



**Dr. KONGA GOPIKRISHNA**

Scientist – ‘F’

SEED Division

E- Mail: k.gopikrishna@nic.in

**भारत सरकार**

विज्ञान और प्रौद्योगिकी मंत्रालय

विज्ञान और प्रौद्योगिकी विभाग

टेक्नोलॉजी भवन, नया मेहरौली मार्ग

नयी दिल्ली-११० ०१६

**GOVERNMENT OF INDIA**

MINISTRY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF SCIENCE AND TECHNOLOGY

TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD

NEW DELHI – 110 016

**DST/SEED/SCSP/STI/2021/495**

**17.03.2022**

Sub: Financial Assistance for the project titled “Science Technology and Innovation Hub in Kattumannar Koil, CD Block, Cuddalore District, Tamilnadu State.”

Dear Sir

This is to inform that the above mentioned project proposal has been approved at a total cost of Rs.2,36,05,264/- (Rs.96,76,000/- under General Component and Rs.1,39,29,264/- towards Capital Assets) for duration of three years with an initial release of Rs.91,16,548/- (Rs.34,92,000/- towards General Component and Rs.56,24,548/- towards Capital Assets) subject to the following conditions.

1. Submission of bond on non-judicial stamp paper (in the enclosed format).
2. Submission of letter of consent to take up the project at the above cost.
3. The Organization/Institute/Principal Investigator that it has not obtained financial assistance from any other department of the Central/State Governments for this project or a similar project
4. The Institute is not blacklisted
5. Procurement of equipment as per General Financial Rules 2017.
6. Execution of construction work through Government Agency/PSU
7. The proposed equipment in the project are not available with the Host Institution and not procured under any project sanction by Central/State Government
8. The Goods (consumables and equipment) available in GeM portal are to be procured mandatorily online through GeM only
9. The Host Institution/PI will also follow DoE's guidelines for incurring expenditure under the different sub-heads
10. The Host Institution/PI should start using EAT module and next release will be made only after mapping and following EAT modules by the Grantee Institution
11. Selection of NGOs may be done with transparent manner for last mile delivery
12. The HI/PI may ensure involving the Industries for commercialization of technologies, if any, developed in the project
13. The institute will maintain separate audited account for the project and the entire amount of grant will be kept in an interest-bearing government bank account.
14. All interests and other earnings, against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e., [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in)), immediately after finalization of accounts, as it shall not be adjusted towards future release of grant.
15. The permanent assets/equipment procured if any, in the project should be used by the intended beneficiaries even after completion of project tenure. Retention of equipment if any

for further research may be requested and such retention is subject to approval of competent authority.

2. As per the Ministry of Finance, Department of Expenditure OM No. 7 (1) E.Coord/2012 dated 14<sup>th</sup> November 2012, the release of the grant will be subject to declaration by the Organization/ Principal Investigator (s) that

(i) All Utilization Certificates due for rendition, for grant in aid released by the Central Government in respect of all the schemes/programmes/projects of a Ministry/Department of Government of India have been submitted for all the projects implemented (completed) by the Organization/ Principal Investigator (s) and Up to date Utilization Certificates have been submitted for grant in aid released by the Central Government in respect of all the schemes/programmes/projects of a Ministry/Department of Government of India in case of ongoing projects

3. The bank details should be added to the scheme “Innovation Technology Development and Deployment” (1819). The funds will be released only in case if the savings bank account is that of a government bank.

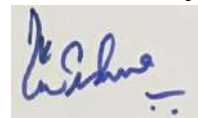
4. The release of the grant would be through electronic transfer of funds (RTGS). You are requested to provide the following details for facilitating e-payments.

- a. Account Holders /Organization name (or) designation
- b. Name of the bank
- c. Bank Account Number
- d. IFSC Code
- e. MICR Code

You are advised to send us a photocopy of a cancelled cheque, which has all the requisite details. The bank details in the photocopy of the cancelled cheque should match with the details given during CPSMS registration.

Enclosures: As above

Yours Sincerely,



(Gopikrishna Konga)

To

Dr. Dawn S S  
Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119, Tamil Nadu





# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)

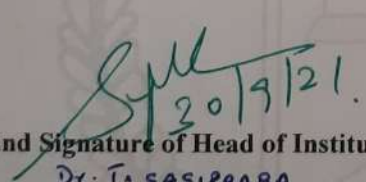
Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

[www.sathyabama.ac.in](http://www.sathyabama.ac.in)

## ENDORSEMENT FROM THE HEAD OF INSTITUTION

**PROJECT TITLE:** \_ Science Technology and Innovation Hub in Kattumannar Koil, C,D Block, Cuddalore District, Tamilnadu State.

1. Certified that the Institute welcomes participation of **Dr..Dawn S S , Dr.Vinita Vishwakarma, Dr.S.Barani, Dr.Poornapushpakala S and Dr.Arun J** as the Principal Investigators and **Dr.D.Ramachandran, Dr.M.Subramoniam, Ms.N.Nirmala and Mr.A.Santosh** as the Co-Investigators for the project and that in the unforeseen event of discontinuance by the Principal Investigator, the Co-Investigator will assume the responsibility for the fruitful completion of the project (after obtaining consent in advance from DST).
2. Certified that the equipment, other basic facilities and such other administrative facilities as per terms and conditions of the grant, will be extended to investigator (s) throughout the duration of the project.
3. Institute assures financial and other managerial responsibilities of the project.
4. Certified that the organization has never been blacklisted by any department of the State Government or Central Government.

  
Name and Signature of Head of Institution

Dr. T. SASIPRABA

Date: 30<sup>th</sup> September 2021

Place: Chennai

**REMARKS:** In regard to research proposals emanating from scientific institutions/laboratories under various scientific departments the Head of the institution is required to provide a justification indicating clearly whether the research proposals falls in line with the normal research activities of the institution or not and if not, the scientific reasons which merit its consideration by DST.

**CO/A/FPI/E132/2021**  
 Government of India  
 Ministry of Science & Technology  
 Department of Science & Technology  
 (NCSTC Division)

Technology Bhavan, New Delhi  
 Dated: 28/03/2022

**ORDER**

Subject: Exhibition On Science and Technology in Chennai, Chengalpattu and Kanchipuram, Tamil Nadu (TPN / 70790) by Pt- Dr. T Sasipraba, Sathyabama Institute of Science and Technology (Under Sathyabama Educational Trust), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119, Tamilnadu

Sanction of the President is hereby accorded to the approval of the above mentioned project at a total cost of Rs. 23,52,000/- (Rupees twenty three lakhs fifty two thousand eight hundred fifty only) for a duration of 9 months. The detailed breakup of the grant for General as are given below:

| S.no. | Particulars                                                                                                                 | Amount in Rs.      |
|-------|-----------------------------------------------------------------------------------------------------------------------------|--------------------|
|       | <b>Events of Organization</b>                                                                                               |                    |
| 1     | Tent, Stall, Chairs, Tables & other venue arrangements etc. (@ Rs.65000 x 3days)                                            | 1,95,000/-         |
| 2     | Lodging & Boarding Expenditure for Outside Resource Person and Programme coordination Team (@ Rs.2000 X No. 15 x 3 days)    | 90,000/-           |
| 3     | Honorarium for 15 Resource Person (@ Rs.1500 X No. 15 X 3 days)                                                             | 67,500/-           |
| 4     | Cost of resource Material and Kit                                                                                           | 25,000/-           |
| 5     | Volunteers/ Support Staff (@ Rs.500 X No. 10 X 4 days)                                                                      | 20,000/-           |
| 6     | Printing of pamphlets on various theme for distribution                                                                     | 25,000/-           |
| 7     | Hiring of Vehicles for Resource Persons and local arrangements (@ Rs.2500 x No. 3 X 3 days)                                 | 22,500/-           |
| 8     | Hiring of labours, security guards - 24 hours (@ Rs.3000 X 3 days)                                                          | 9,000              |
| 9     | Decoration, refreshments and hospitality to VIP, VVIP and other guests/ support staff & Resource Persons and Participants   | 1,00,000/-         |
| 10    | Transportation charges for Project display                                                                                  | 10,000/-           |
| 11    | Banners, Stationery, Prize, Certificate, Photocopy, Photography & Videography                                               | 1,10,000/-         |
| 12    | Contingency & Miscellaneous (Report preparation, correspondence, telephone, typing, accounting & unforeseen expenses, etc.) | 50,000/-           |
|       | <b>Travel</b>                                                                                                               |                    |
| 1     | T.A./D.A. for outside resource person (@ Rs.4000 per person II AC/ or as per actual X No. 15)                               | 60,000/-           |
|       | <b>Total</b>                                                                                                                | <b>7,84,000/-</b>  |
|       | <b>Total for 3 programme = 3 x 7,84,000/-</b>                                                                               | <b>23,52,000/-</b> |

2. The sanction of the President is also accorded to the release of Rs.18,80,000/- (Rupees eighteen lakhs eighty thousand only) to Sathyabama Institute of Science and Technology (Under Sathyabama Educational Trust), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119, Tamilnadu, being the first installment of grant under "General Component" for implementation of the above mentioned project.

3. The project implementation must adhere to the Guidelines/SOPs/Office Orders, etc. from Central Govt. or State Govt. agencies as applicable from time to time.

4. This sanction is subject to the condition that the grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.

5. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

6. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital head grant.

7. The grant-in-aid being released is subject to the condition that

(a) a transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

*[Signature]*



(b) While submitting Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

8. The grant organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing account. For grant released during F.Y. 2017-18 and onwards, all interest and other earnings against released grant shall be remitted to Consolidated Fund of India (through Non Tax Receipt Portal (NTRP), i.e. [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in)), Immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with statement of Expenditure / Utilization Certificate for considering subsequent release of grant / Closure of Grant / Closure of project accounts.

9. Rule 230, (17) (i) As a precondition to the sanction of Grants-in-aid to the agencies where:

(a) the recipient body employs more than twenty persons on a regular basis and at least fifty per cent of its recurring expenditure is met from Grants-in-aid from Central Government; and

(b) the body is a registered society or a co-operative institution and is in receipt of a general purpose annual Grants-in-aid of Rupees twenty lakhs and above from the Consolidated Fund of India,

the Grant sanctioning authority should ensure that a suitable clause is invariably included in the terms and conditions under which the Grants-in-aid are given, to provide for reservation for Scheduled Castes and Scheduled Tribes or OBC in posts and services under such organizations or agencies. The relative provision may be on the following lines :-

"Manvi Society for Social Change, Pocket-10, House no-258 LIG Flat, Nasir pur Dwarka New Delhi-45" agrees to make reservations for Scheduled Castes and Scheduled Tribes or OBC in the posts or services under its control on the lines indicated by the Government of India".

(ii) While sanctioning Grants-in-aid to Institutions or Organisations referred to in (a) above, the Grant sanctioning authority should keep in view the progress made by such Institutions or Organisations in employing Scheduled Castes and Scheduled Tribes or OBC candidates in their services.

10. PI/ Coordinator shall not draw any emoluments/ salary/fellowship from any other project either supported by DST or by any other funding agency for this project.

11. The grant-in-aid being released is subject to the condition that

(a) a transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organisation under the appropriate rules of the grantee organisation while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee Organisation Immediately on receipt of the grant.

(b) Goods (consumables/equipment) available in GeM portal are to be mandatory procured online through GeM only.

(c) While submitting Utilisation Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

12. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.

13. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

14. Failure to comply with the terms and conditions of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

15. Hiring of buses may be regulated as per concerned State Government Transport Department norms.

16. The sanction of this grant is subject to the terms and conditions specified in the Annexure-I enclosed. It is further subject to the following conditions:

i.) That any publicity material/invitation cards/banners/handouts/brochures etc. brought out and used during the course of the project will have a mentioned in bold letter "Catalysed and supported by National Council for Science & Technology Communication, DST, Government of India, New Delhi"

ii) Information about the programme venue & dates will be given to NCSTC.

iii) Two feedback forms one for resource persons and other for participants will be developed by organization to obtain feedback from them. These will be analyzed and will be sent as part of the project completion report.

iv) On completion of programme UC/SE and PCR will be submitted as per NCSTC format given at our website [www.dst.gov.in](http://www.dst.gov.in)

17. The expenditure involved is debitable to Demand No.88, Department of Science & Technology for the year 2021-22:

3425

60

789

15

15.00.31

Other Scientific Research (Major Head)

Others

Schedule Casts Component

Innovation, Technology Development and Deployment

Grants-in-aid General for the year 2021-22

(Previous: SEED-SCSP- 3425.60.789.01.01.31)

*Amu*

18. The amount of Rs 18,80,000/- (Rupees eighteen lakhs eighty thousand only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed, to Sathyabama Institute of Science and Technology (Under Sathyabama Educational Trust), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119, Tamilnadu. The bank details for electronic transfer of funds through RTGS are given below: -

1. Name of the Account Holder: **Sathyabama Institute of Science and Technology**
2. Name of the Bank: Indian Bank
3. Bank Account Number: 6089858032
4. IFSC Code: IDIB000S201
5. Registration on NGO Darpan Portal- Unique Number/ID: TN/2017/0116286

19. As per rule 234 of GFR 2017, this sanction has been entered at S.No. <sup>27</sup> in the register of grant maintained in the Division for the Scheme Innovation, Technology Development and Deployment

20. This issues with the concurrence of IFD Vide their Concurrence Dy. No. **5228/IFD/2021-22** dated the **25/03/2022**.

21. It is mandatory to use EAT module in PFMS, failing which no further funds shall be released.

  
(A.B.P. Mishra)  
Scientist 'E'  
Tel. No. 26590325

To  
The Pay and Accounts Officer,  
Department of Science & Technology,  
New Delhi.

Copy for information and necessary action to:-

1. Cash Section (three copies)
2. IFD/Budget & Accounts Section
3. The Principal Director of Audit (Science Department), III Floor, AGCR Building, I.P. Estate, New Delhi-110002
4. Scientist G (Head, NCSTC)/Sanction Folder/Data Entry Folder
5. Secretary  
Sathyabama Institute of Science and Technology  
(Under Sathyabama Educational Trust),  
Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai – 600119, Tamilnadu

  
(A.B.P. Mishra)  
Scientist 'E'  
Tel. No. 26590325



# Public Financial Management System-PFMS

G/o Controller General of Accounts, Ministry of Finance

(Security 125404)

Welcome: ABP Mishra  
User Type: PD  
Financial Year: 2021-2022



(NCSTCM) Logout  
Change Password

Login History

English

Help

AdhocReports

SchemeWiseContactDetails

Home

CAM Reports

User Manuals

Hosters

Users

Agency

Sanctions

PreSanction

Sanction Custom Fields

Printing Templates

Sanction Templates

Employee Info. System

Reports

Hosters

My Schemes

Agencies

My Funds

Scheme Allocation

Register/ Track Issue

Utilisation Certificate

OLD UC

## Payee Details

Controller: 037-SCIENCE AND TECHNOLOGY

Sanction Status: Approved

Sanction Number: COA/FF/EI32/2021

Sanction Date: 28/03/2022

Sanction Type: Transfer (DDO Bill)

Sanction Amount: 1880000

IPD Number: 5228

IPD Date: 25/03/2022

Scheme: 1819-INNOVATION, TECHNOLOGY DEVELOPMENT AND DEPLOYMENT

PAO: 058296-PAO(DST), New Delhi

DDO: 258297-DEPARTMENT OF SCIENCE & TECHNOLOGY (INCLUDING, NCST)

Remarks: 1st Release

☐ North East Expenditure

## Account Details

| Grant                                      | Department<br>(For UT Grants Only) | Function Head                                                    | Object Head                | Category  | Amount  | External PAO | Available Budget |
|--------------------------------------------|------------------------------------|------------------------------------------------------------------|----------------------------|-----------|---------|--------------|------------------|
| 085 - Department of Science and Technology |                                    | 3425607891500 - INNOVATION TECHNOLOGY DEVELOPMENT AND DEPLOYMENT | 31 - GRANTS-IN-AID GENERAL | 5 - VOTED | 1880000 |              | 612158491        |

| Agency                         | Bank Account No                    | Amount       | Instrument Type |
|--------------------------------|------------------------------------|--------------|-----------------|
| Sathyabama University, Chennai | 6089858032 - SATHYABAMA UNIVERSITY | 1,880,000.00 | RTGS            |

## ePayment Details

Accredited Bank: \* UNION BANK OF INDIA Amount: 1880000 Not Payable Before: \* ☐ Required

| Party Name      | IFSC Code   | Party Account No | Amount  | Payee Remarks |
|-----------------|-------------|------------------|---------|---------------|
| SATHYABAMA UNIV | IDIB0005201 | 6089858032       | 1880000 | OK            |

Note: If the IFSC Code is not automatically shown it means bank A/C is not validated. If payment process is urgent please key in the IFSC Code and process payment. Please ensure IFSC Code is correct.

Back

*Handwritten signature*



# **EXHIBITION ON SCIENCE AND TECHNOLOGY IN TAMIL NADU**

**NCSTC - STEMM DEMONSTRATION AND POPULARIZATION**

**Submitted to**

**Department of Science & Technology (DST)  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110 016**

**Submitted by**



**Dr.T.SASIPRABA, M.E., Ph.D.**  
**VICE CHANCELLOR**

**SATHYABAMA**  
**INSTITUTE OF SCIENCE AND TECHNOLOGY**  
**(Deemed to be University)**  
*Accredited with Grade "A" by NAAC*  
Rajiv Gandhi Salai, Jeppiaar Nagar, Chennai-600119

**SEPTEMBER- 2021**



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

[www.sathyabama.ac.in](http://www.sathyabama.ac.in)

ENDORSEMENT FROM THE HEAD OF THE PROPOSER AGENCY

Project Title:

Exhibition on Science and Technology in Tamil Nadu

1. Certified that our institution welcomes participation of Dr.T.Sasipraba as the Principal Coordinator, **Dr.M.S.Godwin Premi, Dr.V.Vijaya Baskar** as Co-Principal Coordinators and Dr.S.Karthikeyan, Dr.V.Vedananarayanan, **Dr.R.Narmadha, Dr.A.Aranganathan, Mr.N.Mathan** as Co-coordinators of the project mentioned above. The Co-Principal Coordinators/ Coordinators will assume the responsibility of fruitful completion of the project if the Principal Coordinator is unable to do so (with due intimation to NCSTC, DST.)
2. Certified that the hardware, other basic facilities and such other administrative support required as per terms and condition of the grant, will be extended to coordinators throughout the duration of the project.
3. Our institution will undertake the financial and other management responsibilities of the project and will ensure compliance with the terms and conditions laid down in case the project is sanctioned.

Place: Chennai  
Date: 06-09-2021



Name, Signature and Seal of the  
Head of the Institution

**Dr.T.SASIPRABA, M.E., Ph.D.,**  
VICE CHANCELLOR  
**SATHYABAMA**  
INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)  
Jeppiyur Nagar, Rajiv Gandhi Salai,  
Chennai- 600 119.



**101. Title**

Exhibition on Science and Technology in Tamil Nadu

**102. Details of Principal Coordinator**

Name : Dr.T.Sasipraba  
Date of Birth : 20-06-1972  
Gender : Female  
Designation & Organization : Vice Chancellor, Sathyabama Institute of  
Science and Technology  
Complete address with Pin code : Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai – 600 119  
Valid email address : vc@sathyabama.ac.in  
Telephone, Mobile No : +91-44-24503065

**103. Details of Co-Principal Coordinators (1)**

Name : Dr.M.S.GodwinPremi  
Date of birth : 28.06.1975  
Gender : Female  
Designation & Organization : Professor  
Sathyabama Institute of Science and Technology  
Complete address with Pin code : Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai – 600 119  
Valid email address : godwin.etc@sathyabama.ac.in  
Telephone, Mobile No. : 9444200310

**103. Details of Co-Principal Coordinators (2)**

Name : Dr.V.Vijaya Baskar  
Date of birth : 24.06.1977  
Gender : Male  
Designation & Organization : Professor  
Sathyabama Institute of Science and Technology  
Complete address with Pin code : Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai – 600 119  
Valid email address : vijayabaskar.ece@sathyabama.ac.in  
Telephone, Mobile No. : 9443656637



Government of India  
Department of Atomic Energy (DAE)  
Board of Research in Nuclear Sciences (BRNS)

Hemant Prakash Agnihotri  
Programme Officer (MSS)

BRNS  
Secretariat, 316-C, CFB,  
BARC, Trombay,  
Mumbai-400085  
Phone: 022-25593470  
Email:  
hemant\_brns@barc.gov.in

No: 57/14/05/2022-BRNS/34074

Date: 15 FEB 2023

**OFFICE MEMORANDUM**

Sub: R/P entitled "Real-Time Plasma Localization System for Tokamak plasma images in SST-1" under Dr V. Vijay Bhaskar, Professor, Sathyabama Institute of Science and Technology, JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI-600119 bearing sanction 57/14/05/2022-BRNS with MSS, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for 2 years beginning from financial year 2022-2023 with a total grant of Rs. 21,87,500/- (Rupees twenty one lakh eighty seven thousand five hundred only) for the project as under :

| Item of expenditure    | Year 1<br>(2022-2023) | Year 2<br>(2023-2024) |
|------------------------|-----------------------|-----------------------|
| Equipments             | 950000                | 0                     |
| Staff Salary - SRF (1) | 420000                | 420000                |
| Consumables            | 5000                  | 5000                  |
| Travel - PI            | 25000                 | 25000                 |
| Contingencies          | 30000                 | 30000                 |
| Overheads              | 105000                | 33750                 |
| <b>Total(INR)</b>      | <b>1535000</b>        | <b>513750</b>         |

Note: \* Accelerator, Cooling unit, Current and voltage controller, Custom motherboard, Driver License, EMI/EMC testing, Enclosure, Feeder, Frame grabber, Heatsink system with radiator, Image storage, License, Motherboard, Motherboard fabrication, Operating System, PCIe module, Processor, Processor main memory  
SRF salary calculated @35,000/- p.m.

Please note that as per the government orders under Direct Benefit Transfer (DBT) scheme, the staff salary has to be transferred to his/her bank account. Accordingly, Aadhar Number(UID) of the appointed staff, Bank Account details and the Mobile number linked to the bank account should be obtained and it should be intimated to this office.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads (Rs. 1,38,750/-) shall be released only on meeting the requirements specified (See Annex-B).

- I am also pleased to convey the sanction of the President of India to incur an expenditure of Rs. 15,35,000/- (Rupees fifteen lakh thirty five thousand only) towards grant for the year 2022-2023.
- The expenditure involved is debitable to: 3401 00 004 27 0231.
- This is issued with the concurrence of the competent authority in the Department

*Hemant Prakash Agnihotri*  
14/2/23

Hemant Prakash Agnihotri

Pay & Accounts Officer, DAE, Mumbai - 400 001

Interest earned in previous year and duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.

d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee.

e) An inventory of equipment and the copy of Purchase order of equipments costing more than 1 Lakh.

D. At the end of Terminal Year the Settlement Grant and the Balance 7.5% Overheads will be released on fulfillment of the following requirements:

a) Claim Form-II if any,

b) The final Consolidated Statement of Accounts (SA) and Consolidated Utilization Certificate duly audited by an external Chartered Accountant or the Statutory (Govt.) Auditor. It is mandatory to include the amount of bank interest earned on the grant released into the SA.

c) Final Consolidated Progress Report and a brief report as per format given in Form-VII .

5. AAO (Cheque), DAE, Anushakti Bhavan, CSM Marg, Mumbai - 400 001 - With a request that the amount granted for the first year of the project may be released.
6. Member Secretary (MSS) : Dr. H Kumavat, [harphool@barc.gov.in](mailto:harphool@barc.gov.in); Ph:+91-2221234567
7. Co-Investigator (CI) : Dr.E. Logashanmugam & Dr.M.S.Godwin Premi School of EEE, Sathyabama Institute of science and Technology,Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai- 600119, Email : [vijayabaskar.ece@sathyabama.ac.in](mailto:vijayabaskar.ece@sathyabama.ac.in) & [godwin.etc@sathyabama.ac.in](mailto:godwin.etc@sathyabama.ac.in)
8. Project Collaborator (PC): Dr.Manoj Kumar Gupta, Laser Diagnostics Division, Institute for Plasma Research,Gandhi Nagar, Gujarat-382424, Email : [mkg@ipr.res.in](mailto:mkg@ipr.res.in), Mobile :9574690376

You or your nominee may please be the DAE representative for selection of Research Fellow/ Research Associate for the project.

  
Hemant Prakash Agnihotri

Note:

1. Please quote the Sanction Number 57/14/05/2022-BRNS in all your correspondence with BRNS
2. Kindly submit a request for revalidation of the 1st year grant from FY 2022-23 to FY 2023-24, so that the start date of the project will be from 01st April 2023





GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
CO/A/FP/E80/2022 (G)  
(NCSTC)

Technology Bhawan, New Delhi  
Dated: 13/09/2023

**Sanction Order**

**Subject:** Financial assistance for the project entitled "Creating Awareness on Extended Technologies - Artificial Intelligence, Augmented Reality and Virtual Reality for School Children" submitted by **Dr. Godwin Premi M S, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, CHENNAI, CHENNAI, TAMILNADU, 600119** Release of the First installment regarding

Sanction of the President is hereby accorded to the approval to the above mention project at a total cost of **Rs. 21,58,500/- (Rupees Twenty One Lakh Fifty Eight Thousand Five Hundred only)** for a duration of **1 Years**. The detailed breakup of the grant for General as well as Capital Components are given below:-

**General Component : ₹ 21,58,500/-**  
**Capital Component : ₹ 0.00/-**

| Items                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Budget Summary (in Rs.) |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Year-1                  | Total   |
| <b>1- Non-Recurring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |         |
| Subtotal (Capital)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0                       |         |
| <b>2- Recurring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |         |
| Travel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 396000                  | 396000  |
| <b>A. Events of Organization-1.</b> Honorarium for Resource Persons (@ Rs.2000 X 5 persons X 3 days) = Rs. 30,000/-, 2. Accommodation for outside Resource Person (@ Rs.3000 x 3 persons x 3days) = Rs. 27,000/-, 3. Design and Print of Brochures, Banners, stationaries = Rs.20,000/-, 4. Cost of Drawing competition Material (@Rs.110 for 300 students) = Rs.33,000/-, 5. Certificates and Trophies to the students, school representatives = Rs.25,000/-, 6. Expenses for Sound system, Photography and Videography for all 3 days = Rs.25,000/-, 7. Refreshment and meal 200 students and teachers for 3 days) = Rs.42,500/-, 8. Hiring of Covered Camp Space, Rent of Tents for Stalls, Chairs, Tables & other venue arrangements etc. (@ Rs.50000 x 3days) = Rs.1,50,000/-, 9. Registration Kit to students (@400 for 300 students) = Rs.1,20,000/-, 10. Event promotion / visit to schools = Rs.15,000/-, Total = Rs. 5,87,500/-, Total for 3 programme = 3 x 5,87,500/- = Rs. 17,62,500/- | 1762500                 | 1762500 |
| <b>Subtotal (General)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2158500                 | 2158500 |
| <b>Total Project Cost (Cap.+ Gen.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2158500                 | 2158500 |

2. The sanction of the President is also accorded to the release of **Rs. 16,00,000/- (Rupees Sixteen Lakh only)** to the "Director/Registrar/Principal/Controller/Comptroller, **SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY**" being the **First** installment of grant as mentioned above table under "General Component" for the above mentioned project.

3. The expenditure involved is debitable to **Demand No. 89, Department of Science & Technology** for the year **2023-24**:

|                      |                                                   |
|----------------------|---------------------------------------------------|
| 3425                 | Other Scientific Research(Major Head)             |
| 3425.60              | Others : (Sub-Major Head)                         |
| 3425.60.200          | Assistance to Other Scientific Bodies(Minor Head) |
| 3425.60.200.70       | Innovation,Technology Development and Deployment  |
| 3425.60.200.70.00    | Detailed Head                                     |
| 3425.60.200.70.00.31 | Grants-in-aid General                             |
|                      | (Previous: 3425.60.200.08.05.31)                  |

*Rajinder Singh*

4. The amount of ₹ 1/- (Rupee One only) against the sanctioned amount of 16,00,000/- (Rupees Sixteen Lakh only) will be drawn by DDO, DST and disbursed to the "CNA account of SERB in respect of Innovation, Technology Development and Deployment Scheme".

|                           |                                                     |
|---------------------------|-----------------------------------------------------|
| Name of A/C Holder        | Innovation Technology Development and Deployment    |
| Bank A/C No               | 349902010051240                                     |
| Name of the Bank & branch | Union Bank of India, Safdarjang Enclave - New Delhi |
| RTGS/IFSC code            | UBIN0534994                                         |

5. CNA shall assign/allocate the amount of Rs. 16,00,000/- (Rupees Sixteen Lakh only) to the Director/Registrar/Principal/Controller/Comptroller, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY" as per details given below:-

|                           |                                                |
|---------------------------|------------------------------------------------|
| Name of A/C Holder        | Sathyabama Institute of Science and Technology |
| Bank A/C No               | 113522010000827                                |
| Name of the Bank & branch | Union Bank of India                            |
| RTGS/IFSC code            | UBIN0911356                                    |

6. As per Rule 234 of GFR 2017, the sanction has been entered at S. No 219 . in the register of grants maintained in the NCSTC for the scheme STEMM DEMONSTRATION AND POPULARIZATION .

7. This issues with the concurrence of IFD vide their Concurrence Dy. No. IFD/C/III/290823/31/02193 dated 29/08/2023.

8. The GI will keep all the funds received in the Central Nodal Account only and shall not transfer the funds to any other account or not divert the same to Fixed Deposits/ Flexi-Account/ Multi-Option Deposit Account/ Corporate Liquid Term Deposit (CLTD) account etc. The funds released to GI shall not be parked in bank account of any other agency.

9. The GI will ensure the compliance of OM. No. F. No. 1/(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.

10. Registration on NGO Darpan Portal- Unique Number/ID: TN/2017/0116286

11. This sanction order is subject to the Terms & Conditions as annexed .

*Rajinder Singh*

Rajinder Singh  
(Scientist - 'E')  
rsingh.dst@nic.in

To,  
The Pay & Accounts Officer,  
Department of Science & Technology,  
New Delhi – 110 016.

Copy of information and necessary action to: -

1. Drawing and Disbursing Officer, DST, Cash Section. (two copies)
2. Dr. Godwin Premi M S, Professor, ECE, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, Chennai, Chennai, Tamilnadu - 600119
3. The Director/Registrar/Principal/Controller/Comptroller/Chief Executive Officer(CEO), SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, Chennai, Chennai, Tamilnadu - 600119
4. Secretary, SERB, New Delhi ( for allocation of limits to implementing agency )
5. Head (NCSTC) DST
6. Sanction Folder (NCSTC)
7. The Principal Director of Audit, Scientific Department, IIIRD floor, AGCR Building, I.P. Estate, New Delhi.
8. The Financial Advisor, Integrated Finance Division, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016
9. The Internal Audit Wing, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016

*Rajinder Singh*

Rajinder Singh  
(Scientist - 'E')  
rsingh.dst@nic.in





भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
CO/A/FP/E80/2022 (G)  
**निबंधन और शर्तें**

1. अनुदानग्राही संस्थान प्रत्येक वित्त वर्ष के अंत में इस परियोजना के अंतर्गत प्राप्त अनुदान पर अर्जित/प्रोद्भूत ब्याज को विधिवत रूप से दशति हुए अद्यतन प्रगति रिपोर्ट (लक्ष्य बनाम उपलब्धि) के साथ जीएफआर 2017 में विनिर्दिष्ट प्ररूप में वित्तीय वर्ष-वार उपयोग प्रमाण पत्र (यूसी) और व्यय का लेखापरीक्षित विवरण (एसई) विज्ञान और प्रौद्योगिकी विभाग को प्रस्तुत करेगा। यह परियोजना की समाप्ति की निर्धारित तारीख से एक वर्ष भीतर व्यय का अंतिम विवरण, उपयोग प्रमाण-पत्र और परियोजना समाप्ति रिपोर्ट प्रस्तुत करने की शर्त के भी अध्वधीन है।
2. अनुदानग्राही संस्थान को उपयोग प्रमाण-पत्र इस प्रभाग में भौतिक रूप में भेजने के साथ-साथ पीएफएमएस पोर्टल पर प्रविष्टि और अपलोड करना होगा। अनुवर्ती/अंतिम किस्त प्रभाग द्वारा यूसी की स्वीकृति की पुष्टि और पीएफएमएस में पूर्ववर्ती उपयोग प्रमाण-पत्र की प्रविष्टि के बाद ही जारी की जाएगी।
3. यदि अनुदान एक ही परियोजना के अंतर्गत उपस्कर (रों) की खरीद के लिए पृथक संस्वीकृति आदेश के माध्यम से पूंजी-शीर्ष के अंतर्गत जारी किया गया है तो जारी किया गया पूंजी-शीर्ष अनुदान के लिए पृथक एसई/यूसी प्रस्तुत करना होगा।
4. जारी किया जा रहा सहायता अनुदान निम्नलिखित शर्तों के अध्वधीन है-  
क) उपर्युक्त परियोजना के लिए संस्वीकृत पूंजी आस्तियों की खरीद करते समय अनुदानग्राही संस्थान के उचित नियमों के तहत संस्थान/संगठन द्वारा सामान्य वित्तीय नियमावली 2017 के उपबंधों के अनुरूप पारदर्शी खरीद प्रक्रिया का अनुपालन किया जाए और अनुदान प्राप्ति पर तुरंत प्रभाव से अनुदानग्राही संगठन द्वारा इस आशय का प्रमाण-पत्र प्रस्तुत किया जाए।  
ख) उपयोग प्रमाण-पत्र/ व्यय विवरण प्रस्तुत करते समय, संगठन को जीएफआर 2017 के उपबंधों के अनुसरण में उपस्कर/पूंजी आस्तियों की खरीद के संबंध में संबंधित दस्तावेज़-साक्ष्य प्रस्तुत करना सुनिश्चित करना होता है।
5. जीएफआर नियमावली 2017 के नियम 230 (8) के अनुसार अनुदानग्राही संस्थान को सुनिश्चित करना चाहिए कि किसी भी अनुदानग्राही संस्थान को जारी किए गए सहायता अनुदान या अग्रिम (प्रतिपूर्ति से भिन्न) पर प्राप्त समस्त प्रकार के ब्याज या अन्य आय को लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में अनिवार्य रूप से विप्रेषित किया जाए। ऐसे अग्रिमों को भविष्य में जारी की जाने वाली निधियों में समायोजित करने की अनुमति नहीं दी जाएगी।
6. जीएफआर नियमावली 2017 के नियम 230 (17) के अनुसार, "अनुदानग्राही संस्थान को भारत सरकार के निर्देशानुसार अपने नियंत्रणाधीन पदों या सेवाओं में अनुसूचित जाति या अनुसूचित जनजाति या ओबीसी के लिए आरक्षण रखने पर सहमत होना चाहिए।"
7. अनुदानग्राही संस्थान परियोजना का पृथक परीक्षित लेखा रखेगा और अनुदान की समस्त राशि बैंक खाते में सब्याज रखी जाएगी। वित्तीय वर्ष 2017-18 के दौरान और उसके बाद जारी अनुदान के लिए, अनुदान के लिए सभी प्रकार के ब्याज या अन्य आय ऐसे लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में (गैर कर प्राप्ति पोर्टल (एनटीआरपी) अर्थात् [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in) के माध्यम से) विप्रेषित की जाएगी, क्योंकि यह राशि भविष्य में जारी की जाने वाली राशि में समायोजित नहीं की जाएगी। अनुवर्ती अनुदान के निर्गम/ परियोजना खाते को बंद करने पर विचार किए जाने के लिए, व्यय विवरण/ उपयोग प्रमाण-पत्र के साथ इस आशय का प्रमाण पत्र प्रस्तुत करना होगा।
8. डीएसटी, अनुदान से सृजित परिसंपत्तियों पर एकमात्र सुरक्षित अधिकार रखता है। सरकारी अनुदानों से पूरी तरह से या पर्याप्त रूप से अर्जित संपत्ति (जीएफआर 2017 में निर्धारित प्रक्रिया के अनुसार अप्रचलित और अनुप्रयोज्य, अनुपयोगी घोषित अनुदानों से इतर), का निपटारा डीएसटी का पूर्व अनुमोदन प्राप्त किए बिना नहीं किया जाएगा।
9. जैसा कि सामान्य वित्तीय नियमावली 2017 के नियम 236 (1) के तहत निर्धारित किया गया है, अनुदानग्राही संगठन का लेखा स्वीकृति प्रदाता प्राधिकारी और लेखा परीक्षक (भारत के नियंत्रक एवं महालेखापरीक्षक और डीएसटी के प्रधान लेखा कार्यालय दोनों द्वारा आंतरिक लेखा परीक्षा) द्वारा निरीक्षण किए जाने, जब भी संगठन को ऐसा करने के लिए कहा जाता है, हेतु अभिगम्य होगा।
10. इस परियोजना अनुदान से प्राप्त तकनीकी सहायता/वित्तीय सहायता की उचित पावती को अनुदानग्राही संगठन द्वारा सभी प्रकाशनों/मिडिया प्रकाशनी में मोटे अक्षरों में और परियोजना के पूरा होने के दौरान और तदुपरांत उनकी वार्षिक रिपोर्टों के शुरुआती पैराग्राफों में अनिवार्य रूप से दिखाया किया जाना चाहिए।
11. बॉन्ड के नियमों और शर्तों का पालन करने में असफल होने पर जीएफआर 2017 के नियम 231 (2) के अनुसार पूरी राशि सब्याज वापस करनी होगी।
12. पीएफएमएस में ईएटी मॉड्यूल का उपयोग करना अनिवार्य है, ऐसा न करने पर अन्य कोई भी आगामी निधि जारी नहीं की जाएगी।
13. जीएफआर के नियम 149 के उपबंधों के अनुसार जीईएम पोर्टल पर उपलब्ध वस्तुओं (उपभोज्य वस्तु/उपस्कर) का अनिवार्यतया आर्न लाइन प्रापण जैम (जीईएम) ही के माध्यम से किया जाना है।
14. अनुदान ग्राही संस्थान को व्यय विभाग के आईडी नोट संख्या: 4/1/2021-पीपीडी दिनांक 10.09.2021 के अनुसार वैश्विक निविदाकरण जांच-पड़ताल (जीटीई) नियमों का पालन करना चाहिए।
15. यदि एकबारगी सहायता या गैर-आवर्ती अनुदान 10.00 लाख रुपये से 50.00 लाख रुपये के सहायता अनुदान का हो तो इसे संस्थान की वार्षिक रिपोर्ट में दर्ज किया जाना चाहिए।
16. अनुदान ग्राही संस्थान को जीएफआर-2017 (<https://doe.gov.in/order-circular/general-financial-rules2017-0>) के किसी भी अन्य उपबंध और समय-समय पर भारत सरकार द्वारा जारी दिशा-निर्देश/संशोधन का अनुपालन सुनिश्चित करना चाहिए।





GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
**CO/A/FP/E80/2022 (G)**

**Terms & Conditions**

1. The grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report (Vis-a-Vis Target Vs-Achievement) at the end of each financial year duly reflecting the interest earned / accrued on the grant received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.
2. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
3. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital head grant.
4. The grant-in-aid being released is subject to the condition that:-
  - a) A transparent procurement procedure in line with Provisions of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.
  - b) While submitting Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard of the purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.
5. As per the GFR 2017 Rule 230 (8) the Grantee Institute should ensure that all the interests or other earnings against Grant-in-Aid or advances (other than reimbursement) released to any Grantee institution should be mandatorily remitted to the Consolidated Fund of India immediately after finalization of the accounts. Such advances will not be allowed to be adjusted against future releases.
6. As per the GFR 2017 Rule 230 (17) "the Grantee Institute should agree to make reservations for Scheduled Castes and Scheduled Tribes or OBC in the posts or services under its control on the lines indicated by the Government of India"
7. The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in)), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure/ Utilization Certificate for considering subsequent release of Grant/ Closure of Project accounts.
8. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.
9. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.
10. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publication / media release as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.
11. Failure to comply with the terms and conditions of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
12. It is mandatory to use EAT module in PFMS, failing which no further funds shall be released.
13. Goods (Consumable/Equipment) available in GeM portal are to be procured mandatorily online through GeM only as per the provisions of Rule 149 of GFR.
14. The Grantee Institute should follow Global Tendering Enquiry (GTE) conditions as per Department of Expenditure ID Note No:4/1/2021-PPD dated 10.09.2021.
15. If One time assistance or non-recurring grant as Grant-in-Aid for Rs. 10.00 lakhs to Rs. 50.00 lakhs, it should be included in the Annual Report of the Institute.
16. The Grantee Institute must ensure any other provisions of GFR-2017 (<https://doe.gov.in/order-circular/general-financial-rules2017-0>) and guidelines/amendments issued from Govt. of India from time to time.





Welcome: RAJINDER  
SINGH  
User Type: PD  
Financial Year: 2023-2024

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# Public Financial Management System-PFMS

Q/o Controller General of Accounts, Ministry of Finance

(formerly CPMS)

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SchemeWiseContactDetails

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Agency

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PreSanction

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Sanction Templates

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Agencies

My Funds

Scheme Allocation

Register/ Track Issue

Utilisation Certificate

OLD UC

## Payee Details

Controller: 037-SCIENCE AND TECHNOLOGY

Sanction Status: Approved

Sanction Number: CO/A/FP/E80/2022 (G)

Sanction Date: 13/09/2023

Sanction Type: Transfer (DDO Bill)

Sanction Amount: 1

IFD Number: IFD/C/III/290823/31/02193

IFD Date: 29/08/2023

Scheme: 1819-INNOVATION, TECHNOLOGY DEVELOPMENT AND DEPLOYMENT

PAO: 058296-PAO(DST), New Delhi

DDO: 258297-DEPARTMENT OF SCIENCE & TECHNOLOGY (INCLUDING,NCST)

Remarks: Limit Assignment as Rs.16,00,000/-

North East Expenditure

## Account Details:

| Grant                                      | Department (For UT Grants Only) | Function Head                                                    | Object Head                | Category  | Amount | External PAO | Available Budget |
|--------------------------------------------|---------------------------------|------------------------------------------------------------------|----------------------------|-----------|--------|--------------|------------------|
| 089 - Department of Science and Technology |                                 | 3425602007000 - INNOVATION TECHNOLOGY DEVELOPMENT AND DEPLOYMENT | 31 - GRANTS-IN-AID GENERAL | 5 - VOTED | 1      |              | 2562748002       |

| Agency                                 | Bank Account No                    | Amount | Instrument Type |
|----------------------------------------|------------------------------------|--------|-----------------|
| SCIENCE AND ENGINEERING RESEARCH BOARD | 349902010051240 - INNOVATION TEC ✓ | 1.00   | RTGS            |

## ePayment Details

Accredited Bank : \* UNION BANK OF INDIA ✓ Amount : 1

Not Payable Before : \* Required

| Party Name     | IFSC Code   | Party Account No | Amount | Payee Remarks        |
|----------------|-------------|------------------|--------|----------------------|
| INNOVATION TEC | UBIN0534994 | 349902010051240  | 1      | Limit Assign 1600000 |

Note: If the IFSC Code is not automatically shown it means bank A/C is not validated.If payment process is urgent please key in the IFSC Code and process payment.Please ensure IFSC Code is correct.

Back



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

[www.sathyabama.ac.in](http://www.sathyabama.ac.in)

## ENDORSEMENT FROM THE HEAD OF PROSPER AGENCY

Project Title:

**Creating Awareness on Extended Technologies - Artificial Intelligence, Augmented Reality & Virtual Reality for School Children**

1. Certified that our institution welcomes the participation of Dr.M.S.Godwin Premi as the Principal coordinator, Dr.V.Vijaya Baskar, Dr.S.Karthikeyan, Dr.D.Susitra, Dr.A.Anderson, Dr.R.Narmadha, Dr.L.Megalan Leo and Dr.N.Mathan as Co-Principal Coordinators of the project mentioned above. The Co-Principal Coordinators will assume the responsibility of fruitful completion of the project if the Principal Coordinator is unable to do so (with due intimation to NCSTC, DST.)
2. Certified that the hardware, other basic facilities, and such other administrative support required as per terms and conditions of the grant, will be extended to the coordinator(s) throughout the duration of the project.
3. Our agency will undertake the financial and other management responsibilities of the project and will ensure compliance with the terms and conditions laid down; in case the project is sanctioned.

Place: 13.5.2022

Date: Chennai



Name, Signature and Seal of the  
Head of the Institution

*S. Me*  
13/5/22  
**Dr.T.SASIPRABA, M.E., Ph.D.,**  
**VICE CHANCELLOR**  
**SATHYABAMA**  
INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)  
Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai-600 119.



**MoES/16/09/2018-RDEAS/THUMP-5**  
**Government of India**  
**Ministry of Earth Sciences**

Prithvi Bhawan, Lodhi Road,  
New Delhi-110003  
Dated: 01.02.2023

**ADMINISTRATIVE ORDER**

- Subject:** Project entitled "Prediction and Analysis of Mesoscale Thunderstorm in India – A Computational Approach".
- PI:** Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

Sanction of the Competent authority is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules 1978 for implementation of the above-mentioned project at an estimated cost of **Rs. 20,73,280/- (Rupees twenty lakhs seventy three thousand and two hundred eighty only)** Sathyabama Institute of Science and Technology for a period of three years (2022-23 to 2024-25).

**2.0 Objectives:**

- Understand the genesis, development and propagation of severe Thunderstorms over Tamil Nadu.
- To develop Mesoscale Thunderstorm prediction model with various computational methods and techniques.
- Evaluate the performance of computational models for the thunderstorm prediction over Tamil nadu and find out suitable model

**.2.1 Programme:**

In general, climate prediction is highly non-linear phenomena in nature. The parameters that are required to predict the thunderstorms are enormously complex and the prediction using all these parameters is enormous even for a short period. Soft computing is an innovative approach to construct computationally intelligent systems that are supposed to possess humanlike expertise within a specific domain, adapt themselves and learn to do better in changing environments, and explain how they make decisions. In that manner ANFIS processing is a good solution from radar images to predict the accurate models. I have gone through many literatures, this hybrid technology of both NWP and Doppler images data cannot be used anywhere also the anti noise reduction technique is a new era before prediction of thunderstorm using Doppler images.

The prediction model will able to ingest Doppler radar, Satellite data using various soft computing tools and techniques (ANFIS, Machine language, 2nd Generation wavelet neural network and Image processing). The proposed mesoscale thunderstorm model will identify when and where the severe thunderstorm will occur in. This alert will be of much use to the society to save life and property.

  
1/2/2023



## 2.2 Implementing Organization:

Sathyabama Institute of Science and Technology would be implementing this project.

## 2.3 Estimated Project Cost:-

Total estimated cost of the project for three years is **Rs. 20,73,280/- (Rupees twenty lakhs seventy three thousand two hundred eighty only)** The year\wise / item-wise fund requirement is given below

| S. No.    | Item                                                                                                                                          | 1 <sup>st</sup> year<br>2022-23 | 2 <sup>nd</sup> year<br>2023-24 | 3 <sup>rd</sup> year<br>2024-25 | Total                    |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|
| <b>A.</b> | <b>Recurring</b>                                                                                                                              |                                 |                                 |                                 |                          |
| 1.        | Salaries/wages<br>One<br>JRF/SRF@ Rs.<br>31,000/- p.m. for<br>first two years +<br>HRA 27%<br>Rs. 35,000/-p.m.<br>for third<br>year + HRA 27% | 4,72,440/-                      | 4,72,440/-                      | 5,33,400/-                      | 14,78,280/-              |
| 2.        | Consumables                                                                                                                                   | 10,000/-                        | 15,000/-                        | 15,000/-                        | 40,000/-                 |
| 3.        | Travel                                                                                                                                        | 15,000/-                        | 30,000/-                        | 30,000/-                        | 75,000/-                 |
| 4.        | Contingencies                                                                                                                                 | 10,000/-                        | 10,000/-                        | 10,000/-                        | 30,000/-                 |
| <b>A.</b> | <b>Total Recurring</b>                                                                                                                        | <b>5,07,440/-</b>               | <b>5,27,440/-</b>               | <b>5,88,400/-</b>               | <b>16,23,280/-</b>       |
| <b>B.</b> | <b>Overhead charges (10%) of<br/>Recurring</b>                                                                                                | 50,000/-                        | 50,000/-                        | 50,000/-                        | 1,50,000/-               |
|           | <b>Non-Recurring</b>                                                                                                                          |                                 |                                 |                                 |                          |
|           | Equipment<br>Higher end System<br>with Printer & UPS<br>Data Products                                                                         | 2,00,000/-<br>1,00,000/-        | -                               | -                               | 2,00,000/-<br>1,00,000/- |
| <b>C.</b> | <b>Total Non-Recurring</b>                                                                                                                    | <b>3,00,000/-</b>               | <b>-</b>                        | <b>-</b>                        | <b>3,00,000/-</b>        |
|           | <b>Grand Total (A+B+C)</b>                                                                                                                    | <b>8,57,440/-</b>               | <b>5,77,440/-</b>               | <b>6,38,400/-</b>               | <b>20,73,280/-</b>       |

## 2.4 Time Schedule: 3 years (2022-23 to 2024-25)

## 2.5 Description and proposed programme to be implemented by:

This project will be implemented by the PI as per the details given in Annexure-I.

## 3.0 The proposed expenditure will be debited under the following budget head:

- 3425 - Other Scientific Research (Major Head)
- 60.200 - Assistance to other Scientific Bodies (Minor head)
- 52. - Research Education and Training Outreach
- 52.00.31 - Grant-in-aid General
- 52.00.35 - Grants for creation of Capital Assets

*M Daniel*  
1/2/2023



#### 4.0 Other Terms & Conditions:

- Allocation of budget is tentative and subject to changes after review of progress, both physical and financial as recommended by the Committee of Experts.
- This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences year wise Utilization Certificated (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with update progress report (Vis-à-vis Target Vs-Achievement) at the end of each Financial year. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.
- The grantee organization will have to enter & upload the Utilization certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- If the grantee has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital Head Grant.
- The Grant-in-Aid being released is subject to the condition that: -
  - A transparent procurement procedure in line with Provisions of General Financial Rules 2017 will be allowed by the Institute/Organization under appropriate rule of grantee organization while procuring Capital Assets sanctioned for the above-mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.
  - While submitting Utilization Certificated /Statement of Expenditure the organization has to ensure submission of supporting documentary evidences with regard of the purchase of equipment capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.
- MoES reserves sole rights on assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017) shall not be disposed of without obtaining the prior approval of MoES.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- All equipments / assets procured out of MoES grant shall be maintained by the grantee institute and will be available for use by other researchers.
- All equipments / assets procured from MoES funded shall be maintained in the stock register of the grantee institute and should not treat such assets as their own assets in their Book of Accounts but should disclose their holding and using such assets in the Notes to Accounts specifically. No asset/equipment shall be diverted and /or disposed off without prior approval of the competent authority in MoES.

*M Daniel*  
11/2/2023



- Codal provisions as conveyed in GFR, manual on Policies and Procedures for purchase of Goods and GoI instructions issued from time to time for services and requisition of research personnel shall be ensured.
- Due acknowledgment of technical support/financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications media release as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.
- **Expenditure, Advance and Transfer (EAT) module of PFMS should be activated for the grants released under the project and expenditure under the project shall be monitored through EAT module.**
- The Position of project staff is co-terminus with the duration of the project & MoES would have no liability towards such manpower costs beyond the duration of the project.
- Overhead expenses are meant for the host institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project, etc.
- Goods (Consumables/equipment) available in GeM portal are to be procured mandatorily online through GeM portal are to be procured mandatorily online through GeM only as per the provisions of Rule 149 of GFR.
- If one-time assistance or non-recurring grants as Grant-in-Aid for Rs. 10.00 lakh to Rs. 50.00 lakh, it should be included in the Annual Report of the Institute.
- The grantee Institute must ensure compliance of any other provisions of GFR -2017 and guidelines amendments issued from Govt. of India from time to time.
- The grantee Institute will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure. The grantee Institute is requested to utilized the released funds in first one year.
- The grantee Institute will ensure the compliance of OM. No. F.No. 1(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.
- While implementing the programme all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- The account of the grantee organisation shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the MoES), whenever the organisation is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.

**5.0** This issues under powers delegated to this Ministry and with the concurrence of IFD vide their Dy. No. 50(R)/IFD/6614/2022-23/REACHOUT dated 04.05.2022 and with the approval of the Secretary, MoES vide E-file. No. 6614/Secy/2022 dated 05.05.2022.

*Manjula Daniel*  
11/2/2023  
(Manjula Daniel)

Under Secretary to the Govt. of India



To,

The Pay and Accounts Officer, Ministry of Earth Sciences, New Delhi-110003

Copy to:

1. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110002.
1. The Registrar, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
2. Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
3. Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
4. Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
5. The Director, INCOIS, (CNA-REACHOUT), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090.
6. Cash Section, MoES, New Delhi.
7. Controller of Accounts, MoES.
8. AS&FA / Sc. G (GRI) / Dir (F) / AD (OL) / IFD, MoES.
9. PSO to Secretary, MoES.
10. Sanction Folder/ File copy.

*Manjula Daniel*  
1/2/2023  
(Manjula Daniel)

Under Secretary to the Govt. of India

*OK*

Annexure-1

Work schedule and detailed plan of implementation with year wise time lines and targets  
Time.

| S.No. | Activities                                                       | Duration |
|-------|------------------------------------------------------------------|----------|
| 1.    | Data Collection                                                  | 3 months |
|       | Signal to Noise Reduction of images                              | 4 months |
| 2.    | Data Preprocessing and Image conversion                          | 6 months |
|       | Data base Creation and system setup                              | 4 months |
| 3.    | Developing ANFIS prediction model                                | 7 months |
| 4.    | Further improvement of prediction using Wavelet<br>2D NN         | 4 months |
| 5.    | Comparative Analysis                                             | 4 months |
| 6.    | Compilation and preparation of<br>report/Preparation of Articles | 4 months |

M Daniel

1/2/2023



**MoES/16/09/2018-RDEAS/THUMP-5**  
**Government of India**  
**Ministry of Earth Sciences**

Prithvi Bhawan, Lodhi Road,  
New Delhi-110003  
Dated: 01.02.2023

**SANCTION ORDER**

- Subject:** Project entitled "Prediction and Analysis of Mesoscale Thunderstorm in India – A Computational Approach".
- PI:** Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

In continuation to this Ministry's Administrative Order dated 01/02/2023 & SO No. MoES/REACHOUT/CNA/2022 dated 27<sup>th</sup> June, 2022, sanction of the competent authority is hereby accorded to the release of **Rs. 5,57,440/- (Rupees Five Lakhs Fifty Seven Thousand and Four Hundred Forty only)** as the 1<sup>st</sup> year grant (Recurring) for the above-mentioned project during the current financial year 2022-23. The break-up of **Rs. 5,57,440/- (GIA-G)** is as follows: -

| (Amount in Rupees) |                                                                   |            |
|--------------------|-------------------------------------------------------------------|------------|
| S.No.              | Description                                                       | Total      |
| 1.                 | Allocation for the FY 2022-23 under -recurring (GIA-G) as per A.O | 5,57,440/- |
| 2.                 | Less Unspent balance                                              | Nil        |
| 3.                 | Total amount to be released                                       | 5,57,440/- |

2. The expenditure involved is debatable to Demand No. 24 Ministry of Earth Sciences for the year 2022-23.

|          |                                                    |
|----------|----------------------------------------------------|
| 3425     | Other Scientific Research (Major Head)             |
| 60.200   | Assistance to Other Scientific Bodies (Minor Head) |
| 52       | Research Education and Training Outreach           |
| 52.00.31 | Grant-in-Aid-General                               |

3. The amount of **Rs. 5,57,440/- (Rupees five lakhs fifty seven thousand and four hundred forty only)** will be drawn from the Central Nodal Agency CNA account (INCOIS REACHOUT Account) and will be disbursed to the Zero balance Subsidiary Account (M/s SATHYABAMA INSTITUTE OF SCIENCE AND TECH) through REAT/EAT module of PFMS for expenditure under the above-mentioned project. The bank details for electronic transfer of funds through RTGS are given below: -

  
1/2/2023



|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| <b>Name of the Account</b> | SATHYABAMA INSTITUTE OF SCIENCE AND TECH                                                           |
| <b>Name of the Bank</b>    | CANARA BANK                                                                                        |
| <b>Branch</b>              | NOLOGY MOES REACHOUT, OLD MAHABALIPURAM<br>ROAD JEPPIAAR NAGAR, CHENNAI-600119-TAMIL<br>NADU-INDIA |
| <b>Type of Account</b>     | Saving Account                                                                                     |
| <b>Account Number</b>      | 110092782310                                                                                       |
| <b>IFSC Code</b>           | CNRB0002929                                                                                        |
| <b>MICR Code</b>           | 600015101                                                                                          |
| <b>Branch Code</b>         | 002929                                                                                             |

4. As per rule 238(1) of GFR 2017 relating to UC's for the fund released are not applicable at this stage since the said institute would be receiving the grant for the aforesaid purpose for the first time.
5. The Registrar, Sathyabama Institute of Science and Technology will furnish to MoES a Utilization Certificate in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with updated progress report (Vis-à-vis Target Vs-Achievement) at the end of each Financial year.
6. The grantee organization will have to enter & upload the Utilization certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent file/installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
7. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the MoES), whenever the organization is called upon to do so, as laid down under Rule 236 (1) of GFR 2017.
8. The grantee Institute will ensure the compliance of OM. No. F.No. 1(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.
9. All the future correspondence regarding the project may be addressed to Dr. RS.Maheskumar, Scientist-G, Atmospheric Sciences & Services Division, Ministry of Earth Sciences.
10. As per the rule 234 of GFR 2017, the sanction has been entered at Page No. 81 Sl. No. 122 in the register of grants maintained in the scheme.
11. This issues under powers delegated to this Ministry and with the concurrence of IFD vide their Dy. No. 50(R)/IFD/6614/2022-23/REACHOUT dated 04.05.2022 and with the approval of the Secretary, MoES vide E-file. No. 6614/Secy/2022 dated 05.05.2022.

*Manjula Daniel*  
1/2/2023

(Manjula Daniel)  
Under Secretary to the Govt. of India

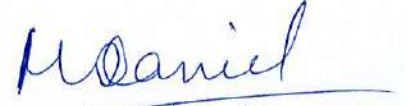


To,

The Pay and Accounts Officer, Ministry of Earth Sciences, New Delhi-110003

Copy to:

1. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110002.
1. The Registrar, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
2. Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
3. Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
4. Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
5. The Director, INCOIS, (CNA-REACHOUT), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090.
6. Cash Section, MoES, New Delhi.
7. Controller of Accounts, MoES.
8. AS&FA / Sc. G (GRI) / Dir (F) / AD (OL) / IFD, MoES.
9. PSO to Secretary, MoES.
10. Sanction Folder/ File copy.

  
1/2/2023

(Manjula Daniel)

Under Secretary to the Govt. of India

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**MoES/16/09/2018-RDEAS/THUMP-5**  
**Government of India**  
**Ministry of Earth Sciences**

Prithvi Bhawan, Lodhi Road,  
New Delhi-110003  
Dated: 01.02.2023

**SANCTION ORDER**

- Subject:** Project entitled "Prediction and Analysis of Mesoscale Thunderstorm in India – A Computational Approach".
- PI:** Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

In continuation to this Ministry's Administrative Order dated 01/02/2023 & SO No. MoES/REACHOUT/CNA/2022 dated 27<sup>th</sup> June, 2022, sanction of the competent authority is hereby accorded to the release of **Rs. 3,00,000/- (Rupees three lakhs only)** as the 1<sup>st</sup> year grant (**Non-recurring**) for the above-mentioned project during the current financial year 2022-23. The break-up of **Rs. 3,00,000/- (GIA-C)** is as follows: -

| (Amount in Rupees) |                                                                      |            |
|--------------------|----------------------------------------------------------------------|------------|
| S.No.              | Description                                                          | Total      |
| 1.                 | Allocation for the FY 2022-23 under Non-recurring (GIA-C) as per A.O | 3,00,000/- |
| 2.                 | Less Unspent balance                                                 | Nil        |
| 3.                 | Total amount to be released                                          | 3,00,000/- |

2. The expenditure involved is debatable to Demand No. 24 Ministry of Earth Sciences for the year 2022-23.

|          |                                                    |
|----------|----------------------------------------------------|
| 3425     | Other Scientific Research (Major Head)             |
| 60.200   | Assistance to Other Scientific Bodies (Minor Head) |
| 52       | Research Education and Training Outreach           |
| 52.00.35 | Grants for Creation of Capital Assets              |

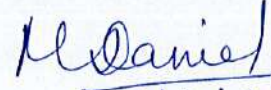
3. The amount of **Rs. 3,00,000/- (Rupees three lakhs only)** will be drawn from the Central Nodal Agency CNA account (INCOIS REACHOUT Account) and will be disbursed to the Zero balance Subsidiary Account (M/s SATHYABAMA INSTITUTE OF SCIENCE AND TECH) through REAT/EAT module of PFMS for expenditure under the above-mentioned project. The bank details for electronic transfer of funds through RTGS are given below: -

  
1/2/2023



|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| <b>Name of the Account</b> | SATHYABAMA INSTITUTE OF SCIENCE AND TECH                                                           |
| <b>Name of the Bank</b>    | CANARA BANK                                                                                        |
| <b>Branch</b>              | NOLOGY MOES REACHOUT, OLD MAHABALIPURAM<br>ROAD JEPPIAAR NAGAR, CHENNAI-600119-TAMIL<br>NADU-INDIA |
| <b>Type of Account</b>     | Saving Account                                                                                     |
| <b>Account Number</b>      | 110092782310                                                                                       |
| <b>IFSC Code</b>           | CNRB0002929                                                                                        |
| <b>MICR Code</b>           | 600015101                                                                                          |
| <b>Branch Code</b>         | 002929                                                                                             |

4. As per rule 238(1) of GFR 2017 relating to UC's for the fund released are not applicable at this stage since the said institute would be receiving the grant for the aforesaid purpose for the first time.
5. The Registrar, Sathyabama Institute of Science and Technology will furnish to MoES a Utilization Certificate in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with updated progress report (Vis-à-vis Target Vs-Achievement) at the end of each Financial year.
6. The grantee organization will have to enter & upload the Utilization certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent file/installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
7. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the MoES), whenever the organization is called upon to do so, as laid down under Rule 236 (1) of GFR 2017.
8. The grantee Institute will ensure the compliance of OM. No. F.No. 1(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.
9. All the future correspondence regarding the project may be addressed to Dr. RS.Maheskumar, Scientist-G, Atmospheric Sciences & Services Division, Ministry of Earth Sciences.
10. As per the rule 234 of GFR 2017, the sanction has been entered at Page No. 121 Sl. No. 01 in the register of grants maintained in the scheme.
11. This issues under powers delegated to this Ministry and with the concurrence of IFD vide their Dy. No. 50(R)/IFD/6614/2022-23/REACHOUT dated 04.05.2022 and with the approval of the Secretary, MoES vide E-file. No. 6614/Secy/2022 dated 05.05.2022.

  
1/2/2023  
(Manjula Daniel)

Under Secretary to the Govt. of India

To,

The Pay and Accounts Officer, Ministry of Earth Sciences, New Delhi-110003

Copy to:

1. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110002.
1. The Registrar, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
2. Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
3. Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
4. Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
5. The Director, INCOIS, (CNA-REACHOUT), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090.
6. Cash Section, MoES, New Delhi.
7. Controller of Accounts, MoES.
8. AS&FA / Sc. G (GRI) / Dir (F) / AD (OL) / IFD, MoES.
9. PSO to Secretary, MoES.
10. Sanction Folder/ File copy.

*M. Daniel*

*1/2/2023*

(Manjula Daniel)

Under Secretary to the Govt. of India

*O/C*



Compose

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Drafts

121

Categories

Social

200

Updates

53

Forums

59

Promotions

136

More

Labels

## Result Announcement of Funding Assessment round of YUKTI Innovation Chi



**YUKTI 2.0 MIC**

to Dipan, Abhishek, Jerry, sro.iic, SCRO, WRO, ero, NWRO, nro, cro, Swro, bcc: me

Dear Innovators,

Thanks for participating in the YUKTI Innovation Challenge 2023 and in the funding assessment to receive grant support from AIC

The result of the funding assessment round is out. Out of total 441 teams gone through the funding assessment phase, a total of 135 Cell to work on their innovations to refine further and transform it into startups.

A Detailed list of selected innovations and funding support is available in the IIC webpage-<https://iic.mic.gov.in/iic-notification> an

Congratulations to all those who have been selected for funding. Those who have not selected but gone through the experiential lea your institution and ecosystem enablers to refine your ideas as per the customer need and market requirements. We will let you kno

Thanks & regards.

Dipan Sahu  
Assistant Innovation Director  
Ministry of Education's Innovation Cell  
AICTE HQ, Nelson Mandela Road, Vasant Kunj,  
New Delhi 110070 Phone: 011 29581226

One attachment • Scanned by Gmail



# Co-funded by the Erasmus+ Programme of the European Union



## Erasmus+: Higher Education – International Capacity Building

GRANT AGREEMENT for an ACTION with MULTIPLE BENEFICIARIES

AGREEMENT NUMBER: 2019-1774/001-001,

Project Reference Number: 598251-EPP-1-2018-1-PL-EPPKA2-CBHE-JP

PROJECT: FRACTION: **Developing future - oriented academic curricula in Teacher Education with innovative methodologies for Nex-Gen Asian HEIs.**

### CONTRACT BETWEEN THE CO-ORDINATOR AND THE CO-BENEFICIARIES

This contract, drawn up under the **Erasmus+** programme, shall govern relations between:

| Parties:                                          | Registered seat                                                             | Legal representative          |
|---------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------|
| P1 Wrocław University of Science and Technology   | Wybrzeże Wyspiańskiego Str. 27, 50-370 Wrocław, Poland                      | Prof. Andrzej Trochimczuk     |
| P2 Technische Universität Dresden                 | 01062 Dresden, Germany                                                      | Dr Andreas Handschuh          |
| P3 University of Almeria                          | Crtra. De Sacramento S/N 04120 La Canada de San Urbano, Almeria, Spain      | Carmelo Rodriguez Torrealanca |
| P4 Ceske Vysoke Ucení Technické w Praze           | Zikova 1903/4, 166 36 Praha                                                 | Prof. Ing. Petr Konvalinka    |
| P5 Gujarat Law Society University                 | Opp. Law Garden, Ellisbridge, 380006 Ahmedabad, India                       | Shri Sudhkir Nanavti          |
| P6 Sambhram Group of Institutions                 | M S Palaya, Jalahalli East, 560097 Bangalore, India                         | V. Nagaraj                    |
| P7 Cochin University of Science and Technology    | South Kalamassery, 682022 Kochi, Kerala State, India                        | Prof. J. Letha                |
| P8 University of Engineering and Management       | Plot III-B/5, Main Arterial Road, New Town, Action Area III, Kolkata 700160 | Prof. Dr Sajal Dasgupta       |
| P9 Sathyabama Institute of Science and Technology | Jeppiaar Nagar, Rajiv Gandhi Road 600119 Chennai, Tamilnadu, India          | Dr S. Sundar Manoharan        |
| P10 Shanghai Polytechnic University               | Jinhai Road 2360, Pudong New Area, 201209 Shanghai, P.R. China              | Tao Yu                        |
| P11 Beihang University                            | Xueyuan Road 37, Haidan District, Beijing 100191 P.R. China                 | Haijun Huang                  |
| P12 University of Transport and Communication     | No 3, Cau Clay Street, Lang Thuong Ward, Dong Da Distr. Hanoi, Vietnam      | Ngoc Long Nguyen              |
| P13 Vietnam Institute of Educational Sciences     | 101 Tran Hung Dao, Hoan Kiem Distr. Hanoi, Vietnam                          | Prof. Dr Le Anh Vinh          |

P1 is the Co-ordinator. Parties 2 till 10 are individually referred to as "Co-beneficiary" or collectively as "Co-beneficiaries". Parties 1 till 10 are individually referred to as "Party" or collectively as "Parties".

Parties have agreed to the general conditions and the following Annexes:

Annex I Estimated budget breakdown between parties.

Annex II Bank account of the Co-beneficiary



**JOINT DECLARATION**

Ref. No P8/27

Project No. 598251-EPP-1-2018-1-PL-EPPKA2-CBHE-JP

The reference number must correspond to the progressive numbering indicated in the financial statements of the final report

**FROM SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY**

Hereinafter "the Institution"\*

**AND**

Name: Dr.Yovan Felix.A

Address: Associate Professor, School of Computing.

Sathyabama Institute of Science and Technology, Chennai, Tamilnadu, India

Hereinafter "the Staff member"\*

**THE INSTITUTION AND THE STAFF MEMBER HEREBY CERTIFY THAT:**

- The Institution is a member of the partnership for the above-mentioned project.
- The Staff member is either:
  - employed by the Institution ☐ YES ☒ NO
  - or
  - a natural person \*\* assigned to the project on the basis of a contract against payment ☒ YES ☐ NO
- The Institution and Staff member agree that the Staff member has worked on this project and performed the following duties during the project's eligibility period.

dd/mm/yy

dd/mm/yy

|             |            |           |            |
|-------------|------------|-----------|------------|
| <b>FROM</b> | 01/01/2020 | <b>TO</b> | 01/03/2020 |
|-------------|------------|-----------|------------|

Please describe the outputs produced (short overall indication since detailed information has to be given in the accompanying time-sheet):

Preparation of analysis of infrastructure and IT resources needed to launch modern technology enhancement classroom for the needs of new programme for academic teachers.

- Please complete the following information.

|                                                                                             |                            |
|---------------------------------------------------------------------------------------------|----------------------------|
| Staff category (Manager / Researcher, Teacher, Trainer / Technician / Administrative staff) | Teacher/Trainer/Researcher |
| Country of the Institution                                                                  | India                      |
| Number of days worked and charged to the project (according to time-sheet)                  | 3                          |

5. This declaration does not alter in any way the employment conditions/assignment already existing between the Institution and the Staff member and is established solely for the purpose of justifying the Staff costs that the Institution will charge to the Erasmus+ Capacity Building in Higher Education grant.

Done in Chennai

Date 01/03/2020

Name : Dr.T.Sasipraba

Function: Vice Chancellor

Institution Sathyabama Institute of Science and Technology

Staff member name Dr.Yovan Felix.A

Signature and Stamp of the Institution

Signature of the Staff member

\*The declaration must be signed by the person concerned, then signed and stamped by the person responsible in the Institution where this person worked for the project. The Institution must be a member of the partnership.

\*\* A natural person (individual) can be assigned to the action also on the basis of e.g. a civil contract, a free-lance contract, an expert contract, a service contract with self-employed person ("in house consultant) or a secondment to the Institution against payment. The costs of such natural persons working under the action may be assimilated to the costs of personnel, if:

- the person works under conditions similar to those of an employee (in particular regarding the way the work is organised, the tasks that are performed and the premises where they are performed); and
- the result of the work belongs to the Institution (unless exceptionally agreed otherwise); and
- the costs are not significantly different from the costs of staff performing similar tasks under an employment contract within the institution



**MoES/16/09/2018-RDEAS/THUMP-5**  
**Government of India**  
**Ministry of Earth Sciences**

Prithvi Bhawan, Lodhi Road,  
New Delhi-110003  
Dated: 01.02.2023

**ADMINISTRATIVE ORDER**

- Subject:** Project entitled "Prediction and Analysis of Mesoscale Thunderstorm in India – A Computational Approach".
- PI:** Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

Sanction of the Competent authority is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules 1978 for implementation of the above-mentioned project at an estimated cost of **Rs. 20,73,280/- (Rupees twenty lakhs seventy three thousand and two hundred eighty only)** Sathyabama Institute of Science and Technology for a period of three years (2022-23 to 2024-25).

**2.0 Objectives:**

- Understand the genesis, development and propagation of severe Thunderstorms over Tamil Nadu.
- To develop Mesoscale Thunderstorm prediction model with various computational methods and techniques.
- Evaluate the performance of computational models for the thunderstorm prediction over Tamil nadu and find out suitable model

**.2.1 Programme:**

In general, climate prediction is highly non-linear phenomena in nature. The parameters that are required to predict the thunderstorms are enormously complex and the prediction using all these parameters is enormous even for a short period. Soft computing is an innovative approach to construct computationally intelligent systems that are supposed to possess humanlike expertise within a specific domain, adapt themselves and learn to do better in changing environments, and explain how they make decisions. In that manner ANFIS processing is a good solution from radar images to predict the accurate models. I have gone through many literatures, this hybrid technology of both NWP and Doppler images data cannot be used anywhere also the anti noise reduction technique is a new era before prediction of thunderstorm using Doppler images.

The prediction model will able to ingest Doppler radar, Satellite data using various soft computing tools and techniques (ANFIS, Machine language, 2nd Generation wavelet neural network and Image processing). The proposed mesoscale thunderstorm model will identify when and where the severe thunderstorm will occur in. This alert will be of much use to the society to save life and property.

  
1/2/2023



## 2.2 Implementing Organization:

Sathyabama Institute of Science and Technology would be implementing this project.

## 2.3 Estimated Project Cost:-

Total estimated cost of the project for three years is **Rs. 20,73,280/- (Rupees twenty lakhs seventy three thousand two hundred eighty only)** The year\wise / item-wise fund requirement is given below

| S. No.    | Item                                                                                                                                          | 1 <sup>st</sup> year<br>2022-23 | 2 <sup>nd</sup> year<br>2023-24 | 3 <sup>rd</sup> year<br>2024-25 | Total                    |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|
| <b>A.</b> | <b>Recurring</b>                                                                                                                              |                                 |                                 |                                 |                          |
| 1.        | Salaries/wages<br>One<br>JRF/SRF@ Rs.<br>31,000/- p.m. for<br>first two years +<br>HRA 27%<br>Rs. 35,000/-p.m.<br>for third<br>year + HRA 27% | 4,72,440/-                      | 4,72,440/-                      | 5,33,400/-                      | 14,78,280/-              |
| 2.        | Consumables                                                                                                                                   | 10,000/-                        | 15,000/-                        | 15,000/-                        | 40,000/-                 |
| 3.        | Travel                                                                                                                                        | 15,000/-                        | 30,000/-                        | 30,000/-                        | 75,000/-                 |
| 4.        | Contingencies                                                                                                                                 | 10,000/-                        | 10,000/-                        | 10,000/-                        | 30,000/-                 |
| <b>A.</b> | <b>Total Recurring</b>                                                                                                                        | <b>5,07,440/-</b>               | <b>5,27,440/-</b>               | <b>5,88,400/-</b>               | <b>16,23,280/-</b>       |
| <b>B.</b> | <b>Overhead charges (10%) of<br/>Recurring</b>                                                                                                | 50,000/-                        | 50,000/-                        | 50,000/-                        | 1,50,000/-               |
|           | <b>Non-Recurring</b>                                                                                                                          |                                 |                                 |                                 |                          |
|           | Equipment<br>Higher end System<br>with Printer & UPS<br>Data Products                                                                         | 2,00,000/-<br>1,00,000/-        | -                               | -                               | 2,00,000/-<br>1,00,000/- |
| <b>C.</b> | <b>Total Non-Recurring</b>                                                                                                                    | <b>3,00,000/-</b>               | <b>-</b>                        | <b>-</b>                        | <b>3,00,000/-</b>        |
|           | <b>Grand Total (A+B+C)</b>                                                                                                                    | <b>8,57,440/-</b>               | <b>5,77,440/-</b>               | <b>6,38,400/-</b>               | <b>20,73,280/-</b>       |

## 2.4 Time Schedule: 3 years (2022-23 to 2024-25)

## 2.5 Description and proposed programme to be implemented by:

This project will be implemented by the PI as per the details given in Annexure-I.

## 3.0 The proposed expenditure will be debited under the following budget head:

- 3425 - Other Scientific Research (Major Head)
- 60.200 - Assistance to other Scientific Bodies (Minor head)
- 52. - Research Education and Training Outreach
- 52.00.31 - Grant-in-aid General
- 52.00.35 - Grants for creation of Capital Assets

*M Daniel*  
1/2/2023



#### 4.0 Other Terms & Conditions:

- Allocation of budget is tentative and subject to changes after review of progress, both physical and financial as recommended by the Committee of Experts.
- This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences year wise Utilization Certificated (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with update progress report (Vis-à-vis Target Vs-Achievement) at the end of each Financial year. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.
- The grantee organization will have to enter & upload the Utilization certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- If the grantee has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital Head Grant.
- The Grant-in-Aid being released is subject to the condition that: -
  - A transparent procurement procedure in line with Provisions of General Financial Rules 2017 will be allowed by the Institute/Organization under appropriate rule of grantee organization while procuring Capital Assets sanctioned for the above-mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.
  - While submitting Utilization Certificated /Statement of Expenditure the organization has to ensure submission of supporting documentary evidences with regard of the purchase of equipment capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.
- MoES reserves sole rights on assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017) shall not be disposed of without obtaining the prior approval of MoES.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- All equipments / assets procured out of MoES grant shall be maintained by the grantee institute and will be available for use by other researchers.
- All equipments / assets procured from MoES funded shall be maintained in the stock register of the grantee institute and should not treat such assets as their own assets in their Book of Accounts but should disclose their holding and using such assets in the Notes to Accounts specifically. No asset/equipment shall be diverted and /or disposed off without prior approval of the competent authority in MoES.

*M Daniel*  
1/2/2023



- Codal provisions as conveyed in GFR, manual on Policies and Procedures for purchase of Goods and GoI instructions issued from time to time for services and requisition of research personnel shall be ensured.
- Due acknowledgment of technical support/financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications media release as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.
- **Expenditure, Advance and Transfer (EAT) module of PFMS should be activated for the grants released under the project and expenditure under the project shall be monitored through EAT module.**
- The Position of project staff is co-terminus with the duration of the project & MoES would have no liability towards such manpower costs beyond the duration of the project.
- Overhead expenses are meant for the host institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project, etc.
- Goods (Consumables/equipment) available in GeM portal are to be procured mandatorily online through GeM portal are to be procured mandatorily online through GeM only as per the provisions of Rule 149 of GFR.
- If one-time assistance or non-recurring grants as Grant-in-Aid for Rs. 10.00 lakh to Rs. 50.00 lakh, it should be included in the Annual Report of the Institute.
- The grantee Institute must ensure compliance of any other provisions of GFR -2017 and guidelines amendments issued from Govt. of India from time to time.
- The grantee Institute will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure. The grantee Institute is requested to utilized the released funds in first one year.
- The grantee Institute will ensure the compliance of OM. No. F.No. 1(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.
- While implementing the programme all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- The account of the grantee organisation shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the MoES), whenever the organisation is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.

**5.0** This issues under powers delegated to this Ministry and with the concurrence of IFD vide their Dy. No. 50(R)/IFD/6614/2022-23/REACHOUT dated 04.05.2022 and with the approval of the Secretary, MoES vide E-file. No. 6614/Secy/2022 dated 05.05.2022.

*Manjula Daniel*  
11/2/2023  
(Manjula Daniel)

Under Secretary to the Govt. of India

To,

The Pay and Accounts Officer, Ministry of Earth Sciences, New Delhi-110003

Copy to:

1. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110002.
1. The Registrar, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
2. Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
3. Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
4. Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
5. The Director, INCOIS, (CNA-REACHOUT), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090.
6. Cash Section, MoES, New Delhi.
7. Controller of Accounts, MoES.
8. AS&FA / Sc. G (GRI) / Dir (F) / AD (OL) / IFD, MoES.
9. PSO to Secretary, MoES.
10. Sanction Folder/ File copy.

*Manjula Daniel*  
1/2/2023  
(Manjula Daniel)

Under Secretary to the Govt. of India

*OK*



**Annexure-1**

**Work schedule and detailed plan of implementation with year wise time lines and targets Time.**

| S.No. | Activities                                                    | Duration |
|-------|---------------------------------------------------------------|----------|
| 1.    | Data Collection                                               | 3 months |
|       | Signal to Noise Reduction of images                           | 4 months |
| 2.    | Data Preprocessing and Image conversion                       | 6 months |
|       | Data base Creation and system setup                           | 4 months |
| 3.    | Developing ANFIS prediction model                             | 7 months |
| 4.    | Further improvement of prediction using Wavelet 2D NN         | 4 months |
| 5.    | Comparative Analysis                                          | 4 months |
| 6.    | Compilation and preparation of report/Preparation of Articles | 4 months |

*M Daniel*

*1/2/2023*

**MoES/16/09/2018-RDEAS/THUMP-5**  
**Government of India**  
**Ministry of Earth Sciences**

Prithvi Bhawan, Lodhi Road,  
New Delhi-110003  
Dated: 01.02.2023

**SANCTION ORDER**

- Subject:** Project entitled "Prediction and Analysis of Mesoscale Thunderstorm in India – A Computational Approach".
- PI:** Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

In continuation to this Ministry's Administrative Order dated 01/02/2023 & SO No. MoES/REACHOUT/CNA/2022 dated 27<sup>th</sup> June, 2022, sanction of the competent authority is hereby accorded to the release of **Rs. 5,57,440/- (Rupees Five Lakhs Fifty Seven Thousand and Four Hundred Forty only)** as the 1<sup>st</sup> year grant (**Recurring**) for the above-mentioned project during the current financial year 2022-23. The break-up of **Rs. 5,57,440/- (GIA-G)** is as follows: -

| (Amount in Rupees) |                                                                   |                   |
|--------------------|-------------------------------------------------------------------|-------------------|
| S.No.              | Description                                                       | Total             |
| 1.                 | Allocation for the FY 2022-23 under -recurring (GIA-G) as per A.O | <b>5,57,440/-</b> |
| 2.                 | Less Unspent balance                                              | <b>Nil</b>        |
| 3.                 | Total amount to be released                                       | <b>5,57,440/-</b> |

2. The expenditure involved is debatable to Demand No. 24 Ministry of Earth Sciences for the year 2022-23.

|          |                                                    |
|----------|----------------------------------------------------|
| 3425     | Other Scientific Research (Major Head)             |
| 60.200   | Assistance to Other Scientific Bodies (Minor Head) |
| 52       | Research Education and Training Outreach           |
| 52.00.31 | Grant-in-Aid-General                               |

3. The amount of **Rs. 5,57,440/- (Rupees five lakhs fifty seven thousand and four hundred forty only)** will be drawn from the Central Nodal Agency CNA account (INCOIS REACHOUT Account) and will be disbursed to the Zero balance Subsidiary Account (M/s SATHYABAMA INSTITUTE OF SCIENCE AND TECH) through REAT/EAT module of PFMS for expenditure under the above-mentioned project. The bank details for electronic transfer of funds through RTGS are given below: -

  
1/2/2023



|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| <b>Name of the Account</b> | SATHYABAMA INSTITUTE OF SCIENCE AND TECH                                                           |
| <b>Name of the Bank</b>    | CANARA BANK                                                                                        |
| <b>Branch</b>              | NOLOGY MOES REACHOUT, OLD MAHABALIPURAM<br>ROAD JEPPIAAR NAGAR, CHENNAI-600119-TAMIL<br>NADU-INDIA |
| <b>Type of Account</b>     | Saving Account                                                                                     |
| <b>Account Number</b>      | 110092782310                                                                                       |
| <b>IFSC Code</b>           | CNRB0002929                                                                                        |
| <b>MICR Code</b>           | 600015101                                                                                          |
| <b>Branch Code</b>         | 002929                                                                                             |

4. As per rule 238(1) of GFR 2017 relating to UC's for the fund released are not applicable at this stage since the said institute would be receiving the grant for the aforesaid purpose for the first time.
5. The Registrar, Sathyabama Institute of Science and Technology will furnish to MoES a Utilization Certificate in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with updated progress report (Vis-à-vis Target Vs-Achievement) at the end of each Financial year.
6. The grantee organization will have to enter & upload the Utilization certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent file/installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
7. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the MoES), whenever the organization is called upon to do so, as laid down under Rule 236 (1) of GFR 2017.
8. The grantee Institute will ensure the compliance of OM. No. F.No. 1(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.
9. All the future correspondence regarding the project may be addressed to Dr. RS.Mahes Kumar, Scientist-G, Atmospheric Sciences & Services Division, Ministry of Earth Sciences.
10. As per the rule 234 of GFR 2017, the sanction has been entered at Page No. 81 Sl. No. 122 in the register of grants maintained in the scheme.
11. This issues under powers delegated to this Ministry and with the concurrence of IFD vide their Dy. No. 50(R)/IFD/6614/2022-23/REACHOUT dated 04.05.2022 and with the approval of the Secretary, MoES vide E-file. No. 6614/Secy/2022 dated 05.05.2022.

*Manjula Daniel*  
1/2/2023

(Manjula Daniel)  
Under Secretary to the Govt. of India

To,

The Pay and Accounts Officer, Ministry of Earth Sciences, New Delhi-110003

Copy to:

1. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110002.
1. The Registrar, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
2. Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
3. Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
4. Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
5. The Director, INCOIS, (CNA-REACHOUT), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090.
6. Cash Section, MoES, New Delhi.
7. Controller of Accounts, MoES.
8. AS&FA / Sc. G (GRI) / Dir (F) / AD (OL) / IFD, MoES.
9. PSO to Secretary, MoES.
10. Sanction Folder/ File copy.

*Manjula Daniel*  
1/2/2023

(Manjula Daniel)  
Under Secretary to the Govt. of India

O/K



**MoES/16/09/2018-RDEAS/THUMP-5**  
**Government of India**  
**Ministry of Earth Sciences**

Prithvi Bhawan, Lodhi Road,  
New Delhi-110003  
Dated: 01.02.2023

**SANCTION ORDER**

- Subject:** Project entitled "Prediction and Analysis of Mesoscale Thunderstorm in India – A Computational Approach".
- PI:** Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
- Co-PI:** Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

In continuation to this Ministry's Administrative Order dated 01/02/2023 & SO No. MoES/REACHOUT/CNA/2022 dated 27<sup>th</sup> June, 2022, sanction of the competent authority is hereby accorded to the release of **Rs. 3,00,000/- (Rupees three lakhs only)** as the 1<sup>st</sup> year grant (**Non-recurring**) for the above-mentioned project during the current financial year 2022-23. The break-up of **Rs. 3,00,000/- (GIA-C)** is as follows: -

| (Amount in Rupees) |                                                                      |            |
|--------------------|----------------------------------------------------------------------|------------|
| S.No.              | Description                                                          | Total      |
| 1.                 | Allocation for the FY 2022-23 under Non-recurring (GIA-C) as per A.O | 3,00,000/- |
| 2.                 | Less Unspent balance                                                 | Nil        |
| 3.                 | Total amount to be released                                          | 3,00,000/- |

2. The expenditure involved is debatable to Demand No. 24 Ministry of Earth Sciences for the year 2022-23.

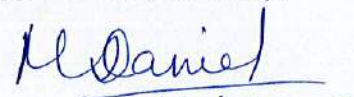
|          |                                                    |
|----------|----------------------------------------------------|
| 3425     | Other Scientific Research (Major Head)             |
| 60.200   | Assistance to Other Scientific Bodies (Minor Head) |
| 52       | Research Education and Training Outreach           |
| 52.00.35 | Grants for Creation of Capital Assets              |

3. The amount of **Rs. 3,00,000/- (Rupees three lakhs only)** will be drawn from the Central Nodal Agency CNA account (INCOIS REACHOUT Account) and will be disbursed to the Zero balance Subsidiary Account (M/s SATHYABAMA INSTITUTE OF SCIENCE AND TECH) through REAT/EAT module of PFMS for expenditure under the above-mentioned project. The bank details for electronic transfer of funds through RTGS are given below: -

  
1/2/2023

|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| <b>Name of the Account</b> | SATHYABAMA INSTITUTE OF SCIENCE AND TECH                                                           |
| <b>Name of the Bank</b>    | CANARA BANK                                                                                        |
| <b>Branch</b>              | NOLOGY MOES REACHOUT, OLD MAHABALIPURAM<br>ROAD JEPPIAAR NAGAR, CHENNAI-600119-TAMIL<br>NADU-INDIA |
| <b>Type of Account</b>     | Saving Account                                                                                     |
| <b>Account Number</b>      | 110092782310                                                                                       |
| <b>IFSC Code</b>           | CNRB0002929                                                                                        |
| <b>MICR Code</b>           | 600015101                                                                                          |
| <b>Branch Code</b>         | 002929                                                                                             |

4. As per rule 238(1) of GFR 2017 relating to UC's for the fund released are not applicable at this stage since the said institute would be receiving the grant for the aforesaid purpose for the first time.
5. The Registrar, Sathyabama Institute of Science and Technology will furnish to MoES a Utilization Certificate in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with updated progress report (Vis-à-vis Target Vs-Achievement) at the end of each Financial year.
6. The grantee organization will have to enter & upload the Utilization certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent file/installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
7. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the MoES), whenever the organization is called upon to do so, as laid down under Rule 236 (1) of GFR 2017.
8. The grantee Institute will ensure the compliance of OM. No. F.No. 1(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.
9. All the future correspondence regarding the project may be addressed to Dr. RS.Maheskumar, Scientist-G, Atmospheric Sciences & Services Division, Ministry of Earth Sciences.
10. As per the rule 234 of GFR 2017, the sanction has been entered at Page No. 121 Sl. No. 01 in the register of grants maintained in the scheme.
11. This issues under powers delegated to this Ministry and with the concurrence of IFD vide their Dy. No. 50(R)/IFD/6614/2022-23/REACHOUT dated 04.05.2022 and with the approval of the Secretary, MoES vide E-file. No. 6614/Secy/2022 dated 05.05.2022.

  
1/2/2023  
(Manjula Daniel)

Under Secretary to the Govt. of India



To,

The Pay and Accounts Officer, Ministry of Earth Sciences, New Delhi-110003

Copy to:

1. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110002.
1. The Registrar, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119
2. Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
3. Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
4. Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119.
5. The Director, INCOIS, (CNA-REACHOUT), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090.
6. Cash Section, MoES, New Delhi.
7. Controller of Accounts, MoES.
8. AS&FA / Sc. G (GRI) / Dir (F) / AD (OL) / IFD, MoES.
9. PSO to Secretary, MoES.
10. Sanction Folder/ File copy.

*M. Daniel*  
1/2/2023

(Manjula Daniel)  
Under Secretary to the Govt. of India

*O/C*

**JOINT DECLARATION**

Ref. No P8/28

Project No. 598251-EPP-1-2018-1-PL-EPPKA2-CBHE-JP

The reference number must correspond to the progressive numbering indicated in the financial statements of the final report

**FROM SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY**

Hereinafter "the Institution"\*

**AND**

Name: Dr.Gowri.S

Address: Professor, School of Computing.

Sathyabama Institute of Science and Technology, Chennai, Tamilnadu, India

Hereinafter "the Staff member"\*

**THE INSTITUTION AND THE STAFF MEMBER HEREBY CERTIFY THAT:**

- The Institution is a member of the partnership for the above-mentioned project.
- The Staff member is either:
  - employed by the Institution ☐ YES ☒ NO
  - or
  - a natural person \*\* assigned to the project on the basis of a contract against payment ☒ YES ☐ NO
- The Institution and Staff member agree that the Staff member has worked on this project and performed the following duties during the project's eligibility period.

dd/mm/yy

dd/mm/yy

|             |            |           |            |
|-------------|------------|-----------|------------|
| <b>FROM</b> | 01/01/2022 | <b>TO</b> | 30/06/2022 |
|-------------|------------|-----------|------------|

Please describe the outputs produced (short overall indication since detailed information has to be given in the accompanying time-sheet):

Supporting activities for equipment purchasing process

- Please complete the following information.

|                                                                                             |                      |
|---------------------------------------------------------------------------------------------|----------------------|
| Staff category (Manager / Researcher, Teacher, Trainer / Technician / Administrative staff) | Administrative Staff |
| Country of the Institution                                                                  | India                |
| Number of days worked and charged to the project (according to time-sheet)                  | 11                   |

5. This declaration does not alter in any way the employment conditions/assignment already existing between the Institution and the Staff member and is established solely for the purpose of justifying the Staff costs that the Institution will charge to the Erasmus+ Capacity Building in Higher Education grant.

Done in Chennai

Date 30/06/2022

Name : Dr.T.Sasipraba

Function: Vice Chancellor

Institution Sathyabama Institute of Science and Technology

Staff member name Dr.Gowri.S

Signature and Stamp of the Institution

Signature of the Staff member

\*The declaration must be signed by the person concerned, then signed and stamped by the person responsible in the Institution where this person worked for the project. The Institution must be a member of the partnership.

\*\* A natural person (individual) can be assigned to the action also on the basis of e.g. a civil contract, a free-lance contract, an expert contract, a service contract with self-employed person ("in house consultant) or a secondment to the Institution against payment. The costs of such natural persons working under the action may be assimilated to the costs of personnel, if:

- the person works under conditions similar to those of an employee (in particular regarding the way the work is organised, the tasks that are performed and the premises where they are performed); and
- the result of the work belongs to the Institution (unless exceptionally agreed otherwise); and
- the costs are not significantly different from the costs of staff performing similar tasks under an employment contract within the institution



# Co-funded by the Erasmus+ Programme of the European Union



## Erasmus+: Higher Education – International Capacity Building

GRANT AGREEMENT for an ACTION with MULTIPLE BENEFICIARIES

AGREEMENT NUMBER: 2019-1774/001-001,

Project Reference Number: 598251-EPP-1-2018-1-PL-EPPKA2-CBHE-JP

PROJECT: FRACTION: **Developing future - oriented academic curricula in Teacher Education with innovative methodologies for Nex-Gen Asian HEIs.**

### CONTRACT BETWEEN THE CO-ORDINATOR AND THE CO-BENEFICIARIES

This contract, drawn up under the **Erasmus+** programme, shall govern relations between:

| Parties:                                          | Registered seat                                                             | Legal representative          |
|---------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------|
| P1 Wrocław University of Science and Technology   | Wybrzeże Wyspiańskiego Str. 27, 50-370 Wrocław, Poland                      | Prof. Andrzej Trochimczuk     |
| P2 Technische Universität Dresden                 | 01062 Dresden, Germany                                                      | Dr Andreas Handschuh          |
| P3 University of Almeria                          | Crtra. De Sacramento S/N 04120 La Canada de San Urbano, Almeria, Spain      | Carmelo Rodriguez Torrealanca |
| P4 Ceske Vysoke Ucení Technické w Praze           | Zikova 1903/4, 166 36 Praha                                                 | Prof. Ing. Petr Konvalinka    |
| P5 Gujarat Law Society University                 | Opp. Law Garden, Ellisbridge, 380006 Ahmedabad, India                       | Shri Sudhkir Nanavti          |
| P6 Sambhram Group of Institutions                 | M S Palaya, Jalahalli East, 560097 Bangalore, India                         | V. Nagaraj                    |
| P7 Cochin University of Science and Technology    | South Kalamassery, 682022 Kochi, Kerala State, India                        | Prof. J. Letha                |
| P8 University of Engineering and Management       | Plot III-B/5, Main Arterial Road, New Town, Action Area III, Kolkata 700160 | Prof. Dr Sajal Dasgupta       |
| P9 Sathyabama Institute of Science and Technology | Jeppiaar Nagar, Rajiv Gandhi Road 600119 Chennai, Tamilnadu, India          | Dr S. Sundar Manoharan        |
| P10 Shanghai Polytechnic University               | Jinhai Road 2360, Pudong New Area, 201209 Shanghai, P.R. China              | Tao Yu                        |
| P11 Beihang University                            | Xueyuan Road 37, Haidan District, Beijing 100191 P.R. China                 | Haijun Huang                  |
| P12 University of Transport and Communication     | No 3, Cau Glay Street, Lang Thuong Ward, Dong Da Distr. Hanoi, Vietnam      | Ngoc Long Nguyen              |
| P13 Vietnam Institute of Educational Sciences     | 101 Tran Hung Dao, Hoan Kiem Distr. Hanoi, Vietnam                          | Prof. Dr Le Anh Vinh          |

P1 is the Co-ordinator. Parties 2 till 10 are individually referred to as "Co-beneficiary" or collectively as "Co-beneficiaries". Parties 1 till 10 are individually referred to as "Party" or collectively as "Parties".

Parties have agreed to the general conditions and the following Annexes:

Annex I Estimated budget breakdown between parties.

Annex II Bank account of the Co-beneficiary

Compose

**Inbox** 842

Starred

Snoozed

Important

Sent

**Drafts** 121

Categories

**Social** 200

**Updates** 53

**Forums** 59

**Promotions** 136

More

Labels

## Result Announcement of Funding Assessment round of YUKTI Innovation Chi



**YUKTI 2.0 MIC**

to Dipan, Abhishek, Jerry, sro.iic, SCRO, WRO, ero, NWRO, nro, cro, Swro, bcc: me

Dear Innovators,

Thanks for participating in the YUKTI Innovation Challenge 2023 and in the funding assessment to receive grant support from AIC

The result of the funding assessment round is out. Out of total 441 teams gone through the funding assessment phase, a total of 135 Cell to work on their innovations to refine further and transform it into startups.

A Detailed list of selected innovations and funding support is available in the IIC webpage-<https://iic.mic.gov.in/iic-notification> an

Congratulations to all those who have been selected for funding. Those who have not selected but gone through the experiential lea your institution and ecosystem enablers to refine your ideas as per the customer need and market requirements. We will let you kno

Thanks & regards.

Dipan Sahu  
Assistant Innovation Director  
Ministry of Education's Innovation Cell  
AICTE HQ, Nelson Mandela Road, Vasant Kunj,  
New Delhi 110070 Phone: 011 29581226

One attachment • Scanned by Gmail



The list of innova..



Memorandum of Understanding  
Between



**SMART Home Healthcare solutions Pvt Ltd**  
HTIC (Healthcare Technology Innovation Centre)  
IIT Madras Research Park  
Taramani, Chennai- 600113

And



**Sathyabama Institute of Science and Technology**  
Jeppiaar Nagar, Rajiv Gandhi Road,  
Sholinganallur, Chennai,  
Tamil Nadu 600119, India

This Memorandum of Understanding (MoU) made and entered into on — by and between the following two entities:

**SMART Home Healthcare Solutions Pvt Ltd**

SMART Home Healthcare Solutions Pvt Ltd, located at Incubation cell, IIT Madras Research Park, has developed two mobile applications which focus on Physiotherapy. The first one, AeglePro is a clinical management software which aims at reducing operational costs of running a Physiotherapy centre, along with helping to standardize the quality of practice among therapists in a centre. The second application called URHAB is an AI based online Physiotherapy and Digital Rehab platform which makes makes quality Physiotherapy accessible to all. Through URHAB, patients can obtain quality Physiotherapy from their homes or workplace. URHAB's exercise library and AI counter provide continuous support to patients to ensure correctness and consistency of exercises.

**Sathyabama Institute of Science & Technology**, a Deemed to be University established under Section 3 of UGC Act, 1956, located at Jeppiaar Nagar, Rajiv Gandhi Road, Sholinganallur, Chennai, Tamil Nadu, India, represented by Dr. T. Sasipraba, Vice Chancellor

1. This Memorandum of Understanding (MoU) has come into existence as a result of the efforts of Dr. Deepa. S, Assistant Professor, College of Physiotherapy, Sathyabama Institute of Science and Technology for the purpose of developing academic and research co-operation and to promote mutual understanding between the two parties.

2. The two Parties agree to develop the following collaborative activities in the areas of mutual interest.
- i. Joint Research
  - ii. Joint seminar & conference
  - iii. Exchange of facilities and resources
  - iv. Joint Publications
  - v. Other activities as mutually agreed
3. The development and implementation of specific activities based on this MoU will be separately negotiated and agreed between faculties, departments, schools or institutes, which carry out the specific projects.
4. It is understood that the parties will support each other at their own costs for the collaborative activities stated in Clause 2.
5. This MoU may be amended or modified by a written agreement signed by the representatives of both parties.
6. This MoU is valid for a period of 3 years from the date of signing by both parties. This MoU shall be renewed after being reviewed and renegotiated by both parties.
7. The agreement may be terminated by either party with advanced written notice of 3 months.
8. No changes can be made to this MoU without written consent and duly signed by both parties.
9. All information exchanged between Parties in connection with this MoU or during discussions preceding this MoU and relating to this MoU or to any matter contemplated by this MoU, and any discussions held between the Parties are CONFIDENTIAL to them and may not be disclosed to any third party during the period of this MoU.

For SMART Home Healthcare  
Solution Pvt Ltd

Signature: R. Arun

Name: Arun Kumar Ramasamy

Designation: Co-founder

Date: 13/5/24



For Sathyabama Institute of  
Science and Technology

Signature: S. Sasipraba

Name: Dr. T. Sasipraba

Designation: Vice Chancellor

Date: 10/5/24





# Statement of work

By Dr. Deepa.S, Assistant Professor, Principal Investigator,  
&  
Dr. Priya Kumari, Assistant Professor, Co- Principal Investigator,

Sathyabama College of Physiotherapy,  
Sathyabama Institute of Science and Technology  
For

SMART Home Healthcare Solutions Pvt Ltd  
HTIC, IIT Madras Research Park, Taramani, Chennai 600113

Date: 16th May 2024

SOW #2024001

## Introduction

URHAB is an online physiotherapy and rehab platform ([www.urhab.com](http://www.urhab.com)) developed by SMART Home Healthcare Solutions Private Limited based at IIT Madras Research Park, Taramani, Chennai 600113. The platform is now in the validation and early use stage and the company is engaging Dr. Deepa. S and Dr. Priya Kumari to conduct research studies and publish the results of the same in leading research journals of Physiotherapy.

Dr. Deepa. S & Dr. Priya Kumari will perform the studies and publish the research results in reputed journals as described in this contract.

This contract will be governed by the existing MoU between Sathyabama Institute of Science and Technology and SMART Home Healthcare Solutions Pvt Ltd, dated

## Purpose and objective

The purpose of this project is to conduct a series of studies to ultimately determine the improvement and effectiveness of the URHAB platform. The project objectives are :

1. Determine the studies that can be conducted to research the platform and determine the order in which they need to be conducted
2. Conducting the studies, obtaining data and analyzing the results
3. Writing of the manuscripts
4. Submission for Publication

## Study Topics

- Topics of study and the order in which they will be performed along with timelines will be discussed over a virtual meeting on a mutually agreeable date. The plan will be finalized within the first fortnight post execution of this contract.

## Tasks

Dr. Deepa. S & Dr. Priya Kumari will complete the following tasks as part of this project:

| SNO. | WEEK  | PLAN                                                                                                                                                                                                                                                                                                                                                   |
|------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | 1     | <ul style="list-style-type: none"><li>• LEARNING ABOUT THE PLATFORM</li><li>• INITIAL MEETING WITH SHHS TEAM TO DETERMINE OBJECTIVES</li><li>• DETERMINING THE STUDY TOPICS</li><li>• FRAMING THE PHASES</li><li>• COLLECTION OF ARTICLES</li><li>• DETERMINING POPULATION, INCLUSION AND EXCLUSION CRITERIA AND OUTCOME MEASURES TO BE USED</li></ul> |
|      | 2,3   | <ul style="list-style-type: none"><li>• PREPARING MATERIALS</li><li>• IDENTIFYING SUBJECTS</li><li>• APPROACHING SAMPLES</li><li>• PREPARING RESEARCH PROPOSAL FOR ETHICAL CLEARANCE</li><li>• OBTAINING ETHICAL CLEARANCE</li><li>• REGISTERING OF TRIAL</li></ul>                                                                                    |
|      | 4     | <ul style="list-style-type: none"><li>• IDENTIFYING SUBJECTS WHO FIT THE CRITERIA</li><li>• ONBOARDING THE SAMPLES</li></ul>                                                                                                                                                                                                                           |
|      | 4,5,6 | <ul style="list-style-type: none"><li>• DATA COLLECTION FROM INDIVIDUALS</li></ul>                                                                                                                                                                                                                                                                     |
|      | 7     | <ul style="list-style-type: none"><li>• OBTAINING AND ANALYZING RESULTS</li><li>• MANUSCRIPT WRITING</li></ul>                                                                                                                                                                                                                                         |



The following tasks are not included in this contract scope:

- DATA MODIFICATION

## Schedule

This project will follow the below estimated schedule:

| Task/project phase                                   | Target end date |
|------------------------------------------------------|-----------------|
| Literature Review/ Reviews                           |                 |
| Pilot study                                          |                 |
| Initial Study Planning & Clinical Trial registration |                 |
| Data Collection                                      |                 |
| Manuscript preparation and Review                    |                 |

Any delay to the planned time will need to be mutually discussed and approved beforehand in writing.

## Location

All work related to this project will occur at the location determined by Dr. Deepa. S & Dr. Priya Kumari

## Milestones and Payment schedule

The total budget planned is Rs.1,00,000 for this project, not to be exceeded. Payments will be made according to the following schedule:

| Task                                       | Payment Amount |
|--------------------------------------------|----------------|
| Review of Literature manuscript            | Rs. 25,000     |
| Clinical trail registration for main study | Rs. 25,000     |
| Completion of manuscript for main study    | Rs. 50,000     |

## Resources

Dr. Deepa S and Dr. Priya Kumari will onboard resources as needed to complete the project on time.

## Special terms and conditions

Dr. Deepa. S & Dr. Priya Kumari and team will share a formal weekly status report through video conferencing and email detailing the activities, accomplishments and the actual completion status against the plan.

## IP Rights

As the current product was developed solely by SMART Home Healthcare Solutions and the current contract only seeks validation of the tool, IP rights will be solely owned by SMART Home Healthcare Solutions. Sathyabama University will not have any IP rights to URHAB in it's current and future versions.



## Signatures

Signed and agreed to by:

Dr. Deepa. S

Assistant Professor

Sathyabama College of  
Physiotherapy, Sathyabama Institute  
of Science and Technology



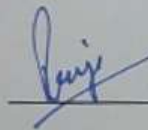
13/5/24

[Date]

Dr. Priya Kumari

Assistant Professor

Sathyabama College of  
Physiotherapy, Sathyabama Institute  
of Science and Technology



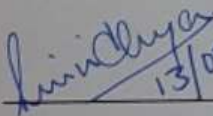
13/05/2024

[Date]

Dr. Srividhya Kesavan(PT)

Consultant Physiotherapist

SMART Home Healthcare  
Solutions Pvt Ltd



13/05/24

[Date]



Dr. Radhika S <radhikachandru79@gmail.com>

## Project Sanction Letter| PMKVY 4.0| Special Projects| Skill Hub Initiative 4 messages

Target Allocation PMKVY4.0 <targetallocation\_pmkvy4@nsdcindia.org> Wed, Jul 19, 2023 at 2:17 PM  
To: "radhikachandru79@gmail.com" <radhikachandru79@gmail.com>  
Cc: Karthik Nair <karthik.nair@nsdcindia.org>

Dear Sir/Ma'am,

Greetings from the **National Skill Development Corporation (NSDC), New Delhi.**

The Ministry of Skill Development & Entrepreneurship (MSDE), Govt. of India, is implementing the flagship skill development scheme of Government of India - Pradhan Mantri Kaushal Vikas Yojana 4.0 (PMKVY 4.0).

With the roll-out of the National Education Policy (NEP) in 2020, there has been a renewed focus on vocational skill training imparted by schools and higher education institutes, thus integrating mainstream academics with practical vocational skill training.

NSDC had circulated an online form to aggregate demand, and your institution has expressed interest to participate in PMKVY 4.0. Accordingly, your school, Sathyabama Institute of Science and Technology has been allocated 240 targets for implementing training under PMKVY4.0.

We are starting handholding initiatives through capacity building workshops in parallel for the benefit of all participants. A schedule of such workshops shall be shared with you upon receiving your willingness and Job Role wise demand. Some key highlights in terms of scheme contours, course offerings, etc. is shared below for your ready reference. You may like to write to [@Karthik Nair](#) for any queries.

Regards,

PMKVY 4.0 Target Allocation Team.

Brief Note on PMKVY 4.0

Pradhan Mantri Kaushal Vikas Yojana 4.0 (PMKVY 4.0) will be implemented between FY 2022-26 with a strong emphasis on making the programme candidate-centric by creating an enabling ecosystem to meet the emerging sectoral needs. More information on PMKVY can be assessed at [www.pmkvyofficial.org](http://www.pmkvyofficial.org) with guidelines of previous versions of PMKVY. The Guidelines for PMKVY 4.0 will also be placed shortly on this website.

### 1. Objective of the Scheme:

- a. Promote an enabling ecosystem for the youth to get skilled and choose a career path aligned with their abilities and aspirations.
- b. Enable the delivery of skill training in a market-oriented and demand-driven manner by making the existing skilling ecosystem more flexible, swift, and geared to meet the emerging demand.
- c. Process overhauling of the skill ecosystem by leveraging technology, innovative financing, and digitalization.

### 2. Implementation through Skill Hubs:

*Skill Hubs* can be setup in State and Central Government Schools, Higher Educations Institutes (HEIs), Colleges, and Universities (including Skill Universities) with requisite infrastructure for providing Short Term Trainings under PMKVY 4.0. The information on Skill Hub is available on [www.pmkvyofficial.org](http://www.pmkvyofficial.org).

### 3. Selection of Job Role for Training:



- a. Under PMKVY 4.0, it is proposed to offer various demand-driven and industry linked skilling courses including new age courses like Drone, 3D Printing, Robotics, AI, etc. An indicative list of Job Roles that can be offered under the scheme can be found on the link:  [PMKVY 2023 Job-roles - 17 July 2023.xlsx](#)
- b. Details of the respective Job Role including the infrastructure requirement, trainer qualification, candidate eligibility, etc. is mentioned in the respective Qualification Pack of the Job Role which can be accessed at [www.nqr.gov.in](http://www.nqr.gov.in).
- c. Equipment specification and other specification details are available on <https://admin.skillindiadigital.gov.in/knowledgebank>.

#### 4. Pre-Requisites for Training:

##### a. Infrastructure:

i. Availability of adequate classroom for theory classes and laboratory depending on the Job Role to be opted. (For e.g., Computer Lab in case of Data Entry Operator). More details are available under the "Training Partner and Centre" section of [www.skillindia.gov.in](http://www.skillindia.gov.in).

ii. Functional Aadhaar Enabled Biometric Attendance System (AEBAS) registered on the NIC platform.

b. Trainer: Teacher/Trainer available in the own institution with domain experience or certified trainer (list available on Skill India Portal) can also be engaged.

#### 5. Selection of Candidates:

- a. The scheme targets school/college dropouts, out-of-education, and unemployed youths in the age group of 15-45 years (*refer to Job role age criteria*).
- b. In case of Schools/Colleges/Universities, students currently studying in these institutions are also permitted to enroll.
- c. Eligibility criteria for selection of candidates is defined in the respective course curriculum of Job Role to be offered.

#### Implementation Modalities:

- a. National Skill Development Corporation (NSDC) is the implementing arm of the Ministry and shall provide all required handholding support and technical assistance in implementation of PMKVY 4.0 in Skill Hubs.
- b. The entire training life cycle from enrolment to certification and tracking will be done through Skill India Portal/Digital which necessary orientation and handholding support will be provided by NSDC ([www.skillindia.gov.in](http://www.skillindia.gov.in)).
- c. On-the-Job Training (OJT) has been mandated under the scheme in applicable Job Roles. It shall be the responsibility of the institutions to arrange for OJT in nearby industry or establishments.
- d. Assessment and certification would be done through the third-party agencies namely, Sector Skill Councils (SSCs) or any other National Council for Vocational Education and Training (NCVET) approved awarding body. The State Education Board/Technical Education Board can also become an awarding body under NCVET.
- e. Registration of the Skill Hub (institution) on Skill India Portal/Digital with requisite details of available classroom, labs, trainers, etc.
- f. Mandatory daily AEBAS attendance of Candidate, Trainer, and Assessor.
- g. The duration of the project is "till 31<sup>st</sup> March 2024, subject to availability of Scheme Budget". (Therefore, please note that the enrollment of this project may also be stopped once the overall scheme budget is committed.)

#### 7. Financial Provisions

- a. The training payout to project implementing agency would be as per PMKVY 4.0 i.e.,

 Per candidate cost = (No. of Job role Hours) X (Discounted Common Cost Norms Category)

b. The training cost will be paid by NSDC in tranches as per the PMKVY 4.0 guidelines.

For further information and support, please write to [@Karthik Nair](#)

<https://mail.google.com/mail/u/0/?ik=8b9aa0de9b&view=pt&search=all&permthid=thread-f:1771838084794301320&simpl=msg-f:17718380847943013...> 2/4  
07/05/2024, 22:25 Gmail - Project Sanction Letter| PMKVY 4.0| Special Projects| Skill Hub Initiative

*Disclaimer: The Information contained in this e-mail and/or in any of the attached files is confidential and proprietary information of National Skill Development Corporation (NSDC) and also the subject of privileged Company information. This privilege is not waived or lost by mistaken transmission or receipt. If you are not the intended recipient, any use, disclosure or copying of this mail is unauthorized. If you have received this mail in error, please notify the sender immediately by reply email and destroy the original. NSDC has taken every reasonable precaution to minimize the risk of viruses, but is not liable for any damage you may sustain as a result of any virus in this e-mail.*

Dr. Radhika S <radhikachandru79@gmail.com> Thu, Jul 20, 2023 at 6:52 AM To: "Target Allocation PMKVY4.0" <targetallocation\_pmkvy4@nsdcindia.org>, karthik.nair@nsdcindia.org

Respected Sir

Thank you very much for considering our Institute for the allocation of 240 targets for implementing training under PMKVY4.0.

We readily accept and are eagerly waiting to participate in capacity building workshops for providing training

Thank you

With Best Regards

[Quoted text hidden]

--

Dr. S. Radhika Ph.D,MISTE

Professor and Head

Department of Electrical and Electronics Engineering,

Sathyabama Institute of Science and Technology,

Jeppiaar Nagar,

Chennai-600119.

[radhikachandru79@gmail.com](mailto:radhikachandru79@gmail.com)

9444899926/9791175812

Dr. Radhika S <radhikachandru79@gmail.com> Thu, Jul 20, 2023 at 8:49 PM To: "vc@sathyabama.ac.in" <vc@sathyabama.ac.in>

Respected madam

I am forwarding the mail which i received from NSDC

Thanks and with regards

RADHIKA S

[Quoted text hidden]

[Quoted text hidden]

Vice Chancellor , Sathyabama Institute of Science and Technology <vc@sathyabama.ac.in>Thu, Jul 20, 2023 at 9:07 PM To: "Dr. Radhika S" <radhikachandru79@gmail.com>

Congratulations mam

[Quoted text hidden]

--

Thanks & Regards

Dr. T.Sasipraba

Vice Chancellor

Sathyabama Institute of Science and Technology

(Deemed to be University),

Accredited with 'A++' Grade by NAAC and 12B Status by UGC

Jeppiaar Nagar, [Rajiv Gandhi Road, Chennai- 600119](#)

[Tamilnadu, INDIA](#)

Ph: 91 -044-24503065

















**उन्नत भारत अभियान**  
**ग्रामीण विकास एवं प्रौद्योगिकी केंद्र**  
**भारतीय प्रौद्योगिकी संस्थान, दिल्ली**  
हौजखास, नयी दिल्ली- 110016



**UNNAT BHARAT ABHIYAN**  
**INDIAN INSTITUTE OF TECHNOLOGY, DELHI**  
**National Coordinating Institution**

Address: V-405, IIT Delhi Main Rd, Block 5, Hauz Khas, New Delhi, 110016

Tel: +91-11-2659 1121/1157, Fax: +91-11-2659 1121

Email: [unnatbharatabhiyaniitd@gmail.com](mailto:unnatbharatabhiyaniitd@gmail.com)

Date: June 13, 2024

To

**Dr. Y. Swarnalatha & Dr. V. Senthil Nayagam**  
**Sathyabama Institute of Science and Technology, Chennai**

**Subject:** Financial Sanction of Technical Intervention Project (No. RP-03525G) under UBA 2.0

Dear Sir/ Madam

1. This is to intimate you that Technology Intervention proposal under the category of “**Technology Development**” entitled, “**Mosquito Power Guard: An Innovative Solution for Safe Mosquito Control in Rural Communities**” submitted by you under SEG Rural Infrastructure, *Unnat Bharat Abhiyan* Project-No: **RP-03525G**, has been approved and the funds have been disbursed by the **National Coordinating Institute, IIT Delhi** in your account no. **6089858032** against **UTR No. C052428987999** vide dated **28-05-2024**.
2. You can use the grant for fulfilling the project objectives under the approved heads as per the proposal submitted and as per the UBA guidelines. The project completion is expected within 6 months from the date of receiving of funds. Kindly note that the utilization of funds allowed under the head “General Contingency” should not be more than 10% of the total sanctioned fund.

***Note:** TA/ Honorarium is strictly not permitted in this project.*

3. Any product/service developed under the sanctioned project must have UBA logo on it.
4. Detailed information of faculty in charge and students/volunteers, who will be coordinating/ working under the sanctioned project, shall be shared in the project report submitted by your institution.
5. The project implementation location/site shall be selected in consideration with gram panchayat officials/ members.
6. Please take care that the position holders/Panchayat officials shall not be benefitted in person. Also, ensure that the project shall not be controversial in terms of beneficiaries. Selection of beneficiaries shall include the Marginalized communities or EWS Category as well.

7. Few videos and images shall be shared to the NCI & SEG Coordinator (for updating the status of the project), also the report shall contain good quality pictures of the project site/product/service and feedback from the villagers/beneficiaries.
8. For the projects related to training camps, awareness, rally etc., the in-charge shall share the material/posters/modules to be used in the villages, for the knowledge of SEG Coordinator and further comments, if any.

You are required to submit the completion report/5-6 photographs/3 min videos of the project within two months after the completion of the project to the competent authority of NCI-IIT Delhi, UBA2.0 cell. Without the submission of the completion report, the opportunity for funding of a new project will not be facilitated.



**Prof. Vivek Kumar**

National SEG Coordinator

Unnat Bharat Abhiyan (UBA 2.0)

National Coordinating Institute

Indian Institute of Technology, Delhi







# The Institution of Engineers (India)

(Established 1920, Incorporated by Royal Charter 1935)

## KANCHEPURAM LOCAL CENTRE

JERUSALEM COLLEGE OF ENGINEERING, VELACHERY MAIN ROAD  
NARAYANAPURAM, PALLIKARANAI, CHENNAI-600100.



**Dr. Ramesh.S, B.E., M.Tech., Ph.D.,**

**FIE.,**

**Council Member & Chairman**

**Mobile: 9884216363**

**Dr. Karthikeyan.S, B.E., M.E., Ph.D.,**

**FIE.,**

**Honorary Secretary,**

**Mobile: 9500412034**

Email: [kanchepuramlc@ieindia.org](mailto:kanchepuramlc@ieindia.org) / [iei.kanchepuram@gmail.com](mailto:iei.kanchepuram@gmail.com), Website: [www.ieiklc.com](http://www.ieiklc.com)

IEI KLC 2024-25/300

Date: 01.06.2024

To

**Mr S D Sundarsingh Jebaseelan, MIE.**

Professor,

Department of Electrical and Electronics Engineering,

Sathyabama Institute of Science and Technology,

Chennai,

Sir,

**All India Seminar on Applications of Smart Grid Technology** for Sustainable Green solutions and Enhanced Cyber security under the aegis of – Electrical and Electronics Engineering division organized by The Institution of Engineers (India), Kanchepuram Local Centre to be scheduled on 20<sup>th</sup> & 21<sup>st</sup> June 2024 at Sathyabama Institute of Science and Technology, Chennai. The grant of Rs.40, 000/- is sanctioned. Conduct above event successfully.

Yours,

**Dr. S. Karthikeyan, FIE**

**Honorary Secretary,**

**IEI -Kanchepuram Local Centre, Tamilnadu.**

**IE(I) HEADQUARTERS**

**8, Gokhale Road, Kolkata-700020 India**

**Phone: +91-33-22238311/14/15/16/34 | Facsimile: +91-33-22238345**

**Web: [www.ieindia.org](http://www.ieindia.org) | Gram: ENJOIND**



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

[www.sathyabama.ac.in](http://www.sathyabama.ac.in)

## ENDORSEMENT FROM THE HEAD OF PROSPER AGENCY

Project Title:

**Creating Awareness on Extended Technologies - Artificial Intelligence, Augmented Reality & Virtual Reality for School Children**

1. Certified that our institution welcomes the participation of Dr.M.S.Godwin Premi as the Principal coordinator, Dr.V.Vijaya Baskar, Dr.S.Karthikeyan, Dr.D.Susitra, Dr.A.Anderson, Dr.R.Narmadha, Dr.L.Megalan Leo and Dr.N.Mathan as Co-Principal Coordinators of the project mentioned above. The Co-Principal Coordinators will assume the responsibility of fruitful completion of the project if the Principal Coordinator is unable to do so (with due intimation to NCSTC, DST.)
2. Certified that the hardware, other basic facilities, and such other administrative support required as per terms and conditions of the grant, will be extended to the coordinator(s) throughout the duration of the project.
3. Our agency will undertake the financial and other management responsibilities of the project and will ensure compliance with the terms and conditions laid down; in case the project is sanctioned.

Place: 13.5.2022

Date: Chennai



Name, Signature and Seal of the  
Head of the Institution

*S. Me*  
13/5/22  
**Dr.T.SASIPRABA, M.E., Ph.D.,**  
**VICE CHANCELLOR**  
**SATHYABAMA**  
INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)  
Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai-600 119.



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कल्याण मंत्रालय, भारत सरकार  
Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

No. 6/9-7(328)/2023/ECD-II

Dated: 28/01/2024

To,

The Registrar  
Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Road  
Chennai - 600119  
Tamil nadu

**Subject:-Sanction and budget allotment for the New Schemes Entitled, "Exploring temperature and salinity tolerant mosquitoes along the coastal Tamil Nadu, and its influence on mosquito-borne disease dynamics" Under Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology Jeppiaar Nagar, Rajiv Gandhi Road Chennai – 600119**

Sir,

In partial modification to on letter of even number dated: 13/10/2023

The Director General of the Council sanctions the above mentioned research scheme initially for a period of **2 year** subject to extension up to the total duration specified in para 3(3) below.

The Director General of the Council also sanctions the budget allotment of **Rs.33,37,356/- (Rupees Thirty Three Lakh Thirty Seven Thousand Three Hundred Fifty Six Only)** as detailed in the attached statement for the period w.e.f **01.11.2023** year ending on **31.10.2024** during the current financial year **2023-24**.

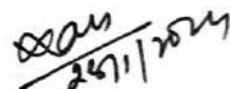
The grant-aid will be given subject to the following conditions:-

1. The payment of the grant will be made in lump-sum to the Head of the Institution. The first installment of the grant will be paid generally as soon as a report regarding the commencement of the project and appointment of the staff is received by the Council. The demand for payment of the subsequent installment of the grant should be placed with the Council in the prescribed Performa attached.
2. The staff appointed on the project should be paid as indicated in the budget statement attached.
3. The approved duration of the scheme is for **3 Years**. The annual extension will be given after review of the work done on the scheme during the previous year.
4. Fifteen copies of the Annual Progress Report of work done be submitted to the Council every year after completion of ten months of the project. Failure to submit the report in time may lead to termination of the project.



5. The institute will maintain a **Separate Saving Bank Account** of the receipts and the expenditure incurred on the scheme and will furnish a utilization certificate and an audited statement of account pertaining to the grant.
6. The grant shall be utilized after following provision laid down in GFR-2017 and TA rules.
7. The other terms and conditions are indicated in the website of ICMR ([www.icmr.nic.in](http://www.icmr.nic.in)) for "Guidelines for operation of projects for Grantees of ICMR's Extramural Research Projects". The receipt of this letter may please be acknowledged.
8. You are advised to seek concurrence of the council before disseminating the findings to journal, media or repositories."

Yours faithfully,

  
(Ved Prakash)  
Administrative Officer

**No. 6/9-7(328)/2023/ECD-II**

**Copy to:-**

1. Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Road Chennai – 600119, Tamil Nadu.
2. Copy together with a copies of the budget statement forwarded to the **Accounts Section-V, ICMR** for information and necessary action.  
**RFC No.ECD/ARS/4606/2023-2024/dt-31-10-2023**
3. Mrs. Vandana, Sr. Technical Officer-II, ICMR
4. IRIS ID No- 2022-17059

Administrative Officer

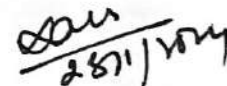
**BUDGET for the 1<sup>st</sup> year**  
**Period From 01.11.2023 to 31.10.2024**

“Exploring temperature and salinity tolerant mosquitoes along the coastal Tamil Nadu, and its influence on mosquito-borne disease dynamics” Under Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology Jeppiaar Nagar, Rajiv Gandhi Road Chennai- 600119, Tamil Nadu.

**BUDGET RECOMMENDED**

| S.No. | Staff                                                                  | 1 <sup>st</sup> Year |
|-------|------------------------------------------------------------------------|----------------------|
| 1.    | Project Research Scientist -II @ Rs 67,000/- + 27% HRA=85,090/-p.m     | 10,21,080/-          |
|       | Project Technical Support-III (TWO)@ Rs 28,000/- + 27% HRA=35,560/-p.m | 8,53,440/-           |
|       | <b>Total</b>                                                           | <b>18,74,520/-</b>   |
| 2.    | <b>Recurring</b>                                                       |                      |
|       | <b>Contingency /Consumables</b>                                        |                      |
|       | Chemicals and Consumables                                              |                      |
|       | Glass wares                                                            | 8,00,000/-           |
|       | Sanger sequencing and /or NGS outsourcing                              | 2,50,000/-           |
|       | Stationeries                                                           | 1,50,000/-           |
|       | <b>Total</b>                                                           | <b>20,000/-</b>      |
| 3.    | <b>Travel</b>                                                          | <b>12,20,000/-</b>   |
| 4.    | <b>Overhead Charges @ 3%</b>                                           | <b>1,50,000/-</b>    |
|       | <b>Total 1+2+3+4</b>                                                   | <b>92,836/-</b>      |
|       |                                                                        | <b>33,37,356/-</b>   |

Yours faithfully,



(Ved Prakash)  
Administrative Officer

**No. 6/9-7(328)/2023/ECD-II**  
**RFC No.ECD/ARS/4606/2023-2024/dt-31-10-2023**  
**IRIS ID No-2022-17059**

### Investigator Details

| # | Name                       | Institute                                      | Designation         | Email                                                                                | Contact No. | Role in Proposal |
|---|----------------------------|------------------------------------------------|---------------------|--------------------------------------------------------------------------------------|-------------|------------------|
| 1 | Dr Amit Kumar              | Sathyabama Institute of Science and Technology | Scientist C         | <a href="mailto:amit.kumar.szn@gmail.com">amit.kumar.szn@gmail.com</a>               | 9094486533  | PI               |
| 2 | Dr Krupakar Parthasarathy  | Sathyabama Institute of Science and Technology | Scientist D         | <a href="mailto:pkrupakar.cddd@sathyabama.ac.in">pkrupakar.cddd@sathyabama.ac.in</a> | 9176163111  | Co-PI            |
| 3 | Dr P. Grace Kanmani Prince | Sathyabama Institute of Science and Technology | Associate Professor | <a href="mailto:coggrace05@gmail.com">coggrace05@gmail.com</a>                       | 9940544477  | Co-PI            |
| 4 | Dr Bethanney Janney J      | Sathyabama Institute of Science and Technology | Associate Professor | <a href="mailto:bethanneyj@gmail.com">bethanneyj@gmail.com</a>                       | 9840402061  | Co-PI            |



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

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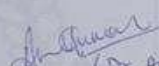
Declaration & Attestation

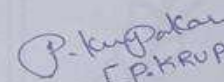
Proposal title: Exploring temperature and salinity tolerant mosquitoes along the coastal Tamil Nadu, and its influence on mosquito-borne disease dynamics.

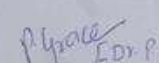
- I/We have read the terms and conditions for ICMR Research Grant. All necessary Institutional facilities will be provided if the research project is approved for financial assistance.
- I/We agree to submit within one month from the date of termination of the project the final report and a list of articles, both expendable and non-expendable, left on the closure of the project.
- I/We agree to submit audited statement of accounts duly audited by the auditors as stipulated by the ICMR.
- It is certified that the equipment(s) is/are not available in the Institute/Department or these are available but cannot be spared for the project
- It is further certified that the equipment(s) required for the project have not been purchased from the funds provided by ICMR for another project(s) in the Institute.
- I/We agree to submit (online) all the raw data (along with descriptions) generated from the project to the ICMR Data Repository within one month from the date of completion /termination of the project.

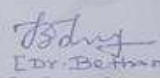
If any equipment already exists with the Department/Institute, the investigator should justify purchase of equipment.

Signature of the:

  
a) Principal Investigator  
(Dr. AMIT KUMAR)

  
b) Co-Investigator 1  
[P. KRUPAKAR]

  
c) Co-Investigator 2  
[Dr. P. GRACE KANMANI PRINCE]

  
d) Co-Investigator 3  
[Dr. Bethanney Janney J]



Date: 18-12-2023

**BIRAC BIG-22 GRANT SANCTION LETTER**

To-  
**Dr Anima Nanda,**  
**Professor & Dean,**  
**Sathyabama Institute of Science and Technology,**  
**Chennai- 600119**

**Sub: Grant-in-aid support from BIRAC Biotechnology Ignition Grant for the 22<sup>nd</sup> call**

**Dear Dr Anima Nanda,**

We are pleased to inform you that your Proposal Reference Number “**BIRAC/KIIT01937/BIG-22/23**” titled as, “Posture stability and anxiety control all terrain heuristic wheelchair” is selected for the **BIRAC’s Biotechnology Ignition Grant (BIG)** funding of **INR 50.00 Lakhs** in the **22<sup>nd</sup> Call** for the duration of 18 months through KIIT Technology Business Incubator (KIIT-TBI) as a BIG Partner. **The amount will be credited to your no lien account in four tranches of which the first tranche has already been transferred upon signing the MoU agreement, and subsequent tranche will be disbursed based on the progress of the project which will be tracked regularly with regard to the work objectives proposed by you.**

*Jayalaxmi Dash*

**Dr. Jayalaxmi Dash**  
Manager Tech innovation,  
KIIT TBI- Bhubaneswar

*Nmisra*

**Dr. Namrata Misra**  
Advisor,  
KIIT TBI- Bhubaneswar



## SPECIAL CONDITIONS

### ARTICLE I.1 – SUBJECT MATTER OF THE AGREEMENT

A European Union grant is awarded, under the terms and conditions set out in the Special Conditions, the General Conditions and the other Annexes to the Agreement, for the action entitled **Developing future - oriented academic curricula in Teacher Education with innovative methodologies for Nex-Gen Asian HEIs (FRACTION)** ("the action") as described in Annex I.

With the signature of the Agreement, the beneficiaries accept the grant and agree to implement the action, acting on their own responsibility.

### ARTICLE I.2 – ENTRY INTO FORCE OF THE AGREEMENT AND DURATION OF THE ACTION

**I.2.1** The Agreement shall enter into force on the date on which the last party signs.

**I.2.2** The action shall run for **36 months** as of **01-10-2019** ("the starting date of the action") and shall end on **30-09-2022**.

### ARTICLE I.3 - MAXIMUM AMOUNT AND FORM OF THE GRANT

The grant shall be of a **maximum amount of EUR 999.442,00** and shall take the form of:

- (a) The reimbursement of 100 % of the eligible costs of the action ("reimbursement of eligible costs"), which are:**
- (i) actually incurred ("reimbursement of actual costs") for the following categories of costs indicated in Annex III: Equipment costs, Costs for Subcontracting and Exceptional costs**
  - (ii) reimbursement of unit costs: not applicable**
  - (iii) reimbursement of lump sum costs: not applicable**
  - (iv) declared on the basis of a flat-rate of 7 % of the eligible direct costs ("reimbursement of flat rate costs") to cover the indirect costs: not applicable**
- (b) A unit contribution to cover the following categories of eligible costs indicated in Annex III: Staff Costs, Travel Costs and Costs of Stay**
- (c) Lump sum[s] contribution: not applicable**
- (d) Flat-rate contribution: not applicable.**

### ARTICLE I.4 – ADDITIONAL PROVISIONS ON REPORTING, PAYMENTS AND PAYMENT ARRANGEMENTS

#### **I.4.1 Reporting periods, payments and additional supporting documents**

In addition to the provisions set out in Articles II.23 and II.24, the following reporting and payment arrangements shall apply:



kalailakshmi tr &lt;kalailakshmip@gmail.com&gt;

---

## FRACTION, final settlements

---

**Mariusz Mazurkiewicz** <mariusz.mazurkiewicz@pwr.edu.pl>

Sat, Feb 17, 2024 at 5:20 AM

To: kalailakshmi tr &lt;kalailakshmip@gmail.com&gt;, Kannan Naga &lt;kannu74@gmail.com&gt;

Cc: Kamila Ludwikowska &lt;kamila.ludwikowska@pwr.edu.pl&gt;

Dear FRACTION partner

This news kicks off the final financial settlement process for the Fraction project.

In the first stage of this process, we are gathering information about the staff involved in the project. All we are asking for now is the names of the university staff who participated in the activities (list of activities and workload in attached file) and the names of the people who took part in the project trips (name, destination and dates of departure and return). This comes down to filling in the two tables provided in attachment. Once this information has been submitted, documents will be prepared for signature.

Universities that have not provided invoices confirming the purchase of equipment (if it took place by 30 September) are asked to send scans immediately. Failure to send scans will make it impossible to account for these amounts.

In the second stage, you will be asked to sign the prepared documents (we are going to prepare documents and send it ready to sign). Once the scans have been collected, we will move on to determining the financial flows.

The financial settlement will take into account all the operations performed so far - including unsuccessful transfers (if any). Any transfers of funds will be carried out until the funds are exhausted (the coordinator has 90% of the budget). The remaining 10% can only be accounted for once the final report has been accepted. This is what the contract with the EACEA states.

Your sincerely

Mariusz Mazurkiewicz

On behalf of coordinating team

Wrocław University of Science and Technology

---

### 3 attachments

 **WUST\_P8.pdf**  
41K **FRACTION\_travel list.xlsx**  
10K **StaffCosts\_P8.xlsx**  
14K





**EUROPEAN COMMISSION**  
Education, Audio-Visual and Culture Executive Agency

**Erasmus+: Higher Education - International Capacity Building**

Brussels, 12/10/2020  
Appfin (2020) 012865  
File code: 2019-1774

POLITECHNIKA WROCLAWSKA  
Prof. Dr. Andrzej TROCHIMCZUK  
Wybrzeże Wyspiańskiego 27  
PL-50370 WROCLAW

Email: [andrzej.trochimeczuk@pwr.edu.pl](mailto:andrzej.trochimeczuk@pwr.edu.pl)

**Subject: 598251-EPP-2018-1-PL-EPPKA2-CBHE-JP**  
**Ref.: 2019 - 1774/001/002-Change in the Partnership Composition**

Dear Prof. Dr. Trochimeczuk,

Thank you for your letter received on 22/04/2020.

We have taken note that the Czech Technical University in Prague wishes to withdraw from the Consortium. We can accept the explanations given in your letter and thank you for the official letter from the beneficiary signed by the legal representative.

We take further note that the project redistributed the unchanged global budget and work programme between the remaining partners according to the documents provided with the amendment request. We updated our files accordingly.

You will find attached an amendment to your Grant Agreement as well as the amended Annex IV of the Grant Agreement.

Should you require any further information, please contact Wolf Besche (Tel: +32 2 29 64423, e-mail: [wolf-dieter.besche@ec.europa.eu](mailto:wolf-dieter.besche@ec.europa.eu) and [eacea-eplus-cbhe-projects@ec.europa.eu](mailto:eacea-eplus-cbhe-projects@ec.europa.eu)). We also encourage you to regularly consult our Erasmus+ CBHE website [https://eacea.ec.europa.eu/erasmus-plus/beneficiaries-space/capacity-building-in-higher-education\\_en](https://eacea.ec.europa.eu/erasmus-plus/beneficiaries-space/capacity-building-in-higher-education_en).

We wish you a successful continuation of your activities.

Yours sincerely,

  
Ralf RAHDERS  
Head of Unit

Copy by email: [kamila.ludwikowska@pwr.edu.pl](mailto:kamila.ludwikowska@pwr.edu.pl)

**ANNEX I**
**ANNEX IV - List of Beneficiaries**
**598251-EPP-1-2018-1-PL-EPPKA2-CBHE-JP**

| Co-beneficiary Institutions                           | PIC       | City      | Country |
|-------------------------------------------------------|-----------|-----------|---------|
| BEIHANG UNIVERSITY                                    | 998207019 | BEIJING   | CN      |
| COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY           | 998347475 | Cochin    | IN      |
| G.L.S. UNIVERSITY                                     | 909606637 | Ahmadabad | IN      |
| SAMBHRAM CHARITABLE TRUST                             | 921973555 | BANGALORE | IN      |
| SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY        | 908722191 | Chennai   | IN      |
| SHANGHAI POLYTECHNIC UNIVERSITY                       | 920348029 | SHANGHAI  | CN      |
| TECHNISCHE UNIVERSITAET DRESDEN                       | 999897729 | DRESDEN   | DE      |
| THE UNIVERSITY OF ENGINEERING AND MANAGEMENT, KOLKATA | 908905327 | Kolkata   | IN      |
| UNIVERSIDAD DE ALMERIA                                | 999884440 | ALMERIA   | ES      |
| UNIVERSITY OF TRANSPORT AND COMMUNICATIONS            | 946991407 | Hanoi     | VN      |
| VIETNAM NATIONAL INSTITUTE OF EDUCATIONAL SCIENCES    | 948009325 | Ha Noi    | VN      |

| Co-ordinator            | PIC       | City    | Country |
|-------------------------|-----------|---------|---------|
| POLITECHNIKA WROCLAWSKA | 999845931 | WROCLAW | PL      |

## Transaction information

|                    |                                                                                      |
|--------------------|--------------------------------------------------------------------------------------|
| Sender data        | POLITECHNIKA WROCŁAWSKA WYB. STANISŁAWA WYSPIAŃSKIEGO 27 50-370 WROCŁAW              |
| DR account         | 80109024020000000610000630                                                           |
| Addressee data     | SATHYABAMA UNIVERSITY 600119 CHENNAI NO.1 OMR ROAD.RAJIV GANDHI SALAI SHOLINGANALLUR |
| CR account         | IN482965061                                                                          |
| Transaction title  | RESEARCH FUND ERASMUS+ PROJECT FRACTION RR/2507/2023                                 |
| Send date          | 2023-09-07                                                                           |
| Booking date       | 2023-09-07                                                                           |
| Transaction amount | 31,550.20 EUR                                                                        |

This document is a computer printout generated in iBiznes24 and no signatures or the Bank's stamp are required. This document has been issued pursuant to Article 7 of the Banking Law (Journal of Laws No. 72 of 2002, item 665 as amended).





## Kopia zlecenia płatniczego wychodzącego

### Message Header

|                                   |                  |             |                                        |             |        |
|-----------------------------------|------------------|-------------|----------------------------------------|-------------|--------|
| Format:                           | SWIFT            | Sub-Format: | Input                                  |             |        |
| Identifier:                       | fin103           | Expansion:  | MT 103 Single Customer Credit Transfer |             |        |
| Application:                      | FIN              | Nature:     | Financial                              |             |        |
| Sender:                           | WBKPPLPPXXX      | LT:         | A                                      |             |        |
| Receiver:                         | DEUTDEFFXXX      | LT:         | X                                      |             |        |
| Transaction reference:            | 2307210866371968 |             |                                        |             |        |
| Fin Copy Service:                 |                  |             |                                        |             |        |
| Priority:                         | Normal           |             |                                        |             |        |
| Banking Priority:                 |                  |             |                                        |             |        |
| Amount:                           | 1707,2           | Currency:   | EUR                                    | Value Date: | 230725 |
| ACK/NAK reception Date/Time(GMT): | 2023/07/21 12:26 |             |                                        |             |        |

### Sender / Receiver

|                       |             |            |                                                                                               |
|-----------------------|-------------|------------|-----------------------------------------------------------------------------------------------|
| Sender Institution:   | WBKPPLPPXXX | Expansion: | SANTANDER BANK POLSKA S.A. (FORMERL<br>HEAD OFFICE<br>WARSZAWA<br>MAZOWIECKIE<br>PL<br>POLAND |
| Receiver Institution: | DEUTDEFFXXX | Expansion: | DEUTSCHE BANK AG<br>FRANKFURT AM MAIN<br>HESSEN<br>DE<br>GERMANY                              |

### Message Text

20: Sender's Reference  
2307210866371968

23B: Bank Operation Code  
CRED

Santander Bank Polska S.A. z siedzibą w Warszawie, przy al. Jana Pawła II 17, 00-854 Warszawa, zarejestrowana w Sądzie Rejonowym dla m. st. Warszawy w Warszawie, XIII Wydział Gospodarczy Krajowego Rejestru Sądowego pod nr. KRS 0000008723. NIP 896-000-56-73. REGON 930041341. Wysokość kapitału zakładowego i wpłaconego 1 021 893 140 zł.



32A: Value Date/Currency/Interbank Settled Amount  
230725EUR1707,2

33B: Currency/Instructed Amount  
EUR1707,2

50K: Ordering Customer  
/PL80109024020000000610000630

50K: Ordering Customer  
POLITECHNIKA WROCLAWSKA WYB. STANIS

50K: Ordering Customer  
LAWA

50K: Ordering Customer  
WYSPIANSKIEGO 27 50-370 WROCLAW PL

56A: Intermediary Institution  
SCBLDEFX  
STANDARD CHARTERED BANK AG  
FRANKFURT AM MAIN  
HESSEN  
DE  
GERMANY

57A: Account With Institution  
IDIBINBB  
INDIAN BANK  
MUMBAI  
MAHARASHTRA  
IN  
INDIA

59: Beneficiary Customer  
/IN482965061

59: Beneficiary Customer  
SATHYABAMA UNIVERSITY 600119 CHENNA

59: Beneficiary Customer  
I NO.1 OMR ROAD.RAJIV GANDHI SALAI

59: Beneficiary Customer  
SHOLINGANALLUR

70: Remittance Information  
RESEARCH FUND ERASMUS+ PROJECT FRAC

70: Remittance Information

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Santander Bank Polska S.A. z siedzibą w Warszawie, przy al. Jana Pawła II 17, 00-854 Warszawa, zarejestrowana w Sądzie Rejonowym dla m. st. Warszawy w Warszawie, XIII Wydział Gospodarczy Krajowego Rejestru Sądowego pod nr. KRS 0000008723. NIP 896-000-56-73. REGON 930041341. Wysokość kapitału zakładowego i wpłaconego 1 021 893 140 zł.



TION P9 RR/2108/2023

71A: Details of Charges

OUR

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Santander Bank Polska S.A. z siedzibą w Warszawie, przy al. Jana Pawła II 17, 00-854 Warszawa, zarejestrowana w Sądzie Rejonowym dla m. st. Warszawy w Warszawie, XIII Wydział Gospodarczy Krajowego Rejestru Sądowego pod nr. KRS 0000008723. NIP 896-000-56-73. REGON 930041341. Wysokość kapitału zakładowego i wpłaconego 1 021 893 140 zł.





## Kopia zlecenia płatniczego wychodzącego

### Message Header

|                                   |                  |             |                                        |             |        |
|-----------------------------------|------------------|-------------|----------------------------------------|-------------|--------|
| Format:                           | SWIFT            | Sub-Format: | Input                                  |             |        |
| Identifier:                       | fin103           | Expansion:  | MT 103 Single Customer Credit Transfer |             |        |
| Application:                      | FIN              | Nature:     | Financial                              |             |        |
| Sender:                           | WBKPPLPPXXX      | LT:         | A                                      |             |        |
| Receiver:                         | COBADEFFXXX      | LT:         | X                                      |             |        |
| Transaction reference:            | 2309070843631797 |             |                                        |             |        |
| Fin Copy Service:                 |                  |             |                                        |             |        |
| Priority:                         | Normal           |             |                                        |             |        |
| Banking Priority:                 |                  |             |                                        |             |        |
| Amount:                           | 31550,2          | Currency:   | EUR                                    | Value Date: | 230911 |
| ACK/NAK reception Date/Time(GMT): | 2023/09/07 12:58 |             |                                        |             |        |

### Sender / Receiver

|                       |             |            |                                                                                               |
|-----------------------|-------------|------------|-----------------------------------------------------------------------------------------------|
| Sender Institution:   | WBKPPLPPXXX | Expansion: | SANTANDER BANK POLSKA S.A. (FORMERL<br>HEAD OFFICE<br>WARSZAWA<br>MAZOWIECKIE<br>PL<br>POLAND |
| Receiver Institution: | COBADEFFXXX | Expansion: | COMMERZBANK AG<br>FRANKFURT AM MAIN<br>HESSEN<br>DE<br>GERMANY                                |

### Message Text

20: Sender's Reference  
2309070843631797

23B: Bank Operation Code  
CRED

Santander Bank Polska S.A. z siedzibą w Warszawie, przy al. Jana Pawła II 17, 00-854 Warszawa, zarejestrowana w Sądzie Rejonowym dla m. st. Warszawy w Warszawie, XIII Wydział Gospodarczy Krajowego Rejestru Sądowego pod nr. KRS 0000008723. NIP 896-000-56-73. REGON 930041341. Wysokość kapitału zakładowego i wpłaconego 1 021 893 140 zł.



32A: Value Date/Currency/Interbank Settled Amount  
230911EUR31550,2

33B: Currency/Instructed Amount  
EUR31550,2

50K: Ordering Customer  
/PL80109024020000000610000630

50K: Ordering Customer  
POLITECHNIKA WROCLAWSKA WYB. STANIS

50K: Ordering Customer  
LAWA

50K: Ordering Customer  
WYSPIANSKIEGO 27 50-370 WROCLAW PL

56A: Intermediary Institution  
SCBLDEFX  
STANDARD CHARTERED BANK AG  
FRANKFURT AM MAIN  
HESSEN  
DE  
GERMANY

57A: Account With Institution  
IDIBINBB  
INDIAN BANK  
MUMBAI  
MAHARASHTRA  
IN  
INDIA

59: Beneficiary Customer  
/IN482965061

59: Beneficiary Customer  
SATHYABAMA UNIVERSITY 600119 CHENNA

59: Beneficiary Customer  
I NO.1 OMR ROAD.RAJIV GANDHI SALAI

59: Beneficiary Customer  
SHOLINGANALLUR

70: Remittance Information  
RESEARCH FUND ERASMUS+ PROJECT FRAC

70: Remittance Information

---

Santander Bank Polska S.A. z siedzibą w Warszawie, przy al. Jana Pawła II 17, 00-854 Warszawa, zarejestrowana w Sądzie Rejonowym dla m. st. Warszawy w Warszawie, XIII Wydział Gospodarczy Krajowego Rejestru Sądowego pod nr. KRS 0000008723. NIP 896-000-56-73. REGON 930041341. Wysokość kapitału zakładowego i wpłaconego 1 021 893 140 zł.



TION RR/2507/2023

71A: Details of Charges

OUR

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Santander Bank Polska S.A. z siedzibą w Warszawie, przy al. Jana Pawła II 17, 00-854 Warszawa, zarejestrowana w Sądzie Rejonowym dla m. st. Warszawy w Warszawie, XIII Wydział Gospodarczy Krajowego Rejestru Sądowego pod nr. KRS 0000008723. NIP 896-000-56-73. REGON 930041341. Wysokość kapitału zakładowego i wpłaconego 1 021 893 140 zł.





*Our vision is that all people,  
no matter where they live,  
no matter what their age,  
have the right to access high  
quality and affordable  
healthcare and to lead healthy  
and productive lives*

**Service Agreement**  
**Between “ ACCESS Health International, Inc.” and “Sathyabama Institute of  
Science and Technology”**

**Ref No: AHII/240220/004**

This Agreement and the attached schedules (which are hereinafter collectively referred to as this “Agreement” it being understood that all schedules are part of this Agreement), is entered into as of the **January 01, 2024** between ACCESS Health International, Inc., with a mailing address of [384 West Lane, Ridgefield, CT 06877] (“the Foundation”) and Sathyabama Institute of Science and Technology with an address at [Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119, Tamilnadu, India] (“SIST”).

1. SIST. Subject to the terms and conditions of this Agreement, the Foundation hereby engages the SIST to perform the services set forth herein, and SIST hereby accepts such engagement.
2. Duties, Term, and Compensation. SIST’s duties, term of engagement, compensation and provisions for payment thereof shall be as set forth in the estimate presented in the attached as Schedule A, which may be amended by mutual agreement between SIST and the Foundation in writing from time to time or supplemented with subsequent estimates for services to be rendered by SIST and agreed to in writing by the Foundation, and which collectively are hereby incorporated by reference.
3. Expenses. No additional amounts, expenses, or expense reimbursements will be paid by the Foundation to or for SIST except as agreed between both parties in writing prior to incurring such expenses, such as for travel related to this contract.
4. Deliverables; Written Reports; SIST’s Duties. SIST shall deliver to the Foundation all reports and other work product as required by this Agreement. All reports shall be in such form and setting forth such information and data as agreed with the Foundation and reflected in the Schedule A of this agreement.
5. Professional Services. SIST warrants that the services performed under this Agreement will be performed with the care and skill ordinarily exercised by members of the profession and the SIST’s industry practicing under similar conditions at the same time and in the same or a similar locality.
6. Standard of Conduct. SIST agrees to conduct itself in such a manner so that it shall not injure or diminish, in any way, directly or indirectly, the professional and/or personal reputations of the Foundation and/or the employees of the Foundation.
7. Conflicts of Interest. SIST, in rendering its duties, shall not utilize any invention, discovery, development, improvement, innovation, patent, trademark or trade secret in which it does not have a proprietary interest.



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8. Business and Property Rights.

(a) SIST and Foundation, independently, shall be responsible for the hiring and firing of any of their own employees or independent contractors of its respective business, and each of them shall set all policies governing the conduct of its own business, including their own contractual relationships with contractors as needed.

(b) All business related assets, both tangible and intangible, that are currently and in the future the property of SIST or the Foundation independently, are and shall remain the property of the SIST and Foundation independently.

9. Trade Secrets and Confidentiality.

(a) During the term of this Agreement and the term of its engagement, SIST shall keep secret and retain in strictest confidence, and shall not use for its benefit or for the benefit of others (except for the Foundation), any Trade Secrets and/or Confidential Information known to it relating to the business and operations of the Foundation, including, without limitation, contributors, supporters, operational methods, techniques, and future business plans, and shall not disclose any such information to anyone other than the Foundation, except with the Foundation's express prior written consent. SIST will promptly return any of the Foundation's property to the Foundation upon demand therefore.

(b) Trade Secrets and Confidential Information shall include, but not be limited to, the names, addresses and other pertinent information regarding of all contributors to the Foundation, that are not in the public domain.

(c) SIST shall promptly disclose to the Foundation all inventions and Work Product directly related and produced specifically for the project subject of this agreement and keep accurate records relating to the conception and implementation of such inventions and Work Product.

(d) All intellectual property, knowledge, tools, publication, inventions, and products that are already property of SIST at the date of signature of this agreement will remain as property of SIST. SIST may share and include such intellectual property, knowledge, tools, publication, inventions, and products in the deliverables for this project in which case it grants the Foundation royalty-free authorization/license to use them exclusively for activities related to the communication of the deliverables of the project subject of this agreement to individuals and organizations directly involved in it. Under no circumstance can SIST intellectual property, knowledge, tools, publication, inventions, and products be used or disseminated for other purposes without the explicit authorization of SIST.

10. Merger. This Agreement shall not be terminated by the merger or consolidation of the Foundation into or with any other entity.

11. Termination. The Foundation or the SIST may terminate this Agreement by giving one month written notice to the other party, with reasons for the termination.



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12. Agreement. (a) The Foundation shall not be responsible for the withholding or payment of any taxes on behalf of SIST; it being specifically understood and agreed that SIST shall be responsible for the payment of all taxes attributable to the fees it receives from the Foundation in the United States of America. SIST shall have no claim against the Foundation hereunder or otherwise for additional funds for vacation pay, sick leave, retirement benefits, social security, worker's compensation, health or disability benefits, unemployment insurance benefits, or employee benefits not spelled out in this agreement.

(b) SIST and the Foundation hereby release each other from any and all liability that may arise from any job related injuries or illnesses incurred by SIST or its employees or consultants. It is agreed that the Foundation shall not be liable to make any payment including damages, cost or expenses to the employees of SIST or consultants engaged by SIST.

13. Successors and Assigns. All the provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, if any, successors, and assigns.

14. Severability. Should any provision of this Agreement be deemed illegal or unenforceable in any respect, such illegality or unenforceability shall not affect the other provisions of this Agreement, all of which shall remain enforceable in accordance with their terms.

15. Choice of Law. This Agreement shall be subject to and governed by the laws of the State of Delaware, irrespective of the fact that SIST may be or become a resident of a different state or country.

16. Headings. Section headings are to be considered a part of this Agreement and are not intended to be a full and accurate description to the contents hereof.

17. Waiver. Waiver by one party hereto of a breach of any provision of this Agreement by the other shall not operate or be construed as a continuing waiver or a waiver of any other provision.

18. Assignment. SIST may not assign any of its rights under this Agreement, or delegate the performance of any of its duties hereunder, without the prior written consent of the Foundation.

19. Notices. Any and all notices, demands, or other communications required or desired to be given hereunder by any party shall be in writing and shall be validly given or made to another party if: (a) sent by facsimile, (b) personally served, (c) sent by common carrier (e.g., Federal Express), (d) sent by Email or (e) if deposited in the mail, certified or registered, postage prepaid, return receipt requested to the following:





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and productive lives*

If to SIST: Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Salai  
Chennai - 600 119, Tamilnadu, India

Attn: Dr. T. Sasipraba  
Phone: +91-9840133346  
Email: [vc@sathyabama.ac.in](mailto:vc@sathyabama.ac.in)

If to the Foundation: ACCESS Health International, Inc.  
384 West Lane  
Ridgefield, CT 06877

Attn: William A. Haseltine  
Phone: +1 203 550 5989  
Email: [william.haseltine@accessh.org](mailto:william.haseltine@accessh.org)

Any party hereto may change its address or fax number for purposes of this paragraph by written notice given in the manner provided above.

20. Modification or Amendment. No amendment, change or modification of this Agreement shall be valid unless in writing signed by the parties hereto.

21. Unenforceability of Provisions. If any provision of this Agreement, or any portion thereof, is held to be invalid and unenforceable, then the remainder of this Agreement shall nevertheless remain in full force and effect.

22. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

23. Scope of Agreement. This Agreement constitutes the entire agreement between the parties, and there are no conditions, understandings, agreements, or representations between the parties except as expressed herein.

ACCESS Health International, Inc.  
384 WEST LANE, RIDGEFIELD, CT 06877  
[www.accessh.org](http://www.accessh.org)



*Our vision is that all people,  
no matter where they live,  
no matter what their age,  
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healthcare and to lead healthy  
and productive lives*

24. Signature. This Agreement may be executed in Counterparts. Facsimile signatures are binding and are considered to be original signatures

IN WITNESS WHEREOF the undersigned have executed this Agreement as of the day and year first written above.

A handwritten signature in green ink, appearing to read 'S. Sasipraba'.

By:  
Print Name: Dr. T. Sasipraba

Title: Vice Chancellor  
Sathyabama Institute of Science and Technology

Date: 2024-01-01

DocuSigned by:  
A handwritten signature in black ink, appearing to read 'William A. Haseltine'.  
C4BBC3F4088A4D2...

By:  
Print Name: William A. Haseltine

Title: Chair  
ACCESS Health International, Inc.

Date: 2024-01-01



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## Schedule A

**Title:** Competency Assessment of In-Service Community Health Officers in Public Primary Health Care Setting in Odisha

### Scope of Work

#### Introduction:

Providers' competence plays a significant role in primary health care performance (Michielsen et al., 2022). Community Health Officers (CHOs) in Health and Wellness Centres are one of the key members of the Primary Health Care team (Brar et al., 2021). They are new cadres of primary health care professionals, introduced by the Odisha state government. They are appointed in the modified sub-centres (HWCs) which cover 3000 population. Globally, including in Low- and middle-income countries (LMICs), the roles of primary health care nurses are becoming vital. The CHOs support primary health care to meet the elevated service needs caused due to the increasing burden of Chronic Care (Garg et al., 2022). Global, including Indian literature, suggests that the competency of the Primary Health Care team needs substantial capacitation to perform optimally (Baviskar et al., 2021). To explore it further in Odisha, the Harvard School of Public has assessed the competencies of the primary health care team (Yip et al., 2022). It entails that- only 40% of providers were able to diagnose tuberculosis (TB) correctly.

In contrast, the correct diagnostic ability was 54% for pre-eclampsia, 55% for asthma, 67% for heart attack, and 72% for diarrhoea. Doctors practicing in rural areas performed better than those in urban areas. Private providers showed better competence in diagnosing most diseases except for TB. In most cases, the condition was misdiagnosed as a milder illness. Most providers could not prescribe the right treatment recommended by STGs or correctly refer patients to higher facilities when required. This survey reported high referrals from PHCs and SCs to the higher centres for complex cases. However, the back referrals were very few, indicating inefficiencies in the health system's functioning. Out of the total PHCs, 56% refer to CHCs, 28% to sub-centers, and 10% to district hospitals.





*Our vision is that all people,  
no matter where they live,  
no matter what their age,  
have the right to access high  
quality and affordable  
healthcare and to lead healthy  
and productive lives*

Regarding the referral network among the public hospitals (including the CHCs) and private hospitals, 87% refer patients to public hospitals, while 7% to other private hospitals. In other cases, most public hospitals refer their patients to other public hospitals. These findings indicate that the level of competencies among the primary health care team is low, but the existing studies cannot quantify the level of competencies among in-service primary health care team.

Understanding this competency gap among primary health care teams, HSTP proposed to the Government of Odisha to develop the Primary Health Care team competency including Community Health Officers in Health and Wellness Centres. Competency Assessment is the first step towards developing competency. For which, HSTP intends to partner with Sathyabama College of Nursing, Sathyabama Institute of Science and Technology (SCN-SIST), Chennai to assess the competency of in-service CHO in public primary health care setting in Odisha.

The State Research & Ethics Committee, Directorate of Health Services, the Government of Odisha has approved the collaborative proposal to develop the Competency Assessment Framework (Competency Assessment Tool) on 23rd March 2023.

The objective of this proposed study is to assess the level of competencies among in-service CHOs in HWCs in Odisha and to develop the CHOs' competency-based training manuals for Participants and trainers.

## **Budget**

The total budget for the proposed engagement will be INR 36,63,697 (Rupees Thirty-Six Lakh Sixty-Three Thousand Six Hundred and Ninety Seven Only) inclusive of GST and any other statutory taxes is to be paid as per the agreed budget. There will be no additional budget involved apart from the amount mentioned above.



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and productive lives*

## Bank Account Details

|                                |                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Name of the Beneficiary</b> | Sathyabama Institute of Science and Technology-Research                                           |
| <b>Bank Name</b>               | Indian Bank                                                                                       |
| <b>Account Number</b>          | 6089858032                                                                                        |
| <b>Bank Address</b>            | SIST Branch, no 1 OMR road, Rajiv Gandhi Salai, Sholinganallur, Chennai, Tamil Nadu, India 600119 |
| <b>IFSC Code</b>               | IDIB000S201                                                                                       |
| <b>Swift Code</b>              | IDIBINBBMAS                                                                                       |

## Remuneration

The entire service fee, not exceeding INR 36,63,697 inclusive of GST and any other statutory taxes would be paid to the account mentioned above held by Sathyabama Institute of Science and Technology.

## Deliverables & Payment Schedule

| <b><u>Payment Instalment</u></b> | <b><u>Month-Year</u></b> | <b><u>Deliverables</u></b>                                                                                                                                                                                                                       | <b><u>Contribution % (Out of Total Contract Value)</u></b> | <b><u>Amount (INR)</u></b> |
|----------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------|
| 1                                | Feb-2024                 | 1. List of CHO's role-based competencies and behaviours<br>2. Expert Consultation report (Competencies and behaviours)                                                                                                                           | 15%                                                        | 5,49,555                   |
| 2                                | Feb-2024                 | 3. Draft Competency Assessment Tool<br>4. Expert Consultation Report- CAT<br>5. Institutional Ethics Committee Approval Certificate<br>6. State Research and Ethics Committee Approval Documents<br>7. State Consultation Report (Customization) | 35%                                                        | 12,82,294                  |
| 3                                | March-2024               | 8. CAT Pre-testing Report<br>9. Field Investigators training Report.<br>10. Interim data analysis Report<br>11. Study- Assessment Report                                                                                                         | 15%                                                        | 5,49,555                   |
| 4                                | March-2024               | 12. Dissemination Workshop Report<br>13. Competency based Training Manuals for Participants<br>14. Competency based training manuals for trainers                                                                                                | 35%                                                        | 12,82,294                  |



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## **Term of Contract**

This contract period is from **January 01, 2024 to March 31, 2024**. Sathyabama Institute of Science and Technology will be engaged under the agreement from the date of signing the contract till the date of closure as mentioned above. **The contract will be considered closed when all the deliverables are received, and final report is submitted to satisfaction.**





BAVANILATHA M &lt;bavanilatha.biotech@sathyabama.ac.in&gt;

**Selection as Mentor Institute under Margdarshan Scheme in FY 2023-24**

10 messages

**Margadarshak Scheme** <margadarshak@aicte-india.org>

Fri, Apr 19, 2024 at 4:09 PM

To: bavanilatha.biotech@sathyabama.ac.in, Vice Chancellor Sathyabama University &lt;vc@sathyabama.ac.in&gt;, gsbiotech5@gmail.com

Cc: Assistant Director StDC &lt;ad2.sag@aicte-india.org&gt;, "Garima Rohela, Director" &lt;directormdc@aicte-india.org&gt;, "Dr. Neeraj Saxena" &lt;advisor.sag@aicte-india.org&gt;

Dear Sir/Madam,

This is with reference to your proposal submitted for Mentor Institute (MI) in AICTE. The proposal was placed before the duly constituted Committee, based on the recommendations of the Committee, the Competent Authority has approved your Institution as Mentor Institute (MI) under the Margdarshan Scheme 2023-24 of AICTE. The following MBIs are hereby mapped for mentoring under Margdarshan Scheme.

| Name of MI                                                                                                                                     | S.No. | Name of MBI with Address                         |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------|
| Sathyabama Institute of Science and Technology,<br><br>Jeppiaar Nagar, OMR salai, Chemmancherri, Chennai - 600 119, Tamilnadu Kanchipuram (DT) | 1.    | University College of Engineering, Kancheepuram  |
|                                                                                                                                                | 2.    | St. Anne's College of Engineering and Technology |

In accordance with the Scheme Guidelines, a **total grant in aid of Rs. 6.00 Lakh** has been sanctioned. Kindly forward a bank mandate form for releasing the same as per Scheme Guidelines.

You may kindly initiate all the activities for MBIs as per revised Guidelines of Margdarshan Initiatives and it is expected that your institute shall utilize the grant for achieving the objective of the scheme such that maximum beneficiary Institutes are able to achieve accreditation by NBA in the forthcoming session.

--

Thanks and Regards

Margdarshak Cell

All India Council for Technical Education

Contact: 011-29581052

Vice Chancellor , Sathyabama Institute of Science and Technology

&lt;vc@sathyabama.ac.in&gt;

Fri, Apr 19, 2024 at 5:36

PM

To: Margadarshak Scheme &lt;margadarshak@aicte-india.org&gt;

Cc: Assistant Director StDC &lt;ad2.sag@aicte-india.org&gt;, "Dr. Neeraj Saxena" &lt;advisor.sag@aicte-india.org&gt;, "Garima Rohela, Director" &lt;directormdc@aicte-india.org&gt;, bavanilatha.biotech@sathyabama.ac.in, gsbiotech5@gmail.com

Thank you . We are happy and privileged to be a mentor Institution.

Thanks &amp; Regards

Dr. T.Sasipraba

Vice Chancellor

**Sathyabama Institute of Science and Technology**

(Deemed to be University),

Accredited with 'A++' Grade by NAAC and 12B Status by UGC

Jeppiaar Nagar, Rajiv Gandhi Road, Chennai- 600119

Tamilnadu, INDIA

Ph: 91 -044-24503065

[www.sathyabama.ac.in](http://www.sathyabama.ac.in)

[Quoted text hidden]

**BAVANILATHA M** <bavanilatha.biotech@sathyabama.ac.in>  
To: Margadarshak Scheme <margadarshak@aicte-india.org>

Sat, Apr 20, 2024 at 12:23 AM

Dear sir/Madam,  
Thank you so much for your consideration. we will do our level best.

Dr.M.Bavanilatha &amp; Dr.Gopi from SIST.

[Quoted text hidden]

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## Vision of the Department

The department of Biotechnology envisages to empower the students with analytical skills and to create an ethical workforce, competent to transform the future with social consciousness on par with global standards.

## Mission of the Department

We intended to achieve this by:

- 1.To enable the students to acquire technical skills in core aspects of Bioengineering pertaining to the development of innovative technologies.
- 2.To increase the employability of students by exposing them to various industrial, academic and research environment.

3.To inculcate leadership and inter-personal skills by involving students in diversified activities

4.To instil the societal and ethical responsibility in our students.

---

**Margadarshak Scheme** <margadarshak@aicte-india.org>

Tue, Apr 23, 2024 at 4:44 PM

To: bavanilatha.biotech@sathyabama.ac.in, Vice Chancellor Sathyabama University <vc@sathyabama.ac.in>, gsbitech5@gmail.com

Cc: Assistant Director StDC <ad2.sag@aicte-india.org>, "Garima Rohela, Director" <directormdc@aicte-india.org>, "Dr. Neeraj Saxena" <advisor.sag@aicte-india.org>

Dear Sir/Madam,

You are requested to kindly send the mandate form needed to facilitate the release of the sanctioned grant for initiating the activities under the Margdarshan Initiative for the Academic Year 2023-24 at the earliest.

[Quoted text hidden]

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**gobi saravanan** <gsbiotech5@gmail.com>

Wed, Apr 24, 2024 at 12:18 PM

To: Margadarshak Scheme <margadarshak@aicte-india.org>

Cc: bavanilatha.biotech@sathyabama.ac.in, Vice Chancellor Sathyabama University <vc@sathyabama.ac.in>, Assistant Director StDC <ad2.sag@aicte-india.org>, "Garima Rohela, Director" <directormdc@aicte-india.org>, "Dr. Neeraj Saxena" <advisor.sag@aicte-india.org>

Dear Sir/Madam,

As per the previous email, We are sending herewith the "Mandate Form" for your kind perusal.

Regards,

Dr. K. Gobi Saravanan.

[Quoted text hidden]

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**With Warm and Kind Regards,**

**Dr. K. Gobi Saravanan,**  
**Associate Professor (Research),**  
**International Research Centre,**  
**Centre for Nanoscience and Nanotechnology,**  
**Sathyabama Institute of Science and Technology,**  
**Chennai-600 119. India.**  
**Mobile - +91-8300839868**  
[gsbiotech5@gmail.com](mailto:gsbiotech5@gmail.com)  
<http://centrefornanotechnology.com>

*"All of science is nothing more than the refinement of everyday thinking." -Albert Einstein*



**Margdarshan - Mandate Form.pdf**

428K

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**Margadarshak Scheme** <margadarshak@aicte-india.org>

Wed, Apr 24, 2024 at 12:52 PM

To: gobi saravanan <gsbiotech5@gmail.com>, bavanilatha.biotech@sathyabama.ac.in, Vice Chancellor Sathyabama University <vc@sathyabama.ac.in>

Cc: Assistant Director StDC <ad2.sag@aicte-india.org>, "Garima Rohela, Director" <directormdc@aicte-india.org>

Dear Sir,



Kindly provide the **Institute PAN Number** in the Mandate form for releasing the sanctioned grant.

You are also required to provide the final details of the Chief Coordinator under the Margdarshan Scheme 2024-25.

[Quoted text hidden]

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**gobi saravanan** <gsbiotech5@gmail.com>

Wed, Apr 24, 2024 at 3:33 PM

To: Margadarshak Scheme <margadarshak@aicte-india.org>

Cc: bavanilatha.biotech@sathyabama.ac.in, Vice Chancellor Sathyabama University <vc@sathyabama.ac.in>, Assistant Director StDC <ad2.sag@aicte-india.org>, "Garima Rohela, Director" <directormdc@aicte-india.org>

Dear Sir/Madam,

As per your request, we are sending herewith the "Mandate Form" which contains institute PAN details.

Also kindly find the coordinator details of Margdarshan Scheme 2024-25 as follows,

(1) Dr. T. Sasipraba, Vice-Chancellor, Sathyabama Institute of Science and Technology (Chief Coordinator)

(2) Dr. M. Bavani Latha, Associate Professor, Sathyabama Institute of Science and Technology (Coordinator -1)

(3) Dr. K. Gobi Saravanan, Associate Professor, Sathyabama Institute of Science and Technology (Coordinator -2)

Regards,

**Dr. K. Gobi Saravanan.**

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**AICTE Mandate Form.pdf**

184K

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**Margadarshak Scheme** <margadarshak@aicte-india.org>

Fri, May 3, 2024 at 11:52 AM

To: bavanilatha.biotech@sathyabama.ac.in, gobi saravanan <gsbiotech5@gmail.com>, Vice Chancellor Sathyabama University <vc@sathyabama.ac.in>

Cc: Assistant Director StDC <ad2.sag@aicte-india.org>, "Garima Rohela, Director" <directormdc@aicte-india.org>

Dear Sir/Madam,

Please find the Sanction Letter under Margdarshan Scheme along with the Scheme Guidelines attached below.

On Fri, Apr 19, 2024 at 4:09 PM Margadarshak Scheme <margadarshak@aicte-india.org> wrote:

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## 2 attachments



**Sathyabama Institute of Science and Technology.pdf**

125K



**Margdarshan Scheme Guidelines new.pdf**

937K

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**Vice Chancellor , Sathyabama Institute of Science and Technology**

<vc@sathyabama.ac.in>

Fri, May 3, 2024 at 1:38

PM

To: Margadarshak Scheme <margadarshak@aicte-india.org>

Cc: Assistant Director StDC <ad2.sag@aicte-india.org>, "Garima Rohela, Director" <directormdc@aicte-india.org>, bavanilatha.biotech@sathyabama.ac.in, gobi saravanan <gsbiotech5@gmail.com>

Noted with thanks. We will follow according to the guidelines given by you

**Thanks & Regards**

**Dr. T.Sasipraba**

**Vice Chancellor**

**Sathyabama Institute of Science and Technology**

(Deemed to be University),

Accredited with 'A++' Grade by NAAC and 12B Status by UGC

Jeppiaar Nagar, Rajiv Gandhi Road, Chennai- 600119

Tamilnadu, INDIA

Ph: 91 -044-24503065

[www.sathyabama.ac.in](http://www.sathyabama.ac.in)



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Vice Chancellor , Sathyabama Institute of Science and Technology

Fri, May 17, 2024 at 2:37 PM

<vc@sathyabama.ac.in>

To: Margadarshak Scheme <margadarshak@aicte-india.org>

Cc: bavanilatha.biotech@sathyabama.ac.in, gobi saravanan <gsbiotech5@gmail.com>, Assistant Director StDC <ad2.sag@aicte-india.org>, "Garima Rohela, Director" <directormdc@aicte-india.org>

Dear Sir/Madam,

We acknowledge the received grant of Rs. 2,40,000 for the current financial year 2024-25 under Margdarshan Scheme. We have started initiating the work as per guidelines given by AICTE.

Thanks & Regards

Dr. T.Sasipraba

Vice Chancellor

Sathyabama Institute of Science and Technology

(Deemed to be University),

Accredited with 'A++' Grade by NAAC and 12B Status by UGC

Jeppiaar Nagar, Rajiv Gandhi Road, Chennai- 600119

Tamilnadu, INDIA

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GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
CO/B/FP/G49/2022 (G)  
(NCSTC)

122

Technology Bhawan, New Delhi  
Dated: 05/06/2024

**Sanction Order**

**Subject:** Financial assistance for the project entitled **"Awareness on cyber threats and security measures for online safety among school children"** submitted by **Dr. Bharathi B, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, CHENNAI, CHENNAI, TAMILNADU, 600119** Release of the First installment regarding

Sanction of the President is hereby accorded to the approval to the above mention project at a total cost of **Rs. 28,90,500/- (Rupees Twenty Eight Lakh Ninety Thousand Five Hundred only)** for a duration of **1 Years 6 Months**. The detailed breakup of the grant for General as well as Capital Components are given below:-

**General Component : ₹ 28,90,500/-**  
**Capital Component : ₹ 0.00/-**

| Items                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Budget Summary (in Rs.) |        |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------|---------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Year-1                  | Year-2 | Total   |
| <b>1- Non-Recurring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |        |         |
| <b>Subtotal (Capital)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0                       | 0      |         |
| <b>2- Recurring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                         |        |         |
| <b>Event Organising Expenses-</b> (i) TA/DA for External Resource persons (2 experts per day) @ Rs. 3000 x 6 = Rs.18,000/- (ii) Lodging and Boarding expenditure for Outside Resource Persons @Rs.2500- x 2 experts x 3days = Rs. 15,000/- (iii) Honorarium for External Experts @Rs.3000 x 2 experts x 3 days= Rs.18,000/- (iv) Honorarium for Internal Experts @Rs.2500 x 2 experts x 3 days= Rs.15,000/- (v) Printing of Brochures/Flyers @ Rs.20 x 350= Rs.7,000/- (vi) Programme Banners/Standees=Rs.5,000/- (vii) Student Registration Kits @Rs.250 x 350= Rs.87,500/- (viii) Instruction Materials, CDs, Photocopies= Rs.50,000/- (ix) Participation Certificates @ Rs.20 x 350=Rs.7,000/- (x) Winner Certificates for CTFs, Prizes=Rs.10,000/- (xi) Venue Arrangements , Tent, Stalls, tables, Chairs, with projectors, audio, etc.@ Rs.50,000 x 3days=Rs.1,50,000/- (xii) Professional Videography and Photography=Rs.40,000/- (xiii) Mementos for School Teachers/Representatives, Judges for CTFs=Rs.20,000/- (xiv) Food, water, refreshments of students, guests, accompanying teachers @Rs.250 x 400 x 3 days=Rs.3,00,000/- (xv) Design of instruction material, preparation of gaming content, video content=Rs.40,000/- (xvi) Bus arrangement for school students @ Rs. 7000 per bus x 6 buses x 3 days= 1,26,000/- (xvii) Popularization Visits to Schools/Online Promotions=Rs.15,000/- (xviii) Consumables (printing, reprography, files, folders, etc.)=Rs.10,000/- (xix) Contingency=Rs.30,000/- (Total budget for one outreach programme=Rs.9,63,500/-) (Sub-Total for 03 outreach programme (Rs. 9,63,500 x 3 = 28,90,500/-) | 2890500                 | 0      | 2890500 |
| <b>Subtotal (General)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2890500                 | 0      | 2890500 |
| <b>Total Project Cost (Cap.+ Gen.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2890500                 | 0      | 2890500 |

2. The sanction of the President is also accorded to the release of **Rs. 23,00,000/- (Rupees Twenty Three Lakh only)** to the **"Director/Registrar/Principal/Controller/Comptroller, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY"** being the First installment of grant as mentioned above table under **"General Component"** for the above mentioned project.

3. The expenditure involved is debitable to **Demand No. 89**, Department of Science & Technology for the year 2024-2025

*Prasad*



|                      |                                                   |
|----------------------|---------------------------------------------------|
| 3425                 | Other Scientific Research(Major Head)             |
| 3425.60              | Others : (Sub-Major Head)                         |
| 3425.60.200          | Assistance to Other Scientific Bodies(Minor Head) |
| 3425.60.200.70       | Innovation,Technology Development and Deployment  |
| 3425.60.200.70.00    | Detailed Head                                     |
| 3425.60.200.70.00.31 | Grants-in-aid General                             |
|                      | (Previous: 3425.60.200.08.05.31)                  |

4. The amount of Rs. 1/- (Rupee One only) against the sanctioned amount of 23,00,000/- (Rupees Twenty Three Lakh only) will be drawn by DDO, DST and disbursed to the "CNA account of SERB in respect of Innovation,Technology Development and Deployment Scheme".

|                           |                                                     |
|---------------------------|-----------------------------------------------------|
| Name of A/C Holder        | Innovation Technology Development and Deployment    |
| Bank A/C No               | 349902010051240                                     |
| Name of the Bank & branch | Union Bank of India, Safdarjang Enclave - New Delhi |
| RTGS/IFSC code            | UBIN0534994                                         |

5. CNA shall assign/allocate the amount of Rs. 23,00,000/- (Rupees Twenty Three Lakh only) to the Director/Registrar/Principal/Controller/Comptroller, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY" as per details given below:-

|                           |                                   |
|---------------------------|-----------------------------------|
| Name of A/C Holder        | SATHYABAMA DST SEED SCSP STI 2021 |
| Bank A/C No               | 113522010000827                   |
| Name of the Bank & branch | Union Bank of India               |
| RTGS/IFSC code            | UBIN0911356                       |

6. As per Rule 234 of GFR 2017, the sanction has been entered at S. No 146 . in the register of grants maintained in the NCSTC for the scheme **CHILDREN CENTRIC OUTREACH PROGRAMME** .

7. This issues with the concurrence of IFD vide their Concurrence Dy. No. IFD/C/III/100524/31/00461 dated 10/05/2024.

8. The GI will keep all the funds received in the Central Nodal Account only and shall not transfer the funds to any other account or not divert the same to Fixed Deposits/ Flexi-Account/ Multi-Option Deposit Account/ Corporate Liquid Term Deposit (CLTD) account etc. The funds released to GI shall not be parked in bank account of any other agency.

9. The GI will ensure the compliance of OM. No. F. No. 1/(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.

10. The organization is registered on NGO Darpan Portal and their Unique ID is TN/2017/0116286.

11. This sanction order is subject to the **Terms & Conditions** as annexed .

  
Dr. Prabhat K Rai  
(Scientist - 'C')  
prabhatk.raai@gov.in

To,  
The Pay & Accounts Officer,  
Department of Science & Technology,  
New Delhi – 110 016.

Copy of information and necessary action to: -

1. The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, I.P. Estate, New Delhi.
2. The Financial Advisor, Integrated Finance Division, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016
3. The Internal Audit Wing, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016
4. Drawing and Disbursing Officer, DST, Cash Section. (two copies)
5. Dr. Bharathi B, Professor, Computer Science and Engineering, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, Chennai, Chennai, Tamilnadu - 600119
6. The Director/Registrar/Principal/Controller/Comptroller/Chief Executive Officer(CEO), SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, Chennai, Chennai, Tamilnadu - 600119
7. Secretary, Science and Engineering Research Board (SERB), New Delhi ( for allocation of limits to implementing agency )
8. Head (NCSTC) DST
9. Sanction Folder (NCSTC)

  
Dr. Prabhat K Rai  
(Scientist - 'C')  
prabhatk.raai@gov.in

ANNEXURE





GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
CO/B/FP/G49/2022 (G)

Terms & Conditions

1. The grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report (Vis-a-Vis Target Vs-Achievement) at the end of each financial year duly reflecting the interest earned / accrued on the grant received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.
2. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
3. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital head grant.
4. The grant-in-aid being released is subject to the condition that:-
  - a) A transparent procurement procedure in line with Provisions of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.
  - b) While submitting Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to the purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.
5. As per the GFR 2017 Rule 230 (8) the Grantee Institute should ensure that all the interests or other earnings against Grant-in-Aid or advances (other than reimbursement) released to any Grantee institution should be mandatorily remitted to the Consolidated Fund of India immediately after finalization of the accounts. Such advances will not be allowed to be adjusted against future releases.
6. As per the GFR 2017 Rule 230 (17) "the Grantee Institute should agree to make reservations for Scheduled Castes and Scheduled Tribes or OBC in the posts or services under its control on the lines indicated by the Government of India"
7. The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in)), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure/ Utilization Certificate for considering subsequent release of Grant/ Closure of Project accounts.
8. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.
9. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.
10. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publication / media release as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.
11. Failure to comply with the terms and conditions of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
12. It is mandatory to use EAT module in PFMS, failing which no further funds shall be released.
13. Goods (Consumable/Equipment) available in GeM portal are to be procured mandatorily online through GeM only as per the provisions of Rule 149 of GFR.
14. The Grantee Institute should follow Global Tendering Enquiry (GTE) conditions as per Department of Expenditure ID Note No:4/1/2021-PPD dated 10.09.2021.
15. If One time assistance or non-recurring grant as Grant-in-Aid for Rs. 10.00 lakhs to Rs. 50.00 lakhs, it should be included in the Annual Report of the Institute.
16. The Grantee Institute must ensure any other provisions of GFR-2017 (<https://doe.gov.in/order-circular/general-financial-rules2017-0>) and guidelines/amendments issued from Govt. of India from time to time.

*Handwritten signature*





भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
CO/B/FP/G49/2022 (G)  
**निबंधन और शर्तें**

1. अनुदानग्राही संस्थान प्रत्येक वित्त वर्ष के अंत में इस परियोजना के अंतर्गत प्राप्त अनुदान पर अर्जित/प्रोद्भूत ब्याज को विधिवत रूप से दर्शाते हुए अद्यतन प्रगति रिपोर्ट (लक्ष्य बनाम उपलब्धि) के साथ जीएफआर 2017 में विनिर्दिष्ट प्ररूप में वित्तीय वर्ष-वार उपयोग प्रमाण पत्र (यूसी) और व्यय का लेखापरीक्षित विवरण (एसई) विज्ञान और प्रौद्योगिकी विभाग को प्रस्तुत करेगा। यह परियोजना की समाप्ति की निर्धारित तारीख से एक वर्ष भीतर व्यय का अंतिम विवरण, उपयोग प्रमाण-पत्र और परियोजना समाप्ति रिपोर्ट प्रस्तुत करने की शर्त के भी अध्वधीन है।
2. अनुदानग्राही संस्थान को उपयोग प्रमाण-पत्र इस प्रभाग में भौतिक रूप में भेजने के साथ-साथ पीएफएमएस पोर्टल पर प्रविष्ट और अपलोड करना होगा। अनुवर्ती/अंतिम किस्त प्रभाग द्वारा यूसी की स्वीकृति की पुष्टि और पीएफएमएस में पूर्ववर्ती उपयोग प्रमाण-पत्र की प्रविष्टि के बाद ही जारी की जाएगी।
3. यदि अनुदान एक ही परियोजना के अंतर्गत उपस्कर (रों) की खरीद के लिए पृथक संस्वीकृति आदेश के माध्यम से पूंजी-शीर्ष के अंतर्गत जारी किया गया है तो जारी किया गया पूंजी-शीर्ष अनुदान के लिए पृथक एसई/यूसी प्रस्तुत करना होगा।
4. जारी किया जा रहा सहायता अनुदान निम्नलिखित शर्तों के अध्वधीन है-
  - क) उपर्युक्त परियोजना के लिए संस्वीकृत पूंजी आस्तियों की खरीद करते समय अनुदानग्राही संस्थान के उचित नियमों के तहत संस्थान/संगठन द्वारा सामान्य वित्तीय नियमावली 2017 के उपबंधों के अनुरूप पारदर्शी खरीद प्रक्रिया का अनुपालन किया जाए और अनुदान प्राप्ति पर तुरंत प्रभाव से अनुदानग्राही संगठन द्वारा इस आशय का प्रमाण-पत्र प्रस्तुत किया जाए।
  - ख) उपयोग प्रमाण-पत्र/ व्यय विवरण प्रस्तुत करते समय, संगठन को जीएफआर 2017 के उपबंधों के अनुसरण में उपस्कर/पूंजी आस्तियों की खरीद के संबंध में संबंधित दस्तावेज-साक्ष्य प्रस्तुत करना सुनिश्चित करना होता है।
5. जीएफआर नियमावली 2017 के नियम 230 (8) के अनुसार अनुदानग्राही संस्थान को सुनिश्चित करना चाहिए कि किसी भी अनुदानग्राही संस्थान को जारी किए गए सहायता अनुदान या अग्रिम (प्रतिपूर्ति से भिन्न) पर प्राप्त समस्त प्रकार के ब्याज या अन्य आय को लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में अनिवार्य रूप से विप्रेषित किया जाए। ऐसे अग्रिमों को भविष्य में जारी की जाने वाली निधियों में समायोजित करने की अनुमति नहीं दी जाएगी।
6. जीएफआर नियमावली 2017 के नियम 230 (17) के अनुसार, "अनुदानग्राही संस्थान को भारत सरकार के निर्देशानुसार अपने नियंत्रणाधीन पदों या सेवाओं में अनुसूचित जाति या अनुसूचित जनजाति या ओबीसी के लिए आरक्षण रखने पर सहमत होना चाहिए।"
7. अनुदानग्राही संस्थान परियोजना का पृथक परीक्षित लेखा रखेगा और अनुदान की समस्त राशि बैंक खाते में सब्याज रखी जाएगी। वित्तीय वर्ष 2017-18 के दौरान और उसके बाद जारी अनुदान के लिए, अनुदान के लिए सभी प्रकार के ब्याज या अन्य आय ऐसे लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में (गैर कर प्राप्ति पोर्टल (एनटीआरपी) अर्थात् [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in) के माध्यम से) विप्रेषित की जाएगी, क्योंकि यह राशि भविष्य में जारी की जाने वाली राशि में समायोजित नहीं की जाएगी। अनुवर्ती अनुदान के निर्गम/ परियोजना खाते को बंद करने पर विचार किए जाने के लिए, व्यय विवरण/ उपयोग प्रमाण-पत्र के साथ इस आशय का प्रमाण पत्र प्रस्तुत करना होगा।
8. डीएसटी, अनुदान से सृजित परिसंपत्तियों पर एकमात्र सुरक्षित अधिकार रखता है। सरकारी अनुदानों से पूरी तरह से या पर्याप्त रूप से अर्जित संपत्ति (जीएफआर 2017 में निर्धारित प्रक्रिया के अनुसार अप्रचलित और अनुप्रयोज्य, अनुपयोगी घोषित अनुदानों से इतर), का निपटारा डीएसटी का पूर्व अनुमोदन प्राप्त किए बिना नहीं किया जाएगा।
9. जैसा कि सामान्य वित्तीय नियमावली 2017 के नियम 236 (1) के तहत निर्धारित किया गया है, अनुदानग्राही संगठन का लेखा स्वीकृति प्रदाता प्राधिकारी और लेखा परीक्षक (भारत के नियंत्रक एवं महालेखापरीक्षक और डीएसटी के प्रधान लेखा कार्यालय दोनों द्वारा आंतरिक लेखा परीक्षा) द्वारा निरीक्षण किए जाने, जब भी संगठन को ऐसा करने के लिए कहा जाता है, हेतु अभिगम्य होगा।
10. इस परियोजना अनुदान से प्राप्त तकनीकी सहायता/वित्तीय सहायता की उचित पावती को अनुदानग्राही संगठन द्वारा सभी प्रकाशनों/मिडिया प्रकाशनी में मोटे अक्षरों में और परियोजना के पूरा होने के दौरान और तदुपरांत उनकी वार्षिक रिपोर्टों के शुरुआती पैराग्राफों में अनिवार्य रूप से दिखाया किया जाना चाहिए।
11. बॉन्ड के नियमों और शर्तों का पालन करने में असफल होने पर जीएफआर 2017 के नियम 231 (2) के अनुसार पूरी राशि सब्याज वापस करनी होगी।
12. पीएफएमएस में ईएटी मॉड्यूल का उपयोग करना अनिवार्य है, ऐसा न करने पर अन्य कोई भी आगामी निधि जारी नहीं की जाएगी।
13. जीएफआर के नियम 149 के उपबंधों के अनुसार जीईएम पोर्टल पर उपलब्ध वस्तुओं (उपभोज्य वस्तु/उपस्कर) का अनिवार्यतया आनं लाइन प्रापण जैम (जीईएम) ही के माध्यम से किया जाना है।
14. अनुदान ग्राही संस्थान को व्यय विभाग के आईडी नोट संख्या: 4/1/2021-पीपीडी दिनांक 10.09.2021 के अनुसार वैश्विक निविदाकरण जांच-पड़ताल (सीटीई) नियमों का पालन करना चाहिए।
15. यदि एकबारगी सहायता या गैर-आवर्ती अनुदान 10.00 लाख रुपये से 50.00 लाख रुपये के सहायता अनुदान का हो तो इसे संस्थान की वार्षिक रिपोर्ट में दर्ज किया जाना चाहिए।
16. अनुदान ग्राही संस्थान को जीएफआर-2017 (<https://doe.gov.in/order-circular/general-financial-rules2017-0>) के किसी भी अन्य उपबंध और समय-समय पर भारत सरकार द्वारा जारी दिशा-निर्देश/संशोधन का अनुपालन सुनिश्चित करना चाहिए।





Government of India  
Department of Atomic Energy (DAE)  
Board of Research in Nuclear Sciences (BRNS)

Shri S. Pramanik  
Programme Officer (WWM)

BRNS Secretariat, 316-C,  
CFB, BARC, Trombay,  
Mumbai - 400085

No: 56/14/03/2020-BRNS/36152

Date: 12/11/2020

**OFFICE MEMORANDUM**

Sub: R/P entitled "Development of antifouling technologies against green mussel fouling for process coolingwater system of MAPS" under Dr. D Inbakandan, SO/E-Centre for Ocean Research, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, 600119. bearing sanction 56/14/03/2020-BRNS with WWM, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for **3 years** beginning from financial year **2020-2021** with a total grant of **Rs. 33,97,100/- (Rupees thirty three lakh ninety seven thousand one hundred only)** for the project as under :

| Item of expenditure  | Year 1<br>(2020-2021) | Year 2<br>(2021-2022) | Year 3<br>(2022-2023) |
|----------------------|-----------------------|-----------------------|-----------------------|
| Staff Salary - JRF   | 372000                | 372000                | 0                     |
| Staff Salary - SRF   | 0                     | 0                     | 420000                |
| Technical Assistance | 180000                | 180000                | 180000                |
| Consumables          | 350000                | 350000                | 400000                |
| Travel - PI          | 50000                 | 50000                 | 50000                 |
| Overheads            | 71400                 | 71400                 | 78750                 |
| <b>Total(INR)</b>    | <b>1023400</b>        | <b>1023400</b>        | <b>1128750</b>        |

JRF salary calculated @31,000/- p.m. for first two years and on re-designation by committee on in third year as SRF @ 35,000/- p.m.

Please note that as per the government orders under **Direct Benefit Transfer (DBT)** scheme, the staff salary has to be transferred to his/her bank account. Accordingly, Aadhar Number(UID) of the appointed staff, Bank Account details and the Mobile number linked to the bank account should be obtained and it should be intimated to this office.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads (Rs. 2,21,550/-) shall be released only on meeting the requirements specified (See Annex-B).

- I am also pleased to convey the sanction of the President of India to incur an expenditure of **Rs. 10,23,400/- (Rupees ten lakh twenty three thousand four hundred only)** towards grant for the year 2020-2021 .
- The expenditure involved is debitable to: **03 3401 00 004 27 0231**.
- This is issued with the concurrence of the competent authority in the Department.

Pay & Accounts Officer,  
DAE, Mumbai - 400 001.

*S. Pramanik*  
13/11/2020  
S. Pramanik

Copy forwarded to:

1. Director of Audit, Scientific Department, AEAP, OYC, CSM Marg, Mumbai-400 001.
2. Joint Secretary (R&D), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001.
3. Director, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, 600119..
4. Principal Investigator(PI): Dr. D Inbakandan, SO/E-Centre for Ocean Research, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, 600119..

A. First year grant is being released in full along with this Sanction Letter through Pay & Accounts Officer, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai-400 001 directly. You may await a Money transfer (MT) through ECS and The amount would be credited electronically to A/C No: 6089858032, A/C Name: Sathyabama University - Research, IFSC: IDIB000S201, Indian Bank, Sathyabama University Branch, Sollinganallor, Chennai.

i) Acceptance of this sanction and the MT for the amount sanctioned for the first financial year may please be acknowledged (Form-I).

ii) A sticker of the BRNS LOGO (Copy Enclosed) should be pasted on all the items procured under the project.

iii) THIS SANCTION IS FURTHER SUBJECT TO THE CONDITIONS STIPULATED IN ANNEX (ENCLOSED), WHICH MAY BE GONE THROUGH CAREFULLY.

B. Second year Sanction Letter will be issued automatically in the month of April/May of the 2nd financial year, however, the grant will be released (unspent balance of previous year and interest earned will be adjusted) after the PI submits the following documents to the Programme Officer WWM:

a) Claim in Form-II quoting the reference of the sanction issued for the first year.

b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.

c) Statement of Accounts (SA) as on 31st March of the preceding financial year should be updated on the website. Interest earned in previous year should be reflected in the Statement of Accounts. A printout of the same should be sent to BRNS after it is duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.

d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee, alongwith HRA CLAIM (if applicable), should be uploaded in a single pdf file under the file head "Staff Appointment Details". In addition, the details of the appointed staff should also be updated in the available menu.

e) The inventory of equipment also should be updated in the menu, besides uploading the purchase order of the items costing more than 1 Lakh.

f) A One Page report on the progress of work during first year.

C. Third and subsequent years (if any) the Sanction Letter and the grant will be released on fulfillment of the following requirements:

i) Renewal/ Extension Application: Principal Investigator (PI) is required to upload by January 15 a pdf copy of duly signed renewal/ extension application in the prescribed form-(PRA) after logging into his/her account at <https://bms.res.in>. All applications received shall be examined by experts from the field and PIs may be invited to a Technical Programme Discussion Meeting (TPDM). Renewal of the project will be based on the recommendations of the TPDM, Advisory Committee and the Board.

ii) Sanction Letter: If the progress is found to be satisfactory the renewal sanction for the year will be issued in the beginning of that financial year in April/May.

iii) Claim: On receipt of the renewal sanction, the PI shall claim the funds sanctioned by submitting the following documents to Programme Officer WWM, 316-C, Common Facility Building, BARC, Trombay, Mumbai-400085:

a) Claim in Form-II quoting reference of the renewal sanction.

b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant. should be reflected in the Statement of Accounts.

c) Statement of Accounts (SA) as on 31st March of the preceding financial year including the amount of interest earned in previous year and duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.

d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee.

e) An inventory of equipment and the copy of Purchase order of equipments costing more than 1 Lakh.

D. At the end of Terminal Year the Settlement Grant and the Balance 7.5% Overheads will be released on fulfillment of the following requirements:

a) Claim Form-II if any,

b) The final Consolidated Statement of Accounts (SA) and Consolidated Utilization Certificate duly audited by an external Chartered Accountant or the Statutory (Govt.) Auditor. It is mandatory to include the amount of bank interest earned on the grant released into the SA.

c) Final Consolidated Progress Report and a brief report as per format given in Form-VII.

5. AAO (Cheque), DAE, Anushakti Bhavan, CSM Marg, Mumbai - 400 001 – With a request that the amount granted for the first year of the project may be released.
6. Member Secretary (WWM) : Dr. A K Ghosh, [akghosh@barc.gov.in](mailto:akghosh@barc.gov.in);
7. Co-Investigator (CI) : Dr. Radhika Rajasree.SR., Centre for Ocean Research (DST-FIST Sponsored Centre) Col. Dr. Jeppiaar Research Park Sathyabama Institute of Science and Technology Chennai - 600 119, Tamil Nadu, India., Email : [radhiin@gmail.com](mailto:radhiin@gmail.com), Mobile : 9840927503 Dr. L. St
8. Project Collaborator (PC): Dr. P. Sriyutha Murthy, SO - E, Biofouling and Thermal Ecology Section Water and Steam Chemistry Division (Chemistry Group, Bhabha Atomic Research Centre) BARC Facilities, Kalpakkam, Tamil Nadu 603 102, Email : [psmurthy@igcar.gov.in](mailto:psmurthy@igcar.gov.in), Mobile : 044 27480500 Extn. 23341

You or your nominee may please be the DAE representative for selection of Research Fellow/ Research Associate for the project.

  
13/11/2020  
S. Pramanik

Note:

1. Please quote the Sanction Number 56/14/03/2020-BRNS in all your correspondence with BRNS





**No. BT/PR41474/NDB/39/760/2020**  
GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY

Block 2, 6-8<sup>th</sup> Floors  
CGO Complex, Lodhi Road,  
New Delhi- 110 003  
Dated: 28.09.2021

**ORDER**

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the Project entitled "**Bioprospecting of Marine microbial diversity for various products**" under the **Marine Bioresource and Biotechnology Network Programme** with a total cost of Rs. 63875024/- (Rupees Six Crores Thirty Eight Lakhs Seventy Five Thousand and Twenty Four Only) for a period of three years on the terms and conditions detailed here under:-

**2. Project**

**2.1 Project Title:** *"Bioprospecting of Marine microbial diversity for various products" under the Marine Bioresource and Biotechnology Network Programme*

**2.2 Project Co-ordinator:**

**Dr. Yogesh S Shouche**

Emeritus Scientist,  
National Centre for Microbial Resource,  
National Centre For Cell Science,  
First floor, Central Tower, Sai Trinity Building,  
Pune - 411 021

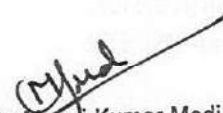
**SUB-PROJECT – A**

**(i) Periyar University, Salem**

**Principal Investigator:**

**Dr. R. Balagurunathan**

Professor & Head,  
Department of Microbiology,  
School of Bioscience,  
Periyar University, Salem - 636 011

  
डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
वैज्ञानिक 'ई' / Scientist 'E'  
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

**Co-PI(s)****Dr. S. Venkatesan**

Professor,  
Department of Environmental Sciences,  
Periyar University, Salem-636 011

**(ii) CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar****Principal Investigator:****Dr. Soumya Haldar**

Principal Scientist  
Analytical and Environmental Science & Centralized  
Instrument Facility,  
CSIR-Central Salt and Marine Chemicals Research Institute,  
GB Marg, Room No. 2, Bhavnagar,  
Gujarat – 364 002

**Co-PI(s)****Dr. Pramod B. Shinde**

Senior Scientist,  
Department of Natural Products & Green Chemistry,  
CSIR-Central Salt and Marine Chemicals Research Institute,  
GB Marg, Room No. 2, Bhavnagar, Gujarat – 364 002

**Dr. Anil Kumar M**

Scientist,  
Analytical and Environmental Science & Centralized  
Instrument Facility,  
CSIR-Central Salt and Marine Chemicals Research  
Institute, GB Marg, Room No. 2, Bhavnagar, Gujarat -364 002

**(iii) Annamalai University, Parangipettai****Principal Investigator:****Dr. S T Somasudaram**

Professor,  
Centre of Advanced Study in Marine Biology,  
CAS in Marine Biology, Faculty of Marine Sciences,  
Annamalai University,  
Parangipettai-608 502

  
डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
वैज्ञानिक 'ई' / Scientist 'E'  
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
विज्ञान और प्रौद्यो. मंत्रालय / M/o Science & Tech.  
भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi



**(iv) Sathyabama Institute of Science and Technology, Chennai****Sub-Project A****Principal Investigator:****Dr. M. Radhakrishnan**

Scientist E,  
 Bioprospecting Division,  
 Centre for Drug Discovery and Development,  
 Sathyabama Institute of Science and Technology,  
 Jeppiaar Nagar,  
 Rajiv Gandhi Road-600 119

**Co-PI(s)****Dr. Wilson Aruni**

Professor & Pro Vice-Chancellor,  
 Sathyabama Institute of Science and Technology,  
 Jeppiaar Nagar,  
 Rajiv Gandhi Road-600 119

**SUB-PROJECT – B****(v) Goa University, Goa****Principal Investigator:****Dr Savita Kerkar**

Professor,  
 Department of Biotechnology,  
 Faculty Block E, Goa University, Taleigao plateau,  
 Goa - 403 206

**(vi) National Centre for Polar and Ocean Research, Goa****Co-PI(s) Dr. K. P. Krishnan**

Scientist - E & Officer in Charge (ACOSTI- Port Blair),  
 Department of Cryobiology Laboratory,  
 National Centre for Polar and Ocean Research,  
 Headland Sada, Vascoda-  
 Gama, Goa 403 804

  
 डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
 वैज्ञानिक 'ई' / Scientist 'E'  
 बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
 विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
 भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

**SUB-PROJECT – C****(vii) Cochin University of Science and Technology, Cochin****Principal Investigator:****Dr. Sajeevan T. P.**

Assistant Professor in Marine Biotechnology,  
National Centre for Aquatic Animal Health,  
Cochin University of Science and Technology,  
Lakeside Campus, Fine Arts Avenue, Cochin - 682 016

**Co-PI(s)****Dr. Rosamma Philip**

Dean, Faculty of Marine Sciences & BSR Faculty,  
Department of Marine Biology, Microbiology and Biochemistry,  
Cochin University of Science and Technology,  
Lakeside Campus, Fine Arts Avenue, Cochin - 682 016

**(viii) CSIR-Central Drug Research Institute, Lucknow****Principal Investigator:****Dr. Narender Tadigoppula**

Professor (AcSIR) and Sr. Principal Scientist  
Medicinal and Process Chemistry Department,  
CSIR-Central Drug Research Institute,  
Jankipuram Extension, Sitapur Road, Lucknow

**(ix) Pondicherry University, Pondicherry****Co-PI(s) Dr. S. Venu**

Assistant Professor in Marine Biology,  
Department of Ocean Studies and Marine Biology,  
Pondicherry University (A Central University) Port Blair  
Campus, Brookshabad, Chakkargaon P.O., PB No. 1, Port, Blair,  
Andaman & Nicobar Islands - 744 112

डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
वैज्ञानिक 'ई' / Scientist 'E'  
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

**SUB-PROJECT – D****(x) Goa University, Goa****Principal Investigator:****Dr. Sanjeev C. Ghadi**

Professor and Head of Department,  
Department of Biotechnology,  
Faculty Block E, Goa University, Taleigao plateau,  
Goa - 403 206

**Co-PI(s)****Prof. S.G. Tilve**

Professor (HAG) and Vice Dean (Research),  
School of Chemical Sciences, Goa University, Taleigao  
plateau, Goa 403 206

**SUB-PROJECT – E****(xi) Indian Institute of Technology Bombay, Mumbai****Principal Investigator:****Prof. Pramod P Wangikar**

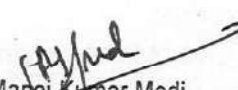
Professor,  
Department of Chemical Engineering,  
Indian Institute of Technology Bombay, IIT Powai,  
Mumbai, 400 076

**Dr. Yogendra Shastri**

Indian Institute of Technology Bombay, IIT Powai,  
Mumbai, 400 076

**SUB-PROJECT – F****(xii) Sathyabama Institute of Science and Technology, Chennai****Principal Investigator:****Dr. D. Inbakandan**

Scientist - E / Associate Professor,  
Centre for Ocean Research (DST-FIST Sponsored),  
Sathyabama Institute of Science and Technology,  
Dr. Jeppiaar Research Park,  
Chennai - 600 119

  
डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
वैज्ञानिक 'ई' / Scientist 'E'  
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi



**Co-PI(s)****Dr. L. Stanley Abraham**

Scientist - E / Associate Professor,  
 Centre for Ocean Research (DST-FIST Sponsored)  
 MoES - Earth Science & Technology Cell (Marine  
 Biotechnological Studies)  
 Sathyabama Institute of Science and Technology,  
 Dr.Jeppiaar Research Park, Chennai -600 119

**Technical Coordinator****Dr. G. Dharani**

Scientist - F & Group Head i/c  
 Marine Biotechnology Division,  
 National Institute of Ocean Technology, Velachery -  
 Tambaram Main Road, Pallikaranai, Chennai 600 100

**Shri.N. Saravanane**

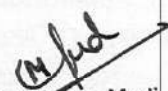
Scientist – E  
 Centre for Marine Living Resources and Ecology  
 Ministry of Earth Sciences, Government of India  
 Block-C, 6th Floor, Kendriya Bhavan, Kakkanad,  
 CSEZ.P.O, Kochi- 682 037

**SUB-PROJECT – G****(Xiii) NCMR NCCS, Pune****PI****Dr. Yogesh S Shouche**

Emeritus Scientist,  
 National Centre for Microbial Resource,  
 National Centre For Cell Science,  
 First floor, Central Tower, Sai Trinity Building,  
 Pune - 411 021

**Co-PI (s)****Dr. Ajay Pillai**

Scientist,  
 Project Management Cell  
 National Centre for Microbial Resource (NCMR),  
 National Center for Cell Science (NCCS),  
 Sai Trinity Complex, Sus Road, Pashan,  
 Pune- 411 021

  
 डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
 वैज्ञानिक 'ई' / Scientist 'E'  
 बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
 विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
 भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

**Objectives:**

**SUB-PROJECT A: Exploring marine actinobacteria for anti-infective and Industrial products**  
**(Implementing institutes: Periyar University, Salem; CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar, Gujarat; Annamalai University, Parangipettai and Sathyabama Institute of Science and Technology, Chennai)**

**Specific objectives**

1. Preparation of extract library from marine actinobacteria [200 from NCMR NCCS, 200 from Periyar University (Andaman strains) and 100 from Sathyabama University (Southern Ocean strains)]
2. In vitro evaluation of marine actinobacterial extracts for anti TB, antibiofilm, antimicrobial (against carbapenem resistant Gram negative bacterial pathogens) and anti virulent activity and isolation of active molecules.
3. Fermentation, isolation and characterization of anti TB, antibiofilm, antimicrobial and anti virulent compounds from potential marine actinobacterial strains
4. Isolation of antifreeze proteins (AFP) from psychrophilic actinobacteria
5. Molecular screening of psychrophilic actinobacteria for secondary metabolite biosynthetic genes and stress tolerant genes.
6. Screening and isolation of enzyme (xylanase) from marine actinobacteria
7. Characterization and taxonomy of potential marine actinobacterial strains

**Institute-wise Objectives****Periyar University, Salem**

1. Preparation of extract library from marine actinobacterial strains for anti-infective studies
2. Fermentation production of anti TB, anti biofilm and anti microbial and antivirulent molecules from potential marine actinobacterial & process optimization
3. Taxonomy of potential actinobacterial strains

**Sathyabama Institute of Science and Technology, Chennai**

1. Screening of marine actinobacteria for anti TB and anti biofilm activity against carbapenem resistant Gram negative bacterial pathogens and oral biofilm pathogens
2. Molecular screening for the distribution of secondary metabolite biosynthetic genes (SMGs) and stress tolerant genes in Southern Ocean actinobacterial strains
3. Characterization and taxonomic identification of psychrophilic and psychrotolerant actinobacteria

**Annamalai University, Parangipettai**

1. Screening and isolation of anti freeze proteins from psychrophilic actinobacteria

**CSIR-CSMCRI, Bhavnagar**

1. Screening and isolation of enzyme (xylanase) from marine actinobacteria

डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi

वैज्ञानिक 'ई' / Scientist 'E'

बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology

विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.

भारत सरकार नई दिल्ली / Govt. of India. N. Delhi

2. Screening of extracts from marine actinobacteria for anti infective and anti-virulent activity against WHO category 1 pathogens
3. Isolation and characterization of New Chemical Entities (NCEs) from potential actinobacterial strains against MTB, biofilm and drug resistant pathogens and anti virulent compounds

**SUB-PROJECT B: Bioprospecting of Goan saltpans to identify indigenous pigment producing bacteria. (Implementing institute: Goa University, Goa and NCPOR, Goa)**

**Overall Objectives**

1. Standardization of carotenoid pigment extraction protocols using pigmented isolates from the in-house culture collection (~1000 strains are available in Goa University and NCPOR)
2. Medium optimization to improve carotenoid production of selected isolates chosen based on pigment content and composition.
3. Genome sequencing of the best carotenoid producing bacteria

**SUB-PROJECT C: Integrated genomic and metabolomic approach for the discovery of novel small molecules with anticancer activity from marine microorganisms (Implementing institute: Cochin University, Cochin and CSIR-CDRI, Lucknow)**

**Overall Objectives**

1. Isolation, Purification, structure elucidation and chemical characterization of lead compound(s) from Marine actinomycetes
2. Elucidation of mode of anticancer activity of the lead compound(s) through cell based assays
3. Chemical transformation and Synthesis of lead compounds

**SUB-PROJECT D: Bioprospecting for active biological oligosaccharides produced from marine polysaccharides by bacterial CAZymes. (Implementing institute: Goa University, Goa)**

**Overall Objectives**

1. Identifying multiple polysaccharides degrading bacterial strains from the PI's bacterial culture collection. Presently the PI has 25 bacterial strains that have been characterized up to genus level and are known to degrade single polysaccharide. Also around 25 bacterial strains have already been identified from NCCS culture collection for determining polysaccharide activity of these strains
2. Preliminary screening for identifying promising bacterial strain that produces oligosaccharides with desired therapeutic activity. The oligosaccharides that are obtained by growing bacteria in respective polysaccharides will be evaluated for following therapeutic activities
  - a. Anti-diabetic activity of oligosaccharides would be determined by using in vitro spectrophotometric assay using  $\alpha$ -amylase and  $\beta$ -glucosidase for screening.
  - b. Spectrophotometric anti-tyrosinase activity of oligosaccharides determined using mushroom tyrosinase.

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वैज्ञानिक 'ई' / Scientist 'E'

बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.

भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi



- c. The anti-biofilm activity of oligosaccharides will be evaluated using microtiter biofilm bioassay.
- d. Antibacterial activity of the oligosaccharides will be confirmed by the disc diffusion and broth dilution method.
- e. Antioxidant activities of oligosaccharides such as radical scavenging, metal chelating activities and reducing power will be evaluated by spectrophotometric assays
- 3. WGS of above selected bacterial strains by Illumina sequencing.
- 4. Cloning of selected novel CAZyme gene in pGEM/pET vectors and CAZyme expression.
- 5. Mass production of oligosaccharides using whole cell bacteria and immobilized purified enzyme and confirming therapeutic activity of purified oligosaccharide.
- 6. Purification of oligosaccharides and structure evaluation.

**SUB-PROJECT E: Metabolic engineering of marine cyanobacteria for the photosynthetic production of therapeutic proteins and platform chemical (Implementing institute: IIT, Mumbai)**

**Overall Objectives**

1. Engineering of selected marine cyanobacterial host strains (namely, *Synechococcus* sp. PCC 7002 and *Synechococcus* sp. PCC 11901) to generate robust, scalable expression systems
2. Pathway engineering for the photosynthetic production of platform chemicals such as succinic acid and therapeutic proteins such as PDGF and Streptokinase
3. <sup>13</sup>C-Metabolic Flux Analysis (<sup>13</sup>C-MFA) of wild type and engineered strains to identify metabolic bottlenecks and competing pathways
4. Production and purification of recombinant therapeutic proteins and development of in vitro activity assays.

**SUB-PROJECT F: Marine microbial product based eco-friendly nanocomposites for marine antifouling application (Implementing institute: Sathyabama Institute of Science and Technology, Chennai)**

**Overall Objectives:-**

1. To collect, culture and extract natural products and biopolymers from marine bacteria
2. To nano syntheses and characterize the natural product based polymernanocomposites
3. To study the stability and toxicity of the polymer-nanocomposites at laboratory condition
4. To study the antifouling activity of the polymer-nanocomposites in field Condition

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 विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
 भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

**SUB-PROJECT G****Overall Objectives**

1. Supply of culture to participating institutes
2. Accepting the isolates generated in the project for the deposit

**2.4 Time Schedule:**

The duration of support is three years from the date of this sanction order.

**2.5 Total Cost:**

The total cost of the project is Rs. **63875024/-** (Rupees Six Crores Thirty Eight Lakhs Seventy Five Thousand and Twenty Four Only) as per details given below:

| Institute                                                        | Year I          | Year II         | Year III        | Total Cost(Rs.) |
|------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| 1. Annamalai University, Parangipettai                           | 2700960         | 1210960         | 1162800         | <b>5074720</b>  |
| 2. Central Drug Research Institute, Lucknow                      | 1437200         | 1437200         | 1437200         | <b>4311600</b>  |
| 3. Central Salt & Marine Chemicals Research Institute, Bhavnagar | 3313040         | 1413040         | 1524400         | <b>6250480</b>  |
| 4. Cochin University of Science and Technology, Cochin           | 4216160         | 2016160         | 2071840         | <b>8304160</b>  |
| 5. Goa University, Goa                                           | 3454560         | 2454560         | 2621600         | <b>8530720</b>  |
| 6. Indian Institute of Technology Bombay, Mumbai                 | 6605840         | 2905840         | 3066544         | <b>12578224</b> |
| 7. National Centre For Cell Science, Pune                        | 497600          | 497600          | 497600          | <b>1492800</b>  |
| 8. National Centre For Polar And Ocean Research, Goa             | 641520          | 641520          | 697200          | <b>1980240</b>  |
| 9. Periyar University Salem, Salem                               | 2059920         | 1159920         | 1215600         | <b>4435440</b>  |
| 10. Sathyabama Institute of Science and Technology, Chennai      | 4501920         | 3121920         | 3292800         | <b>10916640</b> |
| <b>Total (Rs.)</b>                                               | <b>29428720</b> | <b>16858720</b> | <b>17587584</b> | <b>63875024</b> |

**Institute wise details are:**

| Budget Head                                             | Year I            | Year II           | Year III          | Total(Rs.)         |
|---------------------------------------------------------|-------------------|-------------------|-------------------|--------------------|
| <b>1. Indian Institute of Technology Bombay, Mumbai</b> |                   |                   |                   |                    |
| Equipment                                               | 3700000.00        |                   |                   | <b>3700000.00</b>  |
| Manpower                                                | 1755840.00        | 1755840.00        | 1916544.00        | <b>5428224.00</b>  |
| Overhead                                                | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>   |
| Travel                                                  | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>   |
| Consumables                                             | 1000000.00        | 1000000.00        | 1000000.00        | <b>3000000.00</b>  |
| Contingency                                             | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>   |
| <b>Total (Rs.)</b>                                      | <b>6605840.00</b> | <b>2905840.00</b> | <b>3066544.00</b> | <b>12578224.00</b> |

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 बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
 विज्ञान और प्रौद्योगिकी, मंत्रालय / M/o Science & Tech.  
 नई दिल्ली / New Delhi

**2. Sathyabama Institute of Science and Technology, Chennai #**

|                    |                   |                   |                   |                    |
|--------------------|-------------------|-------------------|-------------------|--------------------|
| Equipment          | 1280000.00        |                   |                   | <b>1280000.00</b>  |
| Manpower           | 1621920.00        | 1621920.00        | 1792800.00        | <b>5036640.00</b>  |
| Overhead           | 100000.00         | 100000.00         | 100000.00         | <b>300000.00</b>   |
| Travel             | 100000.00         | 100000.00         | 100000.00         | <b>300000.00</b>   |
| Consumables        | 1300000.00        | 1200000.00        | 1200000.00        | <b>3700000.00</b>  |
| Contingency        | 100000.00         | 100000.00         | 100000.00         | <b>300000.00</b>   |
| <b>Total (Rs.)</b> | <b>4501920.00</b> | <b>3121920.00</b> | <b>3292800.00</b> | <b>10916640.00</b> |

**3. Goa University, Goa\***

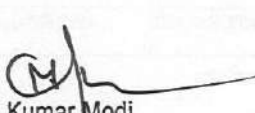
|                    |                   |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| Equipment          | 1000000.00        |                   |                   | <b>1000000.00</b> |
| Manpower           | 1294560.00        | 1294560.00        | 1461600.00        | <b>4050720.00</b> |
| Overhead           | 100000.00         | 100000.00         | 100000.00         | <b>300000.00</b>  |
| Travel             | 60000.00          | 60000.00          | 60000.00          | <b>180000.00</b>  |
| Consumables        | 900000.00         | 900000.00         | 900000.00         | <b>2700000.00</b> |
| Contingency        | 100000.00         | 100000.00         | 100000.00         | <b>300000.00</b>  |
| <b>Total (Rs.)</b> | <b>3454560.00</b> | <b>2454560.00</b> | <b>2621600.00</b> | <b>8530720.00</b> |

**4. Cochin University of Science and Technology, Cochin**

|                    |                   |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| Equipment          | 2200000.00        |                   |                   | <b>2200000.00</b> |
| Manpower           | 1016160.00        | 1016160.00        | 1071840.00        | <b>3104160.00</b> |
| Overhead           | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Travel             | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Consumables        | 600000.00         | 600000.00         | 600000.00         | <b>1800000.00</b> |
| Contingency        | 300000.00         | 300000.00         | 300000.00         | <b>900000.00</b>  |
| <b>Total (Rs.)</b> | <b>4216160.00</b> | <b>2016160.00</b> | <b>2071840.00</b> | <b>8304160.00</b> |

**5. Central Salt & Marine Chemicals Research Institute, Bhavnagar**

|                    |                   |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| Equipment          | 1900000.00        |                   |                   | <b>1900000.00</b> |
| Manpower           | 863040.00         | 863040.00         | 974400.00         | <b>2700480.00</b> |
| Overhead           | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Travel             | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Consumables        | 400000.00         | 400000.00         | 400000.00         | <b>1200000.00</b> |
| Contingency        | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| <b>Total (Rs.)</b> | <b>3313040.00</b> | <b>1413040.00</b> | <b>1524400.00</b> | <b>6250480.00</b> |



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वैज्ञानिक 'ई' / Scientist 'E'

बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology

विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.

भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi



**6. Annamalai University, Parangipettai**

|                    |                   |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| Equipment          | 1490000.00        |                   |                   | <b>1490000.00</b> |
| Manpower           | 660960.00         | 660960.00         | 712800.00         | <b>2034720.00</b> |
| Overhead           | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Travel             | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Consumables        | 400000.00         | 400000.00         | 300000.00         | <b>1100000.00</b> |
| Contingency        | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| <b>Total (Rs.)</b> | <b>2700960.00</b> | <b>1210960.00</b> | <b>1162800.00</b> | <b>5074720.00</b> |

**7. Periyar University, Salem**

|                    |                   |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| Equipment          | 800000.00         |                   |                   | <b>800000.00</b>  |
| Manpower           | 709920.00         | 709920.00         | 765600.00         | <b>2185440.00</b> |
| Overhead           | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Travel             | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Consumables        | 400000.00         | 300000.00         | 300000.00         | <b>1000000.00</b> |
| Contingency        | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| <b>Total (Rs.)</b> | <b>2059920.00</b> | <b>1159920.00</b> | <b>1215600.00</b> | <b>4435440.00</b> |

**8. Central Drug Research Institute, Luknow**

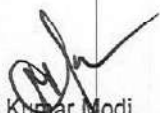
|                    |                   |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| Manpower           | 487200.00         | 487200.00         | 487200.00         | <b>1461600.00</b> |
| Overhead           | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Travel             | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| Consumables        | 800000.00         | 800000.00         | 800000.00         | <b>2400000.00</b> |
| Contingency        | 50000.00          | 50000.00          | 50000.00          | <b>150000.00</b>  |
| <b>Total (Rs.)</b> | <b>1437200.00</b> | <b>1437200.00</b> | <b>1437200.00</b> | <b>4311600.00</b> |

**9. National Centre for Polar and Ocean Research, Goa**

|                    |                  |                  |                  |                   |
|--------------------|------------------|------------------|------------------|-------------------|
| Manpower           | 431520.00        | 431520.00        | 487200.00        | <b>1350240.00</b> |
| Overhead           | 50000.00         | 50000.00         | 50000.00         | <b>150000.00</b>  |
| Travel             | 10000.00         | 10000.00         | 10000.00         | <b>30000.00</b>   |
| Consumables        | 100000.00        | 100000.00        | 100000.00        | <b>300000.00</b>  |
| Contingency        | 50000.00         | 50000.00         | 50000.00         | <b>150000.00</b>  |
| <b>Total (Rs.)</b> | <b>641520.00</b> | <b>641520.00</b> | <b>697200.00</b> | <b>1980240.00</b> |

**10. National Centre For Cell Science, Pune**

|                    |                  |                  |                  |                   |
|--------------------|------------------|------------------|------------------|-------------------|
| Manpower           | 297600.00        | 297600.00        | 297600.00        | <b>892800.00</b>  |
| Travel             | 50000.00         | 50000.00         | 50000.00         | <b>150000.00</b>  |
| Consumables        | 100000.00        | 100000.00        | 100000.00        | <b>300000.00</b>  |
| Contingency        | 50000.00         | 50000.00         | 50000.00         | <b>150000.00</b>  |
| <b>Total (Rs.)</b> | <b>497600.00</b> | <b>497600.00</b> | <b>497600.00</b> | <b>1492800.00</b> |

  
 डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
 वैज्ञानिक 'ई' / Scientist 'E'  
 बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
 विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
 भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

\* The Details of Budget to Goa University are as follows:-

#### SUB-PROJECT – B

**Principal Investigator: Dr Savita Kerkar**, Professor, Department of Biotechnology, Faculty Block E, Goa University, Taleigao plateau, Goa - 403 206

| Amount in Rupees    |                    |               |               |              |                |
|---------------------|--------------------|---------------|---------------|--------------|----------------|
| Goa University, Goa |                    |               |               |              |                |
| Sr. No.             | Budget Head        | Year I        | Year II       | Year III     | Total          |
| <b>Recurring</b>    |                    |               |               |              |                |
| 1.                  | Manpower           | 4,31,520      | 4,31,520      | 4,87,200     | 13,50,240      |
| 2.                  | Consumables        | 1,00,000      | 1,00,000      | 1,00,000     | 3,00,000       |
| 3.                  | Travel             | 10,000        | 10,000        | 10,000       | 30,000         |
| 4.                  | Contingency        | 50,000        | 50,000        | 50,000       | 1,50,000       |
| 5.                  | Overhead           | 50,000        | 50,000        | 50,000       | 1,50,000       |
|                     | <b>Grand Total</b> | <b>6.4152</b> | <b>6.4152</b> | <b>6.972</b> | <b>19.8024</b> |

#### SUB-PROJECT – D

**Dr. Sanjeev C. Ghadi**, Professor and Head of Department, Department of Biotechnology, Faculty Block E, Goa University, Taleigao plateau, Goa - 403 206

| Amount in Rupees     |                    |                  |                  |                  |                  |
|----------------------|--------------------|------------------|------------------|------------------|------------------|
| Sr. No.              | Budget Head        | Year I           | Year II          | Year III         | Total            |
| <b>Non-recurring</b> |                    |                  |                  |                  |                  |
| 1.                   | Equipments         | 10,00,000        |                  |                  | 10,00,000        |
| <b>Recurring</b>     |                    |                  |                  |                  |                  |
| 2.                   | Manpower           | 8,63,040         | 8,63,040         | 9,74,400         | 27,00,480        |
| 3.                   | Consumables        | 8,00,000         | 8,00,000         | 8,00,000         | 24,00,000        |
| 4.                   | Travel             | 50,000           | 50,000           | 50,000           | 1,50,000         |
| 5.                   | Contingency        | 50,000           | 50,000           | 50,000           | 1,50,000         |
| 6.                   | Overhead           | 50,000           | 50,000           | 50,000           | 1,50,000         |
|                      | <b>Grand Total</b> | <b>28,13,040</b> | <b>18,13,040</b> | <b>19,24,400</b> | <b>65,50,480</b> |

# The Details of budget to Sathyabama Institute Of Science And Technology, Chennai are as follows:-

#### Sub Project A

**Principal Investigator:**

डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi

वैज्ञानिक 'ई' / Scientist 'E'

बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology

विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.

भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

**Dr. M. Radhakrishnan**, Scientist E, Bioprospecting Division, Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Road, Chennai -600 119

| Rupees in lakhs                                         |                    |                  |                  |                  |                  |
|---------------------------------------------------------|--------------------|------------------|------------------|------------------|------------------|
| Sathyabama Institute of Science and Technology, Chennai |                    |                  |                  |                  |                  |
| Sr. No.                                                 | Budget Head        | Year I           | Year II          | Year III         | Total            |
| <b>Non-recurring</b>                                    |                    |                  |                  |                  |                  |
| 1.                                                      | Equipments         | 7,80,000         |                  |                  | 7,80,000         |
| <b>Recurring</b>                                        |                    |                  |                  |                  |                  |
| 2.                                                      | Manpower           | 7,58,880         | 7,58,880         | 8,18,400         | 23,36,160        |
| 3.                                                      | Consumables        | 5,00,000         | 4,00,000         | 4,00,000         | 13,00,000        |
| 4.                                                      | Travel             | 50,000           | 50,000           | 50,000           | 1,50,000         |
| 5.                                                      | Contingency        | 50,000           | 50,000           | 50,000           | 1,50,000         |
| 6.                                                      | Overhead           | 50,000           | 50,000           | 50,000           | 1,50,000         |
|                                                         | <b>Grand Total</b> | <b>21,88,880</b> | <b>13,08,880</b> | <b>13,68,400</b> | <b>48,66,160</b> |

#### Sub Project F

**Dr. D. Inbakandan**, Scientist – E, Associate Professor, Centre for Ocean Research (DST-FIST Sponsored), Sathyabama Institute of Science and Technology, Dr. Jeppiaar Research Park, Chennai, Tamil Nadu - 600 119

| Rupees in lakhs                                         |                    |                  |                  |                  |                  |
|---------------------------------------------------------|--------------------|------------------|------------------|------------------|------------------|
| Sathyabama Institute Of Science And Technology, Chennai |                    |                  |                  |                  |                  |
| Sr. No.                                                 | Budget Head        | Year I           | Year II          | Year III         | Total            |
| <b>Non-recurring</b>                                    |                    |                  |                  |                  |                  |
| 1.                                                      | Equipments         | 5,00,000         |                  |                  | 5,00,000         |
| <b>Recurring</b>                                        |                    |                  |                  |                  |                  |
| 2.                                                      | Manpower           | 8,63,040         | 8,63,040         | 9,74,400         | 27,00,480        |
| 3.                                                      | Consumables        | 8,00,000         | 8,00,000         | 8,00,000         | 24,00,000        |
| 4.                                                      | Travel             | 50,000           | 50,000           | 50,000           | 1,50,000         |
| 5.                                                      | Contingency        | 50,000           | 50,000           | 50,000           | 1,50,000         |
| 6.                                                      | Overhead           | 50,000           | 50,000           | 50,000           | 1,50,000         |
|                                                         | <b>Grand Total</b> | <b>23,13,040</b> | <b>18,13,040</b> | <b>19,24,400</b> | <b>60,50,480</b> |

#### 2.7 Equipments:

The details of the equipment sanctioned for the implementation of the project at **Annexure-I**

#### 2.8 Manpower:

The details of the manpower sanctioned for the implementation of the project at **Annexure-II:**

डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
वैज्ञानिक 'ई' / Scientist 'E'  
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
भारत सरकार नई दिल्ली / Govt. of India. N. Delhi



2.9 The quarterly deliverables of the project sanctioned for the implementation of the project at **Annexure-II (A)**:

3. **Head of Account:**

The **Non-Recurring** expenditure involved is debitable to:

| <b>Demand No. 89</b>        | <b>Department of Biotechnology</b>                 |
|-----------------------------|----------------------------------------------------|
| <b>3425</b>                 | Other Scientific Research 2021-2022                |
| <b>3425.60</b>              | Others (Sub Major Head)                            |
| <b>3425.60.200</b>          | Assistance to other Scientific Bodies (Minor Head) |
| <b>3425.60.200.29</b>       | Biotechnology Research and Development             |
| <b>3425.60.200.29.17</b>    | Assistance to Research and Development             |
| <b>3425.60.200.29.17.35</b> | Grants for creation of capital assets              |

The **Recurring** expenditure involved is debitable to:

| <b>Demand No. 89</b>        | <b>Department of Biotechnology</b>                 |
|-----------------------------|----------------------------------------------------|
| <b>3425</b>                 | Other Scientific Research 2021-2022                |
| <b>3425.60</b>              | Others (Sub Major Head)                            |
| <b>3425.60.200</b>          | Assistance to other Scientific Bodies (Minor Head) |
| <b>3425.60.200.29</b>       | Biotechnology Research and Development             |
| <b>3425.60.200.29.17</b>    | Assistance to Research and Development             |
| <b>3425.60.200.29.17.31</b> | Grants -in-Aid General                             |

4. **Terms & Conditions:**

- The Institute/Agency will keep the whole of the grant in a Bank Account earning interest, and the interest so earned should be reported to DBT in the Utilization Certificate and Statement of Expenditure. As per the provision contained in GFR Rule 230(8), all interests/other earning occurred against Grants-in-aid shall be mandatory remitted to the Consolidated fund of India through the online portal [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in) only.
- In case the whole or a part of the amount of the grant in aid is being refunded, an interest at the rate of ten per cent per annum thereon shall be recovered. Utilization certificate due for rendition has been received and accepted. The Non-Recurring grant shall be utilized within 18 months of release.

4.1 The other terms and conditions governing this sanction are attached at Annexure- III.

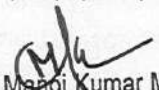
4.2A Memorandum of Agreement (MoA) will be signed between the Department of Biotechnology and the grantee institution on Non-Judicial stamp paper Rs. 100/- in the enclosed format and the second release/installment will be made only after signing of MoA between the grantee institutions and DBT. In case of NGO's and Private Institution's, execution of MOA is mandatory before first release. A format of the MoA is enclosed in

Department of Biotechnology  
Ministry of Science & Technology  
Government of India

डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
वैज्ञानिक 'ई' / Scientist 'E'  
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology

## Annexure-IV

5. No International Travel will be undertaken from the sanctioned project grant unless specified otherwise.
6. The Director, Central Drug Research Institute, Lucknow; The Director, Central Salt & Marine Chemicals Research Institute, Bhavnagar; The Director, National Centre For Cell Science, Pune; Director, National Centre for Polar and Ocean Research, Goa and The Registrar, Indian Institute of Technology Bombay, Mumbai, and The Registrar, Annamalai University, Parangipettai; The Registrar, Cochin University of Science and Technology, Cochin; The Registrar, Goa University, Goa, The Registrar, Periyar University Salem, Salem and The Chancellor, Sathyabama Institute of Science and Technology, Chennai would be responsible for submission of Statements of Expenditure (SoE), utilization certificates (UC), Assets Certificates, Manpower staffing & expenditure details in prescribed DBT formats to DBT in respect of grants released in this project from time to time.
7. PI's of DBT sponsored projects can consider appointment of JRF from Category-II merit list of DBT-BET exam so that candidates can be paid fellowships at par with NET/GATE/BET qualified candidates as per DST OM No. A.SR/S9/Z-05/2019 dated 30 Jan 2019. However, there is no compulsion on PI's to select candidates for JRF in their projects from Category-II of DBT-BET.
8. As per Rule 236 (1) of GFR 2017, the accounts of all Grantee Institutions or Organizations shall be open to inspection by the sanctioning authority and audit, both by the Comptroller and Auditor General of India under the provision of CAG (DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry or Department, whenever the Institution or Organizations is called upon to do so.
9. If the Research Project involves biological resources, the obligations under the Biological Diversity Act 2002 as applicable shall be complied with by the Project Investigator, the details of such obligations can be accessed at [www.nbaindia.org](http://www.nbaindia.org).
10. The retention of the equipments purchased out of the project grant after completion of the project is not allowed in case of the private institutes/organizations/NGOs as per the extant Govt. instructions. Hence, such implementing Agencies in the project will abide by the instructions issued by Govt./Department in the matter from time to time.
11. Further release will be made only after appraisal and approval of the scheme by the MoF for continuation during 15th FC.
12. Import of the equipments, consumables etc. through Global Tender Enquiry (GTE) will be subject to the compliance of instructions:-

  
 डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
 वैज्ञानिक 'ई' / Scientist 'E'  
 बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
 विज्ञान और प्रौद्यो. मंत्रालय / M/o Science & Tech.  
 भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

12.1 The Pls/Implementing Agencies shall strictly adhere to the GoI instructions issued vide OM No.F.4.1.2021-PPD dated 30.6.2021 in the matter of issue of Global tender Enquiry with special reference to instructions contained under para 4 of the said OM for procurement of equipments, spares and consumables for research purposes and shall not issue Global Tenders Enquiries before seeking the approval of the competent authority.

12.2 After incurring the expenditure on import of such items and at the time of submission of UCs to the department next year, the Pls will also furnish the copy of the approval sought from the competent authority for issue of the GTE for such items of import. The release of next installment of grant will be the subject to the fulfillment of the above condition.

13. This issues, under the power delegated to this Department and with the concurrence of IFD vide their SAN No **102/IFD/SAN/1287/2021-2022** dated **September, 28 2021**.

14. This sanction order has been noted at serial no. 55 in the Register of Grants.

(Dr. Manoj Kumar Modi)  
Scientist 'E'

To,  
The Pay & Accounts Officer,  
Department of Biotechnology,  
New Delhi – 110 003.

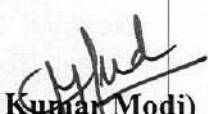
डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
वैज्ञानिक 'ई' / Scientist 'E'  
बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
विज्ञान और प्रौद्योगिकी मंत्रालय / M/o Science & Tech.  
भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

**Copy to:**

1. The Principal Director of Audit (Scientific Departments), DACR Building, New Delhi- 110 002.
2. **Dr. Yogesh S Shouche**, Project Co-ordinator & Principal Investigator, Emeritus Scientist, National Centre for Microbial Resource, National Centre For Cell Science, First floor, Central Tower, Sai Trinity Building, Pune, Maharashtra 411 021
3. **The Director**, Central Drug Research Institute, Lucknow
4. **The Director**, Central Salt & Marine Chemicals Research Institute, Baroda, Gujarat
5. **The Director**, National Centre for Cell Science, Pune
6. **The Director**, National Centre for Polar and Ocean Research, Goa
7. **The Registrar**, Indian Institute of Technology Bombay, Mumbai
8. **The Registrar**, Annamalai University, Cuddalore
9. **The Registrar**, Cochin University of Science and Technology, Cochin
10. **The Registrar**, Goa University, Goa
11. **The Registrar**, Periyar University Salem, Salem
12. **The Chancellor**, Sathyabama Institute of Science and Technology, Chennai
13. **Dr. R. Balagurunathan**, Professor & Head, Department of Microbiology, School of Bioscience, Periyar University, Salem - 636 011



14. **Dr. Soumya Haldar**, Analytical and Environmental Science & Centralized Instrument Facility, CSIR-Central Salt and Marine Chemicals Research Institute, GB Marg, Room No. 2, Bhavnagar, Gujarat – 364 002
15. **Dr. S T Somasudaram**, Professor, Centre of Advanced Study in Marine Biology, CAS in Marine Biology, Faculty of Marine Sciences, Annamalai University, Parangipettai-608 502
16. **Dr. M. Radhakrishnan**, Scientist E, Bioprospecting Division, Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Road-600 119
17. **Dr. Wilson Aruni**, Professor & Pro Vice-Chancellor, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Road-600119
18. **Dr. Savita Kerkar**, Professor, Department of Biotechnology, Faculty Block E, Goa University, Taleigao plateau, Goa - 403 206
19. **Dr. K. P. Krishnan**, Scientist - E & Officer in Charge (ACOSTI- Port Blair), Department of Cryobiology Laboratory, National Centre for Polar and Ocean Research, Headland Sada, Vascoda- Gama, Goa 403 804
20. **Dr. Sajeevan T. P.**, Assistant Professor in Marine Biotechnology, National Centre for Aquatic Animal Health, Cochin University of Science and Technology, Lakeside Campus, Fine Arts Avenue, Cochin - 682 016
21. **Dr. Narender Tadigoppula**, Professor (AcSIR) and Sr. Principal Scientist, Medicinal and Process Chemistry Department, CSIR-Central Drug Research Institute, Jankipuram Extension, Sitapur Road, Lucknow
22. **Dr. Sanjeev C. Ghadi**, Professor and Head of Department, Department of Biotechnology, Faculty Block E, Goa University, Taleigao plateau, Goa - 403 206
23. **Prof. Pramod P Wangikar**, Professor, Department of Chemical Engineering, Indian Institute of Technology Bombay, IIT Powai, Mumbai, 400 076
24. **Dr. D. Inbakandan**, Scientist - E / Associate Professor, Centre for Ocean Research (DST-FIST Sponsored), Sathyabama Institute of Science and Technology, Dr. Jeppiaar Research Park, Chennai, Tamil Nadu, 600 119

  
**(Dr. Manoj Kumar Modi)**  
 Scientist 'E'

डा. मनोज कुमार मोदी / Dr. Manoj Kumar Modi  
 वैज्ञानिक 'ई' / Scientist 'E'  
 बायोटेक्नोलॉजी विभाग / Deptt. of Biotechnology  
 विज्ञान और प्रौद्यो. मंत्रालय / M/o Science & Tech.  
 भारत सरकार, नई दिल्ली / Govt. of India, N. Delhi

Dated: 27 October, 2022

**ORDER**

Subject: Financial Sanction of the research project titled **THERMAL PRIMING AND ROLE OF EPIGENETIC VARIATION ON ADAPTIVE STRATEGY OF SEAGRASSES UNDER WARMING OCEAN** under the guidance of Dr. Jeyapragash Danaraj, Centre for Ocean Research, Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119 - Release of 1st grant.

Sanction of **Science and Engineering Research Board (SERB)** is hereby accorded to the above mentioned project at a total cost of **Rs. 2450260/- (Rs. Twenty Four Lakh Fifty Thousand Two Hundred and Sixty Only)** with break-up of **Rs. 600000/- under Capital (Non-recurring) head** and **Rs.1850260/- under General (Recurring) head** for a duration of 24 months. The items of expenditure for which the total allocation of **Rs. 2450260/-** has been approved are given below:

The following budget may be considered for **Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai**

| S. No     | Head                                                                                                                                                 | Total (in Rs.)            |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>A</b>  | <b>Non-recurring</b>                                                                                                                                 |                           |
| 1         | Equipment<br>-> Diving-PAM-II Underwater fluorometer with miniature spectrometer<br>-> Underwater pH and Temperature Data Logger                     | 600000                    |
| <b>A'</b> | <b>Total (Non-Recurring)</b>                                                                                                                         | <b>600000</b>             |
| <b>B</b>  | <b>Recurring Items</b>                                                                                                                               |                           |
| 1         | Recurring - I : (Research Personnel)<br>Recurring - II : ( Consumables, Travel, Contingencies)<br>Recurring - III : Scientific Social Responsibility | 922560<br>680000<br>25000 |
| 2         | Recurring - IV : (Overhead Charges)                                                                                                                  | 222700                    |
| <b>B'</b> | <b>Total (Recurring)</b>                                                                                                                             | <b>1850260</b>            |
| <b>C</b>  | <b>Total cost of the project (A' + B')</b>                                                                                                           | <b>2450260</b>            |

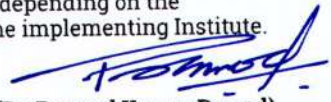
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ( [www.serb.gov.in](http://www.serb.gov.in)).
3. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.
4. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1 lakh each should be spent for travel and contingency.
5. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activities enlisted under SSR norms and under no circumstances it can be reappropriated.
6. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.
7. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.
8. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.
9. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.
10. The research personnel sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any. beyond the duration of the project
11. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.
12. The project File no. SRG/2022/000185 should be mentioned in all communications arising from the above project. The organization/institute/university should ensure that the technical support/financial assistance provided to them by SERB should



invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

13. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by SERB.

14. Sanction order for release of funds under a) Non-recurring and b) Recurring will be issued separately depending on the availability of funds. The project become operational from the day the first release of grant received by the implementing Institute.

  
(Dr. Pramod Kumar Prasad)  
Scientist-D  
pk.prasad@serb.gov.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                        |
| 2. | Sanction Folder, SERB , New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 4. | <b>Dr. Jeyapragash Danaraj</b><br><b>Centre for Ocean Research</b><br><b>Sathyabama Institute of Science and Technology , Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119</b><br><b>Email: pragashdb@gmail.com</b><br><b>Mobile: 917448779186</b><br>(Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a> .) |
| 5. | <b>Registrar,</b><br><b>Sathyabama Institute Of Science And Technology , Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai</b><br>(Receipt of Grant may be intimated by name to the undersigned)                                                                                                                                                                                                                                                                      |

  
(Dr. Pramod Kumar Prasad)  
Scientist-D  
pk.prasad@serb.gov.in



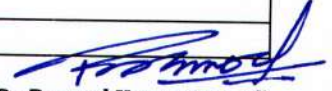
Dated: 27 October, 2022

**ORDER**

Subject: Research project entitled **THERMAL PRIMING AND ROLE OF EPIGENETIC VARIATION ON ADAPTIVE STRATEGY OF SEAGRASSES UNDER WARMING OCEAN** under the guidance of Dr. Jeyapragash Danaraj, Centre for Ocean Research, Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119.

1. In continuation of SERB's sanction order No. SRG/2022/000185 dated 27 October, 2022, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs. 938000/-** under 'Grants-in-aid General' to Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Chennai, Tamil Nadu-600119 being the grant for the financial year 2022-2023 for implementation of the above said project.
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website ([www.serb.gov.in](http://www.serb.gov.in)) and as mentioned in the sanction order of even number dated 27 October, 2022.
3. As this is the first grant being released under 'Grants-in-aid General' for the project, no previous U/C is required.
4. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Start-up Research Grant (General). (EC Life Sciences)
5. The Sanction has been issued with the approval of the competent authority on **25 October, 2022** and vide Diary No. **SERB/F/6036/2022-2023** dated **27 October, 2022**.
6. The release amount of **Rs. 938000/-** (Rupees Nine Lakh Thirty Eight Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

|                        |                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------|
| PFMS Unique Code       | SU                                                                                                                 |
| Account Name           | Sathyabama Institute of Science and Technology - Research                                                          |
| Account Number         | 6089858032                                                                                                         |
| Bank Name & Branch     | Indian Bank Sathyabama University Branch Sathyabama Institute of Science and Technology Jeppiaar Nagar Chennai 119 |
| IFSC/RTGS Code         | IDIB000S201                                                                                                        |
| Email id of A/C Holder | registrar@sathyabama.ac.in                                                                                         |
| Email id of PI         | pragashdb@gmail.com                                                                                                |

  
(Dr. Pramod Kumar Prasad)  
Scientist-D  
pk.prasad@serb.gov.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R. Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                   |
| 2. | Sanction Folder, SERB, New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4. | <b>Dr. Jeyapragash Danaraj</b><br>Centre for Ocean Research<br>Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119<br>Email: <a href="mailto:pragashdb@gmail.com">pragashdb@gmail.com</a><br>Mobile: 917448779186<br>(Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a> .) |
| 5. | <b>Registrar,</b><br>Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai<br>(Receipt of Grant may be intimated by name to the undersigned)                                                                                                                                                                                                                                                                                          |

  
(Dr. Pramod Kumar Prasad)  
Scientist-D  
pk.prasad@serb.gov.in



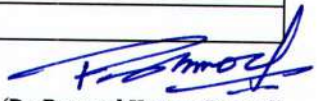
Dated: 27 October, 2022

**ORDER**

Subject: Research project entitled **THERMAL PRIMING AND ROLE OF EPIGENETIC VARIATION ON ADAPTIVE STRATEGY OF SEAGRASSES UNDER WARMING OCEAN** under the guidance of Dr. Jeyapragash Danaraj, Centre for Ocean Research, Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119.

1. In continuation of SERB's sanction order No. SRG/2022/000185 dated 27 October, 2022, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs. 600000/-** under 'Grants-in-aid Capital' to Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Chennai, Tamil Nadu-600119 being the grant for the financial year 2022-2023 for implementation of the above said project.
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website ([www.serb.gov.in](http://www.serb.gov.in)) and as mentioned in the sanction order of even number dated 27 October, 2022.
3. As this is the first grant being released under 'Grants-in-aid Capital' for the project, no previous U/C is required.
4. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Start-up Research Grant (Capital) (EC Life Sciences)
5. The Sanction has been issued with the approval of the competent authority on **25 October, 2022** and vide Diary No. **SERB/F/6035/2022-2023** dated **27 October, 2022**.
6. The release amount of **Rs. 600000/-** (Rupees Six Lakh only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

|                        |                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------|
| PFMS Unique Code       | SU                                                                                                                 |
| Account Name           | Sathyabama Institute of Science and Technology - Research                                                          |
| Account Number         | 6089858032                                                                                                         |
| Bank Name & Branch     | Indian Bank Sathyabama University Branch Sathyabama Institute of Science and Technology Jeppiaar Nagar Chennai 119 |
| IFSC/RTGS Code         | IDIB000S201                                                                                                        |
| Email id of A/C Holder | registrar@sathyabama.ac.in                                                                                         |
| Email id of PI         | pragashdb@gmail.com                                                                                                |

  
(Dr. Pramod Kumar Prasad)  
Scientist-D  
pk.prasad@serb.gov.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R. Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                   |
| 2. | Sanction Folder, SERB, New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4. | <b>Dr. Jeyapragash Danaraj</b><br>Centre for Ocean Research<br>Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119<br>Email: <a href="mailto:pragashdb@gmail.com">pragashdb@gmail.com</a><br>Mobile: 917448779186<br>(Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a> .) |
| 5. | <b>Registrar,</b><br>Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai<br>(Receipt of Grant may be intimated by name to the undersigned)                                                                                                                                                                                                                                                                                          |

  
(Dr. Pramod Kumar Prasad)  
Scientist-D  
pk.prasad@serb.gov.in

भारत सरकार  
Government of India  
पृथ्वी विज्ञान मंत्रालय  
Ministry of Earth Sciences

Prithvi Bhawan,  
Lodhi Road, New Delhi-110003  
Dated: -06-2019

Administrative Order

**विषय:** Revised A.O. of Earth Science & Technology Cell (ESTC) Network Project entitled "Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology (SIST), Chennai under Research & Development in Earth and Atmospheric Sciences.

In supersession of Ministry's A.O. of even number dated 07/08/2018, sanction of President is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules, 1978 for implementation of the project(s) of "Earth Science & Technology Cell (ESTC) on Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology, Chennai, deemed to be University at an estimated cost of **Rs. 3,12,11,740 (Rupees Three crore twelve lakhs eleven thousand seven hundred and forty only)** for the period of 3 years (Rs. 2,02,45,020/- during 1st Year(2019-20), Rs. 55,68,690/- during 2nd Year(2020-21) and Rs. 53,98,030/- during 3rd Year(2021-22).

**2.0 Objectives:** The main objectives of establishment of ESTC on "Marine Biotechnological Studies (MBS)" under Marine Ecology & Biology(MEB) and its initial network projects are as following.

- To augment marine living resources and biotechnology in collaboration with Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai..
- To identify the R&D requirements and to fulfill the gap to develop potent marine bioactive products.
- To establish collaboration between National and international Institutions. .
- To create infrastructure facilities related to advance research in marine biotechnological studies.

**3.0 Programs:-**

The main purpose of the ESTC on Marine Biotechnological Studies (ESTC-MBS) is innovation and application of high end biotechnologies upon Marine Bio Resources of Indian Coast for genetic characterization, assessment, conservation and bio-prospection of and potent bioactive molecules for sustainable utilization, Intellectual Property rights, economical benefits and Posterity. Vision is to realize the potential of Marine Biotechnology for safe marine environment and marine bioproducts, leading to overall socio-economic growth, welfare and progress of humanity. This ESTC (MBS) will promote, support and facilitate the research to

प्र. विज्ञान  
18/6/2019



utilize the marine living resources to improve the quality of human resources interaction in biotechnology industries for societal applications with join collaboration of Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai.

**4.0 Implementing Organizations:** Sathyabama Institute of Science and Technology, Deemed to be University, Chennai.

#### 5.0 Estimated Project Cost

The estimated total cost of the ESTC project(s) and operational expenses of ESTC (MBS) Cell is Rs. Rs. 3,12,11,740 /- for 3 years from date of commencing / release, with year-wise break-up ( 1<sup>st</sup> year : Rs. 2,02,45,020/-; 2<sup>nd</sup> Year: Rs. 55,68,690/-; 3<sup>rd</sup> year: Rs. 53,98,030/-), as per details given below.

(Amount in Rupees)

| Items                                                                                                                                                                   | Institute Name: Sathyabama University |              |              | Grand Total<br><br>(Rs.) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------|--------------|--------------------------|
|                                                                                                                                                                         | Year 1 (Rs.)                          | Year 2 (Rs.) | Year 3 (Rs.) |                          |
| A. Non-Recurring                                                                                                                                                        |                                       |              |              |                          |
| Equipment                                                                                                                                                               | 1,48,28,000                           | -            | -            | 1,48,28,000              |
| B. Recurring                                                                                                                                                            |                                       |              |              |                          |
| Manpower for networking projects (JRF/SRF)-6<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680    | 31,24,800    | 86,60,160                |
| Manpower for ESTC cell operations<br>Field Assistant-1<br>@ Rs. 10,500/pm<br>Accounts Assistant-1<br>@ Rs. 10,500/pm                                                    | 2,52,000                              | 2,52,000     | 2,52,000     | 7,56,000                 |
| Travel                                                                                                                                                                  | 2,80,000                              | 2,75,000     | 2,30,000     | 7,85,000                 |
| Consumables                                                                                                                                                             | 13,50,000                             | 15,00,000    | 10,50,000    | 39,00,000                |
| Contingency                                                                                                                                                             | 62,000                                | 62,000       | 74,000       | 1,98,000                 |
| Other expenses (Sample analysis -Out sourcing)                                                                                                                          | 2,58,000                              | 2,58,000     | 2,26,000     | 7,42,000                 |
| ESTC cell Operational expenses (Expense on meeting of SSE committee travel, consumables etc.,)                                                                          | 2,50,000                              | 2,50,000     | 2,50,000     | 7,50,000                 |
| Overhead                                                                                                                                                                | 1,97,340                              | 2,04,010     | 1,91,230     | 5,92,580                 |
| Total (B)                                                                                                                                                               | 54,17,020                             | 55,68,690    | 53,98,030    | 1,63,83,740              |
| Total (A+B)                                                                                                                                                             | 2,02,45,020                           | 55,68,690    | 53,98,030    | 3,12,11,740              |

Dr. S. Srinivas  
18/6/2019

The detailed break-up of the budget of each of ESTC (MBS) project(s) viz. Project-1, Project-2, Project-3, Project-4, Project-5 and the Operational Expenses of ESTC Cell at Sathyabama Institute of Science & Technology (SIST), Chennai, is given in Annexure-I.

#### 6.0 Manpower requirements:

The manpower requirement for network project under different components including manpower and for main Institute for the operational requirement component (ESTC Cell) of the project is as detailed below:

| Items                                                                                                                                                                     | Institute Name: Sathyabama University |                                 |                                 | Grand Total<br>(Rs.) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|---------------------------------|----------------------|
|                                                                                                                                                                           | 1 <sup>st</sup> Year<br>2018-19       | 2 <sup>nd</sup> Year<br>2019-20 | 3 <sup>rd</sup> Year<br>2020-21 |                      |
| Manpower for networking projects (JRF/SRF)-6.<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680                       | 31,24,800                       | 86,60,160            |
| Manpower for ESTC cell operations                                                                                                                                         |                                       |                                 |                                 |                      |
| Field Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                      | 2,52,000                              | 2,52,000                        | 2,52,000                        | 7,56,000             |
| Accounts Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                   |                                       |                                 |                                 |                      |
| <b>Total</b>                                                                                                                                                              | <b>30,19,680</b>                      | <b>30,19,680</b>                | <b>33,76,800</b>                | <b>94,16,160</b>     |

#### 7.0 Duration of the Project / Description of time schedule of the program (Three Years): Annexure-II

**8.0 Release of fund:** A memorandum of understanding (MoU) will be signed between Sathyabama Institute of Science & Technology (SIST), Chennai and MoES, prior to funding the ESTC project(s). Funds will be released directly to the Sathyabama, Institute of Science & Ocean Technology, Chennai. Subsequent release of funds shall be based on the progress of projects and recommendations of Scientific Steering Committee (SSC) on Marine Ecology & Biology(MEB) as per Ministry's OM No. MoES/16/29/11-RDEAS(ESTC/SSC-MEB) dated 20<sup>th</sup> May, 2019.

Dr. S. N. Y. N.  
18/6/2019

**9.0 Implementation, Monitoring and Evaluation:** Program will be implemented by the ESTC (Marine Biotechnological Studies-MBS) and will be coordinated by Project Coordinator (PC), Dr B. Sheela Rani (Director-Research) at Sathyabama Institute of Science & Ocean Technology (SIST), Chennai, in collaboration with National Institute of Technology (NIOT) Chennai and Centre For Marine Living Resources & Ecology (CMLRE), Kochi. The overall monitoring and periodic review of the progress of the said ESTC project(s) towards their implementation as per objectives and time line will be done by a Scientific Steering Committee (SSC) on MEB and at ESTC level by the Project Coordinator (PC) as per terms of references laid down in Ministry's OM No. MoES/16/29/11-RDEAS (ESTC-NP) and (ESTC/SSC-MEB) dated 23<sup>rd</sup> May, 2014 and dated 20/5/2019. The SSC on subject will send its periodic report to the Chairman of Ministry's Apex Committee.

**10.0** The expenditure involved is debitable to the following Head of Accounts-

|                  |   |                                                   |
|------------------|---|---------------------------------------------------|
| Major Head '3425 | - | Other Scientific Research (Major Head)            |
| 60.200           | - | Assistant to Other Scientific Bodies (Minor Head) |
| 52               | - | Research Education & Training Outreach            |
| 52.00.31         | - | Grant-in-Aid (General)                            |
| 52.00.35         | - | Grants for Creation of Capital Assets             |

**11.0 Other Terms and Conditions:**

- Allocation of budget is tentative and subject to change after review of progress, both physical and financial as recommended by the committee of experts.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- The equipments procured out of the grants from MoES will be maintained by institute and will be available for use by other researchers.
- All equipments/assets procured from MoES funds shall be maintained in the stock register and no asset/equipment shall be diverted and/ or disposed off without prior approval of the competent authority in MoES.
- Codal provisions as conveyed in GFR, Manual on Policies and Procedures for purchase of goods and GOI instruction issued from time to time for service and requisition of research personnel shall be followed. Also information on direct benefit transfer (DBT) of manpower shall be provided to MoES on monthly basis.
- While implementing the programme all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- Utilization certificate and statement of expenditure for the expenditure incurred on the project shall be submitted periodically in the prescribed format as per GFR 2017, alongwith scanned copy of same by email to Program Head/Program Director ESTC, MoES.
- This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned/ accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled dated of completion of the project.

Dr. S. R. Rani  
18/6/2019



- The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- Failure to comply with the terms and conditions of the terms will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
- The grant-in-aid being released is subject to the condition that

i. A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organisation under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

ii. While submitting Utilization Certificate/Statement of Expenditure the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

- End-to-end e-tendering to be followed for procurements of items/services having value above Rs.2.00 lakh as per MoF O.M. dated 09/01/2014.
- Grants released by the Ministry to be kept in interest bearing account and the interest earned shall be refunded to the Govt. of India account as per 230(8) of GFR-2017.
- Expenditure, Advance and Transfer (EAT) module of PFMS should be activated for the grants released under the project and expenditure under the project shall be monitored through EAT module. No HRA is allowed in case of accommodation provided by the institute.

**12.0** This issues under powers delegated to this Ministry with the approval of Secretary MoES vide Dy. No. Nil dated 10/05/2019 and with the concurrence of IFD vide their Dy. No. 120/IFD/1427/2019-20/REACHOUT dated 07.05.2019.

*(Signature)*  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

To

The Pay & Accounts officer,  
Ministry of Earth Sciences,  
Prithvi Bhavan, Lodhi Road,  
New Delhi-110 003.

Copy to:

1. Cash Section, MoES for information.
2. The Principal Director of Audit(Scientific Department), AGCR Building, I.P. Estate, New Delhi.
3. Dr. B. Sheela Rani, PC(ESTC-MBS), Director (Research), Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- kavisheela66@gmail.com)

*(Signature)*  
19/6/19

4. Director, National Institute of Technology (NIOT), Chennai. (Email:- director@niot.res.in )
5. Director, Centre for Marine Living Resources & Ecology (CMLRE), Kochi. (Email:- director@cmlre.gov.in)
6. Dr.Radhika Rajasree S.R., Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- radhiin@gmali.com)
7. Dr. D. Inbakandan, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119.(Email:- inbakandan@gmail.com )
8. Dr. L. Stanley Abraham, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- stanleyabraham.cor@gmail.com)
9. Dr. V. Ganesh Kumar, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- ganesv@gmail.com)
10. Dr. K. GOVINDARAJU, Scientist C, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600119. (Email:- goindaraju@sathyabamauniversity.ac.in)
11. ProgrammeHead(GI)/Sci.'F'(JVS,jv).(Email:- gopal.iyenger@nic.insingh.moes@nic.in)
12. Controller of Accounts, Prithvi Bhavan, Lodhi Road, New Delhi.
13. Sanction folder/Guard file.

श्री. मंजुला दानियल  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

B/C

### Annexure-I

## Project – 1

**Project title: “Studies on the implications of engineered nanoparticles and bio-nanocomposites in aquatic animal health”**

**Principal Investigator:** Dr.Radhika Rajasree S.R., Scientist E

**Co-Investigator:** Dr. D Inbakandan, Scientist E and Dr.L Stanley Abraham, Scientist E

| Budget (In Rupees)                                                                                                                        |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Item                                                                                                                                      | Year 1           | Year 2           | Year 3           | Total            |
| <b>A. Non-Recurring</b>                                                                                                                   |                  |                  |                  |                  |
| <b>Specific equipment</b>                                                                                                                 |                  |                  |                  |                  |
| 1. Stand alone rack-zebra fish housing with light enclosure                                                                               | 12,10,000        |                  |                  | 12,10,000        |
| 2. Digital microtome plus tissue processor and stainer                                                                                    | 3,30,000         |                  |                  | 3,30,000         |
| 3. Continuous flow through proportional diluter                                                                                           | 8,80,000         |                  |                  | 8,80,000         |
| 4. Coulter counter                                                                                                                        | 6,60,000         |                  |                  | 6,60,000         |
| <b>Total (A)</b>                                                                                                                          | <b>30,80,000</b> |                  |                  | <b>30,80,000</b> |
| <b>B. Recurring</b>                                                                                                                       |                  |                  |                  |                  |
| <b>1 Research staff</b>                                                                                                                   |                  |                  |                  |                  |
| JRF – 2 Nos.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 9,22,560         | 9,22,560         | 10,41,600        | 28,86,720        |
| 2 Consumable                                                                                                                              | 5,00,000         | 5,00,000         | 2,00,000         | 12,00,000        |
| 3 Contingencies                                                                                                                           | 10,000           | 10,000           | 10,000           | 30,000           |
| 4 Other expenses (Cost of samples analysis/ outsource, etc.)                                                                              | 40,000           | 40,000           | 40,000           | 1,20,000         |
| 5 Travel                                                                                                                                  | 15,000           | 10,000           | 10,000           | 35,000           |
| 6 Over head                                                                                                                               | 61,870           | 61,640           | 50,138           | 1,73,648         |
| <b>Total (B)</b>                                                                                                                          | <b>15,49,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>44,45,368</b> |
| <b>Grand total (A+B)</b>                                                                                                                  | <b>46,29,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>75,25,368</b> |

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**Project – 2**

**Project title: “Surface modification nanotechnological approach for antifouling and anticorrosion applications”**

**Principal Investigator : Dr. D. Inbakandan, Scientist E**

**Co- Principal Investigator : Dr.L.Stanley Abraham, Scientist E and Dr.Radhika Rajsree S R., Scientist E**

**Brief Budget Estimation (In Rupees)**

| Item                                                                                                                                 | Year 1           | Year 2          | Year 3          | Total            |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|-----------------|------------------|
| <b>A. Non- Recurring</b>                                                                                                             |                  |                 |                 |                  |
| <b>Specific equipment</b>                                                                                                            |                  |                 |                 |                  |
| 1. Fluorescence microscope with image analyzer                                                                                       | 14,40,000        | -               | -               | 14,40,000        |
| 2. Impedance spectrophotometer                                                                                                       | 17,20,000        | -               | -               | 17,20,000        |
| 3. Luminometer                                                                                                                       | 8,00,000         | -               | -               | 8,00,000         |
| <b>Total (A)</b>                                                                                                                     | <b>39,60,000</b> | <b>-</b>        | <b>-</b>        | <b>39,60,000</b> |
| <b>B. Recurring</b>                                                                                                                  |                  |                 |                 |                  |
| <b>1 Research staff</b>                                                                                                              |                  |                 |                 |                  |
| JRF – 1 no.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm+24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280        | 5,20,800        | 14,43,360        |
| 2 Consumable                                                                                                                         | 1,00,000         | 1,00,000        | 1,00,000        | 3,00,000         |
| 3 Contingencies                                                                                                                      | 10,000           | 10,000          | 10,000          | 30,000           |
| 4 Other expenses (Cost of samples analysis/outsource, etc.)                                                                          | 60,000           | 60,000          | 60,000          | 1,80,000         |
| 5 Travel                                                                                                                             | 50,000           | 50,000          | 50,000          | 1,50,000         |
| 6 Over head                                                                                                                          | 28,060           | 28,060          | 30,213          | 86,333           |
| <b>Total B</b>                                                                                                                       | <b>7,09,340</b>  | <b>7,09,340</b> | <b>7,71,013</b> | <b>21,89,693</b> |
| <b>Grand total (A+B)</b>                                                                                                             | <b>46,69,340</b> | <b>7,09,340</b> | <b>7,71,013</b> | <b>61,49,693</b> |

Dr. Stanley Abraham  
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**Project - 3**

**Project title: "Enhancement of marine microbial by-products for biomedical applications"**

**Principal Investigator : Dr. L. Stanley Abraham, Scientist E**

**Co – Investigator : Dr. D. Inbakandan, Scientist E and Dr.Radhika Rajasree S.R., Scientist E**

**Budget Estimates (In Rupees)**

| <b>Budget Head</b>                                                                                                             | <b>Year 1<br/>(Rs.)</b> | <b>Year 2<br/>(Rs.)</b> | <b>Year 3<br/>(Rs.)</b> | <b>Total<br/>(Rs.)</b> |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| <b>A. Non-Recurring</b>                                                                                                        |                         |                         |                         |                        |
| Specific equipment                                                                                                             | 1, 10, 500              | -                       | -                       | 1, 10, 500             |
| SS Extraction Vessels                                                                                                          |                         |                         |                         |                        |
| Vacuum oven                                                                                                                    | 2, 11, 000              | -                       | -                       | 2, 11, 000             |
| Ultra centrifuge                                                                                                               | 27, 09, 000             | -                       | -                       | 27, 09, 000            |
| <b>Total (A)</b>                                                                                                               | <b>30,30,500</b>        | <b>-</b>                | <b>-</b>                | <b>30,30,500</b>       |
| <b>B. Recurring</b>                                                                                                            |                         |                         |                         |                        |
| Research staff                                                                                                                 |                         |                         |                         |                        |
| 1.Manpower                                                                                                                     |                         |                         |                         |                        |
| a) JRF - 1no.                                                                                                                  | 4,61,280                | 4,61,280                | 5,20,800                | 14,43,360              |
| @Rs.31,000/pm + 24%<br>HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year<br>and Rs.35,000/pm +24%<br>HRA for 3 <sup>rd</sup> year |                         |                         |                         |                        |
| 2 Consumable                                                                                                                   | 1,50,000                | 1,00,000                | 1,50,000                | 4, 00, 000             |
| 3 Contingencies                                                                                                                | 12,000                  | 12,000                  | 24,000                  | 48,000                 |
| 4 Other expenses (Cost<br>of samples<br>analysis/outsource, etc.)                                                              | 38,000                  | 38,000                  | 26,000                  | 1, 02, 000             |
| 5 Travel                                                                                                                       | 75,000                  | 75, 000                 | 50, 000                 | 2,00, 000              |
| 6 Over head                                                                                                                    | 30,590                  | 28,290                  | 31,593                  | 90,473                 |
| <b>Total (B)</b>                                                                                                               | <b>7,66,870</b>         | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>22,83,833</b>       |
| <b>Grand total (A+B)</b>                                                                                                       | <b>37,97,370</b>        | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>53,14,333</b>       |

Dr. Stanley Abraham  
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**Project – 4**

**Project title: “Biofunctionalization nanoparticles for anticancer applications using marine biosources”**

Principal Investigator : Dr. V. Ganesh Kumar, Scientist E

Co- Principal Investigator : Dr. L. Stanley Abraham, Scientist E and Dr. K. Govindaraju, Scientist C

**Budget Estimates (In Rupees)**

| Item                                                                                                                | Year 1           | Year 2           | Year 3          | Total            |
|---------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                             |                  |                  |                 |                  |
| <b>Specific equipments</b>                                                                                          |                  |                  |                 |                  |
| i. Particle size analyzer                                                                                           | 15,40,000        | -                | -               | 15,40,000        |
| ii. Phase contrast microscope with accessories                                                                      | 5,50,000         | -                | -               | 5,50,000         |
| iii. Hot air oven                                                                                                   | 82,500           | -                | -               | 82,500           |
| iv. Microfuge                                                                                                       | 1,10,000         | -                | -               | 1,10,000         |
| <b>Total (A)</b>                                                                                                    | <b>22,82,500</b> | <b>-</b>         | <b>-</b>        | <b>22,82,500</b> |
| <b>B. Recurring</b>                                                                                                 |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                             |                  |                  |                 |                  |
| JRF-1                                                                                                               |                  |                  |                 |                  |
| (31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                 | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                              | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                  | 60,000           | 60,000           | 60,000          | 1,80,000         |
| <b>5 Travel</b>                                                                                                     | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                  | 38,410           | 43,010           | 40,103          | 1,21,523         |
| <b>Total (B)</b>                                                                                                    | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,95,903</b> | <b>29,89,883</b> |
| <b>Grand total (A+B)</b>                                                                                            | <b>32,27,190</b> | <b>10,49,290</b> | <b>9,95,903</b> | <b>52,72,383</b> |

Dr. S. S. S. S. S.  
18/6/2019



**Project – 5**

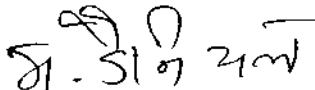
**Project title: “Isolation and identification of bioactive compounds from marine sponges for white spot syndrome virus (WSSV) control”**

**Principal Investigator : Dr. K. GOVINDARAJU, Scientist C**

**Co- Principal Investigator : Dr.D.Inbakandan, Scientist E and Dr.V.Ganesh Kumar, Scientist E**

**Budget Estimates (In Rupees)**

| Item                                                                                                                   | Year 1           | Year 2           | Year 3          | Total            |
|------------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                                |                  |                  |                 |                  |
| <b>Specific equipment</b>                                                                                              |                  |                  |                 |                  |
| 1.Biosafety cabinet                                                                                                    | 2,20,000         | -                | -               | 2,20,000         |
| (Laminar flow)                                                                                                         | 5,50,000         | -                | -               | 5,50,000         |
| 2. ELISA reader with accessories                                                                                       |                  |                  |                 |                  |
| 3.Cooling centrifuge                                                                                                   | 1,65,000         | -                | -               | 1,65,000         |
| 4. Osmometer                                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 5. CO <sub>2</sub> incubator                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 6. Inverted phase contrast microscope                                                                                  | 4,40,000         | -                | -               | 4,40,000         |
| <b>Total (A)</b>                                                                                                       | <b>24,75,000</b> | <b>-</b>         | <b>-</b>        | <b>24,75,000</b> |
| <b>B. Recurring</b>                                                                                                    |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                                |                  |                  |                 |                  |
| JRF-I                                                                                                                  |                  |                  |                 |                  |
| Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                    | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                                 | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                     | 60,000           | 60,000           | 40,000          | 1,60,000         |
| <b>5 Travel</b>                                                                                                        | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                     | 38,410           | 43,010           | 39,183          | 1,20,603         |
| <b>Total (B)</b>                                                                                                       | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,74,983</b> | <b>29,68,963</b> |
| <b>Grand total (A+B)</b>                                                                                               | <b>34,19,690</b> | <b>10,49,290</b> | <b>9,74,983</b> | <b>54,43,963</b> |

  
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**Title: Operational expenses of ESTC (MBS) Cell at Sathyabama Institute of Science & Technology Deemed to be Univ, Chennai**

| Items                                                                                                   |                 |                 |                 | Grand Total      |
|---------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|------------------|
|                                                                                                         | Year 1 (Rs.)    | Year 2 (Rs.)    | Year 3 (Rs.)    | (Rs.)            |
| <b>A ESTC cell Operational expenses</b> (Expense on meeting of SSC committee travel, consumables etc.,) | 2,50,000        | 2,50,000        | 2,50,000        | 7,50,000         |
| <b>B Manpower for ESTC cell operations</b>                                                              |                 |                 |                 |                  |
| <b>i) Field Assistant-1</b><br>@Rs. 10500/pm                                                            | 2,52,000        | 2,52,000        | 2,52,000        | 7,56,000         |
| <b>ii) Accounts Assistant-1</b><br>@Rs. 10500/pm                                                        |                 |                 |                 |                  |
| <b>Total(A+B) =</b>                                                                                     | <b>5,02,000</b> | <b>5,02,000</b> | <b>5,02,000</b> | <b>15,06,000</b> |

Dr. S. Srinivasan  
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## Annexure-II

| S. No. | Research Element                                                                                                                                                                                                        | 1 <sup>st</sup> Year |      | 2 <sup>nd</sup> Year |      | 3 <sup>rd</sup> Year |      |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|----------------------|------|----------------------|------|
|        |                                                                                                                                                                                                                         | 1-6                  | 7-12 | 1-6                  | 7-12 | 1-6                  | 7-12 |
|        | <b>Recruitment of Project staff, Purchase of consumables and Equipment :-</b>                                                                                                                                           |                      |      |                      |      |                      |      |
| 1.     | Manpower recruitment and Purchase of consumables and perment equipments Preparation and characterization of biofunctionalized gold nanoparticles                                                                        |                      |      |                      |      |                      |      |
| 2      | <b>In vitro anti cancer activity Cell culture:-</b><br>The biofunctionalized properties of nanoparticles and its activity in cell culture.                                                                              |                      |      |                      |      |                      |      |
| 3      | <b>Assessment of cell morphology and viability Hoechst 33258 Staining &amp; DNA ladder analysis:-</b><br>Cell Morphology and cell viability will be carried out to check the anticancer potential of the nanomaterials. |                      |      |                      |      |                      |      |
| 4      | <b>In-vivo studies on anticancer activity:-</b><br>The animals will be kept in plastic cages undr hygienic conditions and will be provided standard animal feed for anticancer studies.                                 |                      |      |                      |      |                      |      |
| 5      | <b>Experimental protocol</b><br>Collection of serum Histopathology Immunohistochemistry of PCNA Flow cytometric analysis for plasma membrane potential of bacteria and fungi                                            |                      |      |                      |      |                      |      |
| 6      | <b>Protein extraction</b><br>Western blot analysis Real-time polymerase chain reaction (RT-PCR) for the detection of mRNA expression of different genes Product development                                             |                      |      |                      |      |                      |      |
|        |                                                                                                                                                                                                                         |                      |      |                      |      |                      |      |

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18/6/2019



भारत सरकार  
Government of India  
पृथ्वी विज्ञान मंत्रालय  
Ministry of Earth Sciences

Prithvi Bhawan,  
Lodhi Road, New Delhi-110003  
Dated: -06-2019

Administrative Order

**विषय:** Revised A.O. of Earth Science & Technology Cell (ESTC) Network Project entitled "Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology (SIST), Chennai under Research & Development in Earth and Atmospheric Sciences.

In supersession of Ministry's A.O. of even number dated 07/08/2018, sanction of President is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules, 1978 for implementation of the project(s) of "Earth Science & Technology Cell (ESTC) on Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology, Chennai, deemed to be University at an estimated cost of **Rs. 3,12,11,740 (Rupees Three crore twelve lakhs eleven thousand seven hundred and forty only)** for the period of 3 years (Rs. 2,02,45,020/- during 1st Year(2019-20), Rs. 55,68,690/- during 2nd Year(2020-21) and Rs. 53,98,030/- during 3rd Year(2021-22).

**2.0 Objectives:** The main objectives of establishment of ESTC on "Marine Biotechnological Studies (MBS)" under Marine Ecology & Biology(MEB) and its initial network projects are as following.

- To augment marine living resources and biotechnology in collaboration with Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai..
- To identify the R&D requirements and to fulfill the gap to develop potent marine bioactive products.
- To establish collaboration between National and international Institutions. .
- To create infrastructure facilities related to advance research in marine biotechnological studies.

**3.0 Programs:-**

The main purpose of the ESTC on Marine Biotechnological Studies (ESTC-MBS) is innovation and application of high end biotechnologies upon Marine Bio Resources of Indian Coast for genetic characterization, assessment, conservation and bio-prospection of and potent bioactive molecules for sustainable utilization, Intellectual Property rights, economical benefits and Posterity. Vision is to realize the potential of Marine Biotechnology for safe marine environment and marine bioproducts, leading to overall socio-economic growth, welfare and progress of humanity. This ESTC (MBS) will promote, support and facilitate the research to

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utilize the marine living resources to improve the quality of human resources interaction in biotechnology industries for societal applications with join collaboration of Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai.

**4.0 Implementing Organizations:** Sathyabama Institute of Science and Technology, Deemed to be University, Chennai.

#### 5.0 Estimated Project Cost

The estimated total cost of the ESTC project(s) and operational expenses of ESTC (MBS) Cell is Rs. Rs. 3,12,11,740 /- for 3 years from date of commencing / release, with year-wise break-up ( 1<sup>st</sup> year : Rs. 2,02,45,020/-; 2<sup>nd</sup> Year: Rs. 55,68,690/-; 3<sup>rd</sup> year: Rs. 53,98,030/-), as per details given below.

(Amount in Rupees)

| Items                                                                                                                                                                   | Institute Name: Sathyabama University |              |              | Grand Total<br><br>(Rs.) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------|--------------|--------------------------|
|                                                                                                                                                                         | Year 1 (Rs.)                          | Year 2 (Rs.) | Year 3 (Rs.) |                          |
| A. Non-Recurring                                                                                                                                                        |                                       |              |              |                          |
| Equipment                                                                                                                                                               | 1,48,28,000                           | -            | -            | 1,48,28,000              |
| B. Recurring                                                                                                                                                            |                                       |              |              |                          |
| Manpower for networking projects (JRF/SRF)-6<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680    | 31,24,800    | 86,60,160                |
| Manpower for ESTC cell operations<br>Field Assistant-1<br>@ Rs. 10,500/pm<br>Accounts Assistant-1<br>@ Rs. 10,500/pm                                                    | 2,52,000                              | 2,52,000     | 2,52,000     | 7,56,000                 |
| Travel                                                                                                                                                                  | 2,80,000                              | 2,75,000     | 2,30,000     | 7,85,000                 |
| Consumables                                                                                                                                                             | 13,50,000                             | 15,00,000    | 10,50,000    | 39,00,000                |
| Contingency                                                                                                                                                             | 62,000                                | 62,000       | 74,000       | 1,98,000                 |
| Other expenses (Sample analysis -Out sourcing)                                                                                                                          | 2,58,000                              | 2,58,000     | 2,26,000     | 7,42,000                 |
| ESTC cell Operational expenses (Expense on meeting of SSE committee travel, consumables etc.,)                                                                          | 2,50,000                              | 2,50,000     | 2,50,000     | 7,50,000                 |
| Overhead                                                                                                                                                                | 1,97,340                              | 2,04,010     | 1,91,230     | 5,92,580                 |
| Total (B)                                                                                                                                                               | 54,17,020                             | 55,68,690    | 53,98,030    | 1,63,83,740              |
| Total (A+B)                                                                                                                                                             | 2,02,45,020                           | 55,68,690    | 53,98,030    | 3,12,11,740              |

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The detailed break-up of the budget of each of ESTC (MBS) project(s) viz. Project-1, Project-2, Project-3, Project-4, Project-5 and the Operational Expenses of ESTC Cell at Sathyabama Institute of Science & Technology (SIST), Chennai, is given in Annexure-I.

#### 6.0 Manpower requirements:

The manpower requirement for network project under different components including manpower and for main Institute for the operational requirement component (ESTC Cell) of the project is as detailed below:

| Items                                                                                                                                                                     | Institute Name: Sathyabama University |                                 |                                 | Grand Total<br>(Rs.) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|---------------------------------|----------------------|
|                                                                                                                                                                           | 1 <sup>st</sup> Year<br>2018-19       | 2 <sup>nd</sup> Year<br>2019-20 | 3 <sup>rd</sup> Year<br>2020-21 |                      |
| Manpower for networking projects (JRF/SRF)-6.<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680                       | 31,24,800                       | 86,60,160            |
| Manpower for ESTC cell operations                                                                                                                                         |                                       |                                 |                                 |                      |
| Field Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                      | 2,52,000                              | 2,52,000                        | 2,52,000                        | 7,56,000             |
| Accounts Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                   |                                       |                                 |                                 |                      |
| <b>Total</b>                                                                                                                                                              | <b>30,19,680</b>                      | <b>30,19,680</b>                | <b>33,76,800</b>                | <b>94,16,160</b>     |

#### 7.0 Duration of the Project / Description of time schedule of the program (Three Years): Annexure-II

**8.0 Release of fund:** A memorandum of understanding (MoU) will be signed between Sathyabama Institute of Science & Technology (SIST), Chennai and MoES, prior to funding the ESTC project(s). Funds will be released directly to the Sathyabama, Institute of Science & Ocean Technology, Chennai. Subsequent release of funds shall be based on the progress of projects and recommendations of Scientific Steering Committee (SSC) on Marine Ecology & Biology(MEB) as per Ministry's OM No. MoES/16/29/11-RDEAS(ESTC/SSC-MEB) dated 20<sup>th</sup> May, 2019.

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**9.0 Implementation, Monitoring and Evaluation:** Program will be implemented by the ESTC (Marine Biotechnological Studies-MBS) and will be coordinated by Project Coordinator (PC), Dr B. Sheela Rani (Director-Research) at Sathyabama Institute of Science & Ocean Technology (SIST), Chennai, in collaboration with National Institute of Technology (NIOT) Chennai and Centre For Marine Living Resources & Ecology (CMLRE), Kochi. The overall monitoring and periodic review of the progress of the said ESTC project(s) towards their implementation as per objectives and time line will be done by a Scientific Steering Committee (SSC) on MEB and at ESTC level by the Project Coordinator (PC) as per terms of references laid down in Ministry's OM No. MoES/16/29/11-RDEAS (ESTC-NP) and (ESTC/SSC-MEB) dated 23<sup>rd</sup> May, 2014 and dated 20/5/2019. The SSC on subject will send its periodic report to the Chairman of Ministry's Apex Committee.

**10.0** The expenditure involved is debitable to the following Head of Accounts-

|                  |   |                                                   |
|------------------|---|---------------------------------------------------|
| Major Head '3425 | - | Other Scientific Research (Major Head)            |
| 60.200           | - | Assistant to Other Scientific Bodies (Minor Head) |
| 52               | - | Research Education & Training Outreach            |
| 52.00.31         | - | Grant-in-Aid (General)                            |
| 52.00.35         | - | Grants for Creation of Capital Assets             |

**11.0 Other Terms and Conditions:**

- Allocation of budget is tentative and subject to change after review of progress, both physical and financial as recommended by the committee of experts.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- The equipments procured out of the grants from MoES will be maintained by institute and will be available for use by other researchers.
- All equipments/assets procured from MoES funds shall be maintained in the stock register and no asset/equipment shall be diverted and/ or disposed off without prior approval of the competent authority in MoES.
- Codal provisions as conveyed in GFR, Manual on Policies and Procedures for purchase of goods and GOI instruction issued from time to time for service and requisition of research personnel shall be followed. Also information on direct benefit transfer (DBT) of manpower shall be provided to MoES on monthly basis.
- While implementing the programme all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- Utilization certificate and statement of expenditure for the expenditure incurred on the project shall be submitted periodically in the prescribed format as per GFR 2017, alongwith scanned copy of same by email to Program Head/Program Director ESTC, MoES.
- This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned/ accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled dated of completion of the project.

Dr. S. R. Rani  
18/6/2019



- The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- Failure to comply with the terms and conditions of the terms will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
- The grant-in-aid being released is subject to the condition that

i. A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organisation under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

ii. While submitting Utilization Certificate/Statement of Expenditure the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

- End-to-end e-tendering to be followed for procurements of items/services having value above Rs.2.00 lakh as per MoF O.M. dated 09/01/2014.
- Grants released by the Ministry to be kept in interest bearing account and the interest earned shall be refunded to the Govt. of India account as per 230(8) of GFR-2017.
- Expenditure, Advance and Transfer (EAT) module of PFMS should be activated for the grants released under the project and expenditure under the project shall be monitored through EAT module. No HRA is allowed in case of accommodation provided by the institute.

**12.0** This issues under powers delegated to this Ministry with the approval of Secretary MoES vide Dy. No. Nil dated 10/05/2019 and with the concurrence of IFD vide their Dy. No. 120/IFD/1427/2019-20/REACHOUT dated 07.05.2019.

*(Signature)*  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

To

The Pay & Accounts officer,  
Ministry of Earth Sciences,  
Prithvi Bhavan, Lodhi Road,  
New Delhi-110 003.

Copy to:

1. Cash Section, MoES for information.
2. The Principal Director of Audit(Scientific Department), AGCR Building, I.P. Estate, New Delhi.
3. Dr. B. Sheela Rani, PC(ESTC-MBS), Director (Research), Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- kavisheela66@gmail.com)

*(Signature)*  
19/6/19

4. Director, National Institute of Technology (NIOT), Chennai. (Email:- director@niot.res.in )
5. Director, Centre for Marine Living Resources & Ecology (CMLRE), Kochi. (Email:- director@cmlre.gov.in)
6. Dr.Radhika Rajasree S.R., Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- radhiin@mai.com)
7. Dr. D. Inbakandan, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119.(Email:- inbakandan@gmail.com )
8. Dr. L. Stanley Abraham, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- stanleyabraham.cor@gmail.com)
9. Dr. V. Ganesh Kumar, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- ganesv@gmail.com)
10. Dr. K. GOVINDARAJU, Scientist C, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600119. (Email:- goindaraju@sathyabamauniversity.ac.in)
11. ProgrammeHead(GI)/Sci.'F'(JVS,jv).(Email:- gopal.iyenger@nic.insingh.moes@nic.in)
12. Controller of Accounts, Prithvi Bhavan, Lodhi Road, New Delhi.
13. Sanction folder/Guard file.

श्री. मंजुला दानियल  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

B/C

## Annexure-I

Project – 1

**Project title: “Studies on the implications of engineered nanoparticles and bio-nanocomposites in aquatic animal health”**

**Principal Investigator:** Dr.Radhika Rajasree S.R., Scientist E

**Co-Investigator:** Dr. D Inbakandan, Scientist E and Dr.L Stanley Abraham, Scientist E

| Budget (In Rupees)                                                                                                                        |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Item                                                                                                                                      | Year 1           | Year 2           | Year 3           | Total            |
| <b>A. Non-Recurring</b>                                                                                                                   |                  |                  |                  |                  |
| <b>Specific equipment</b>                                                                                                                 |                  |                  |                  |                  |
| 1. Stand alone rack-zebra fish housing with light enclosure                                                                               | 12,10,000        |                  |                  | 12,10,000        |
| 2. Digital microtome plus tissue processor and stainer                                                                                    | 3,30,000         |                  |                  | 3,30,000         |
| 3. Continuous flow through proportional diluter                                                                                           | 8,80,000         |                  |                  | 8,80,000         |
| 4. Coulter counter                                                                                                                        | 6,60,000         |                  |                  | 6,60,000         |
| <b>Total (A)</b>                                                                                                                          | <b>30,80,000</b> |                  |                  | <b>30,80,000</b> |
| <b>B. Recurring</b>                                                                                                                       |                  |                  |                  |                  |
| <b>1 Research staff</b>                                                                                                                   |                  |                  |                  |                  |
| JRF – 2 Nos.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 9,22,560         | 9,22,560         | 10,41,600        | 28,86,720        |
| 2 Consumable                                                                                                                              | 5,00,000         | 5,00,000         | 2,00,000         | 12,00,000        |
| 3 Contingencies                                                                                                                           | 10,000           | 10,000           | 10,000           | 30,000           |
| 4 Other expenses (Cost of samples analysis/ outsource, etc.)                                                                              | 40,000           | 40,000           | 40,000           | 1,20,000         |
| 5 Travel                                                                                                                                  | 15,000           | 10,000           | 10,000           | 35,000           |
| 6 Over head                                                                                                                               | 61,870           | 61,640           | 50,138           | 1,73,648         |
| <b>Total (B)</b>                                                                                                                          | <b>15,49,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>44,45,368</b> |
| <b>Grand total (A+B)</b>                                                                                                                  | <b>46,29,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>75,25,368</b> |

Dr. S. S. S. S. S.  
18/6/2019

**Project – 2**

**Project title: “Surface modification nanotechnological approach for antifouling and anticorrosion applications”**

**Principal Investigator : Dr. D. Inbakandan, Scientist E**

**Co- Principal Investigator : Dr.L.Stanley Abraham, Scientist E and Dr.Radhika Rajsree S R., Scientist E**

**Brief Budget Estimation (In Rupees)**

| Item                                                                                                                                 | Year 1           | Year 2          | Year 3          | Total            |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|-----------------|------------------|
| <b>A. Non- Recurring</b>                                                                                                             |                  |                 |                 |                  |
| <b>Specific equipment</b>                                                                                                            |                  |                 |                 |                  |
| 1. Fluorescence microscope with image analyzer                                                                                       | 14,40,000        | -               | -               | 14,40,000        |
| 2. Impedance spectrophotometer                                                                                                       | 17,20,000        | -               | -               | 17,20,000        |
| 3. Luminometer                                                                                                                       | 8,00,000         | -               | -               | 8,00,000         |
| <b>Total (A)</b>                                                                                                                     | <b>39,60,000</b> | <b>-</b>        | <b>-</b>        | <b>39,60,000</b> |
| <b>B. Recurring</b>                                                                                                                  |                  |                 |                 |                  |
| <b>1 Research staff</b>                                                                                                              |                  |                 |                 |                  |
| JRF – 1 no.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm+24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280        | 5,20,800        | 14,43,360        |
| 2 Consumable                                                                                                                         | 1,00,000         | 1,00,000        | 1,00,000        | 3,00,000         |
| 3 Contingencies                                                                                                                      | 10,000           | 10,000          | 10,000          | 30,000           |
| 4 Other expenses (Cost of samples analysis/outsource, etc.)                                                                          | 60,000           | 60,000          | 60,000          | 1,80,000         |
| 5 Travel                                                                                                                             | 50,000           | 50,000          | 50,000          | 1,50,000         |
| 6 Over head                                                                                                                          | 28,060           | 28,060          | 30,213          | 86,333           |
| <b>Total B</b>                                                                                                                       | <b>7,09,340</b>  | <b>7,09,340</b> | <b>7,71,013</b> | <b>21,89,693</b> |
| <b>Grand total (A+B)</b>                                                                                                             | <b>46,69,340</b> | <b>7,09,340</b> | <b>7,71,013</b> | <b>61,49,693</b> |

Dr. Stanley Abraham  
18/6/2019



**Project - 3**

**Project title: "Enhancement of marine microbial by-products for biomedical applications"**

**Principal Investigator : Dr. L. Stanley Abraham, Scientist E**

**Co - Investigator : Dr. D. Inbakandan, Scientist E and Dr. Radhika Rajasree S.R., Scientist E**

**Budget Estimates (In Rupees)**

| <b>Budget Head</b>                                                                                                             | <b>Year 1<br/>(Rs.)</b> | <b>Year 2<br/>(Rs.)</b> | <b>Year 3<br/>(Rs.)</b> | <b>Total<br/>(Rs.)</b> |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| <b>A. Non-Recurring</b>                                                                                                        |                         |                         |                         |                        |
| Specific equipment                                                                                                             | 1, 10, 500              | -                       | -                       | 1, 10, 500             |
| SS Extraction Vessels                                                                                                          |                         |                         |                         |                        |
| Vacuum oven                                                                                                                    | 2, 11, 000              | -                       | -                       | 2, 11, 000             |
| Ultra centrifuge                                                                                                               | 27, 09, 000             | -                       | -                       | 27, 09, 000            |
| <b>Total (A)</b>                                                                                                               | <b>30,30,500</b>        | <b>-</b>                | <b>-</b>                | <b>30,30,500</b>       |
| <b>B. Recurring</b>                                                                                                            |                         |                         |                         |                        |
| Research staff                                                                                                                 |                         |                         |                         |                        |
| 1. Manpower                                                                                                                    |                         |                         |                         |                        |
| a) JRF - 1no.                                                                                                                  | 4,61,280                | 4,61,280                | 5,20,800                | 14,43,360              |
| @Rs.31,000/pm + 24%<br>HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year<br>and Rs.35,000/pm +24%<br>HRA for 3 <sup>rd</sup> year |                         |                         |                         |                        |
| 2 Consumable                                                                                                                   | 1,50,000                | 1,00,000                | 1,50,000                | 4, 00, 000             |
| 3 Contingencies                                                                                                                | 12,000                  | 12,000                  | 24,000                  | 48,000                 |
| 4 Other expenses (Cost<br>of samples<br>analysis/outsource, etc.)                                                              | 38,000                  | 38,000                  | 26,000                  | 1, 02, 000             |
| 5 Travel                                                                                                                       | 75,000                  | 75, 000                 | 50, 000                 | 2,00, 000              |
| 6 Over head                                                                                                                    | 30,590                  | 28,290                  | 31,593                  | 90,473                 |
| <b>Total (B)</b>                                                                                                               | <b>7,66,870</b>         | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>22,83,833</b>       |
| <b>Grand total (A+B)</b>                                                                                                       | <b>37,97,370</b>        | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>53,14,333</b>       |

Dr. Stanley Abraham  
18/6/2019

# Project – 4

**Project title: “Biofunctionalization nanoparticles for anticancer applications using marine biosources”**

**Principal Investigator** : Dr. V. Ganesh Kumar, Scientist E

**Co- Principal Investigator** : Dr. L. Stanley Abraham, Scientist E and Dr. K. Govindaraju, Scientist C

## Budget Estimates (In Rupees)

| Item                                                                                                                | Year 1           | Year 2           | Year 3          | Total            |
|---------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                             |                  |                  |                 |                  |
| <b>Specific equipments</b>                                                                                          |                  |                  |                 |                  |
| i. Particle size analyzer                                                                                           | 15,40,000        | -                | -               | 15,40,000        |
| ii. Phase contrast microscope with accessories                                                                      | 5,50,000         | -                | -               | 5,50,000         |
| iii. Hot air oven                                                                                                   | 82,500           | -                | -               | 82,500           |
| iv. Microfuge                                                                                                       | 1,10,000         | -                | -               | 1,10,000         |
| <b>Total (A)</b>                                                                                                    | <b>22,82,500</b> | <b>-</b>         | <b>-</b>        | <b>22,82,500</b> |
| <b>B. Recurring</b>                                                                                                 |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                             |                  |                  |                 |                  |
| JRF-1                                                                                                               |                  |                  |                 |                  |
| (31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                 | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                              | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                  | 60,000           | 60,000           | 60,000          | 1,80,000         |
| <b>5 Travel</b>                                                                                                     | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                  | 38,410           | 43,010           | 40,103          | 1,21,523         |
| <b>Total (B)</b>                                                                                                    | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,95,903</b> | <b>29,89,883</b> |
| <b>Grand total (A+B)</b>                                                                                            | <b>32,27,190</b> | <b>10,49,290</b> | <b>9,95,903</b> | <b>52,72,383</b> |

Dr. S. S. S. S. S.  
18/6/2019

**Project – 5**

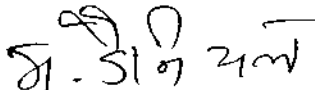
**Project title: “Isolation and identification of bioactive compounds from marine sponges for white spot syndrome virus (WSSV) control”**

**Principal Investigator : Dr. K. GOVINDARAJU, Scientist C**

**Co- Principal Investigator : Dr.D.Inbakandan, Scientist E and Dr.V.Ganesh Kumar, Scientist E**

**Budget Estimates (In Rupees)**

| Item                                                                                                                   | Year 1           | Year 2           | Year 3          | Total            |
|------------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                                |                  |                  |                 |                  |
| <b>Specific equipment</b>                                                                                              |                  |                  |                 |                  |
| 1.Biosafety cabinet                                                                                                    | 2,20,000         | -                | -               | 2,20,000         |
| (Laminar flow)                                                                                                         | 5,50,000         | -                | -               | 5,50,000         |
| 2. ELISA reader with accessories                                                                                       |                  |                  |                 |                  |
| 3.Cooling centrifuge                                                                                                   | 1,65,000         | -                | -               | 1,65,000         |
| 4. Osmometer                                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 5. CO <sub>2</sub> incubator                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 6. Inverted phase contrast microscope                                                                                  | 4,40,000         | -                | -               | 4,40,000         |
| <b>Total (A)</b>                                                                                                       | <b>24,75,000</b> | <b>-</b>         | <b>-</b>        | <b>24,75,000</b> |
| <b>B. Recurring</b>                                                                                                    |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                                |                  |                  |                 |                  |
| JRF-I                                                                                                                  |                  |                  |                 |                  |
| Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                    | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                                 | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                     | 60,000           | 60,000           | 40,000          | 1,60,000         |
| <b>5 Travel</b>                                                                                                        | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                     | 38,410           | 43,010           | 39,183          | 1,20,603         |
| <b>Total (B)</b>                                                                                                       | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,74,983</b> | <b>29,68,963</b> |
| <b>Grand total (A+B)</b>                                                                                               | <b>34,19,690</b> | <b>10,49,290</b> | <b>9,74,983</b> | <b>54,43,963</b> |

  
18/6/2019

**Title: Operational expenses of ESTC (MBS) Cell at Sathyabama Institute of Science & Technology Deemed to be Univ, Chennai**

| Items                                                                                                   |                 |                 |                 | Grand Total      |
|---------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|------------------|
|                                                                                                         | Year 1 (Rs.)    | Year 2 (Rs.)    | Year 3 (Rs.)    | (Rs.)            |
| <b>A ESTC cell Operational expenses</b> (Expense on meeting of SSC committee travel, consumables etc.,) | 2,50,000        | 2,50,000        | 2,50,000        | 7,50,000         |
| <b>B Manpower for ESTC cell operations</b>                                                              |                 |                 |                 |                  |
| i) Field Assistant-1<br>@Rs. 10500/pm                                                                   | 2,52,000        | 2,52,000        | 2,52,000        | 7,56,000         |
| ii) Accounts Assistant-1<br>@Rs. 10500/pm                                                               |                 |                 |                 |                  |
| <b>Total(A+B) =</b>                                                                                     | <b>5,02,000</b> | <b>5,02,000</b> | <b>5,02,000</b> | <b>15,06,000</b> |

Dr. S. Srinivasan  
18/6/2019



## Annexure-II

| S. No. | Research Element                                                                                                                                                                                                        | 1 <sup>st</sup> Year |      | 2 <sup>nd</sup> Year |      | 3 <sup>rd</sup> Year |      |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|----------------------|------|----------------------|------|
|        |                                                                                                                                                                                                                         | 1-6                  | 7-12 | 1-6                  | 7-12 | 1-6                  | 7-12 |
|        | <b>Recruitment of Project staff, Purchase of consumables and Equipment :-</b>                                                                                                                                           |                      |      |                      |      |                      |      |
| 1.     | Manpower recruitment and Purchase of consumables and perment equipments Preparation and characterization of biofunctionalized gold nanoparticles                                                                        |                      |      |                      |      |                      |      |
| 2      | <b>In vitro anti cancer activity Cell culture:-</b><br>The biofunctionalized properties of nanoparticles and its activity in cell culture.                                                                              |                      |      |                      |      |                      |      |
| 3      | <b>Assessment of cell morphology and viability Hoechst 33258 Staining &amp; DNA ladder analysis:-</b><br>Cell Morphology and cell viability will be carried out to check the anticancer potential of the nanomaterials. |                      |      |                      |      |                      |      |
| 4      | <b>In-vivo studies on anticancer activity:-</b><br>The animals will be kept in plastic cages undr hygienic conditions and will be provided standard animal feed for anticancer studies.                                 |                      |      |                      |      |                      |      |
| 5      | <b>Experimental protocol</b><br>Collection of serum Histopathology Immunohistochemistry of PCNA Flow cytometric analysis for plasma membrane potential of bacteria and fungi                                            |                      |      |                      |      |                      |      |
| 6      | <b>Protein extraction</b><br>Western blot analysis Real-time polymerase chain reaction (RT-PCR) for the detection of mRNA expression of different genes Product development                                             |                      |      |                      |      |                      |      |
|        |                                                                                                                                                                                                                         |                      |      |                      |      |                      |      |

म. सिंगल  
18/6/2019



Government of India  
Department of Atomic Energy (DAE)  
Board of Research in Nuclear Sciences (BRNS)

Dr Ajay Kumar  
Programme Officer (HLC)

BRNS  
Secretariat, 316-C, CFB,  
BARC, Trombay,  
Mumbai-400085  
Phone: +91-02225595399  
Email: ajayks@barc.gov.in

No: 54/14/04/2022-BRNS/ 10918

Date: 28/11/2022

**OFFICE MEMORANDUM**

- 6 DEC 2022

Sub: R/P entitled "Development of C60-fullerene-PDMS based catheter endowed with reduced inflammation & infection" under Dr. Karthick Velu, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Sal, Prof. Sudhakar Panda, Director, NISER, Jatni, Khordha-752050, Odisha bearing sanction 54/14/04/2022-BRNS/ with HLC, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for 3 years beginning from financial year 2022-2023 with a total grant of Rs. 19,37,100/- (Rupees nineteen lakh thirty seven thousand one hundred only) for the project as under :

| Item of expenditure    | Year 1<br>(2022-2023) | Year 2<br>(2023-2024) | Year 3<br>(2024-2025) |
|------------------------|-----------------------|-----------------------|-----------------------|
| Staff Salary - JRF     | 372000                | 372000                | 0                     |
| Staff Salary - SRF (1) | 0                     | 0                     | 420000                |
| Consumables            | 150000                | 150000                | 150000                |
| Travel - PI            | 20000                 | 0                     | 20000                 |
| Contingencies          | 10000                 | 15000                 | 10000                 |
| Overheads              | 40850                 | 39150                 | 44250                 |
| Total(INR)             | 592850                | 576150                | 644250                |

Note: \*

JRF salary calculated @31,000/- p.m. for first two years and on re designation by committee on in third year as SRF @ 35,000/- p.m.

Overheads calculated @ 7.5% of the other heads except contingency.

The remaining 7.5% towards overheads (Rs. 1,24,050/-) shall be released only on meeting the requirements specified (See Annex-8).

- I am also pleased to convey the sanction of the President of India to incur an expenditure of Rs. 5,92,850/- (Rupees five lakh ninety two thousand six hundred fifty only) towards grant for the year 2022-2023.
- The expenditure involved is debitable to: 03 3401 00 004 27 0231.
- This is issued with the concurrence of the competent authority in the Department.

Dr Ajay Kumar

Pay & Accounts Officer, DAE, Mumbai - 400 001.  
(Bill enclosed)

- 6 DEC 2022

बिल नं BIII No: 35054

तिथि 28/11/2022

Countersigned for Rs. 5,92,850/- five lakh ninety two thousand six hundred fifty Rupees Only.

अनुमोदन  
Approved

कार्यक्रम अधिकारी

Programme Officer HLC

परमाणु ऊर्जा विभाग

DEPARTMENT OF ATOMIC ENERGY

राष्ट्रीय विज्ञान अनुसंधान मंडल

BOARD OF RESEARCH IN NUCLEAR SCIENCES

Application Number:6943

कृपया निम्नलिखित को चुचित करते हुए  
राशि का शुपत्तन इन्हें करें।

Please pay the amount to

A/C No: 6089858032, A/C Name: Sathyabama Institute of Science and Technology - Research, IFSC: IDIB000S201, INDIAN BANK SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, JEPPIAAR NAGAR, RAJIV GANDJI SALAI, CHENNAI - 600119

Under intimation to

Dr. Karthick Velu, Sathyabama Institute of Science and Technology,  
Jeppiaar Nagar, Rajiv Gandhi Sal

mail id:vkathick.con@sathyabama.ac.in,  
Mob.No.9952420256

घातन एवं लेखन अधिकारी, प.ऊ.वि,

Pay & Accounts Officer, DAE

**Copy forwarded to:**

1. Director of Audit, Scientific Department, AEAP, OYC, CSM Marg, Mumbai-400 001.
  2. Joint Secretary (R&D), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001.
  3. Director, Prof. Sudhakar Panda, Director, NISER, Jatni, Khordha-752050, Odisha.
  4. Principal Investigator(PI): Dr. Karthick Velu, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Sal, Prof. Sudhakar Panda, Director, NISER, Jatni, Khordha-752050, Odisha.  
mail id:vkathick.cor@sathyabama.ac.in, Mob.No.9952420256
- A. First year grant is being released in full along with this Sanction Letter through Pay & Accounts Officer, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai-400 001 directly. You may await a Money transfer (MT) through ECS and The amount would be credited electronically to A/C No: 6089858032, A/C Name: Sathyabama Institute of Science and Technology - Research, IFSC: IDIB000S201, INDIAN BANK SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, JEPPIAAR NAGAR, RAJIV GANDJI SALAI, CHENNAI - 600119.**
- i) Acceptance of this sanction and the MT for the amount sanctioned for the first financial year may please be acknowledged (Form-I).
  - ii) A sticker of the BRNS LOGO (Copy Enclosed) should be pasted on all the items procured under the project.
  - iii) THIS SANCTION IS FURTHER SUBJECT TO THE CONDITIONS STIPULATED IN ANNEX (ENCLOSED), WHICH MAY BE GONE THROUGH CAREFULLY.
- B. Second year Sanction Letter will be issued automatically in the month of April/May of the 2nd financial year, however, the grant will be released (unspent balance of previous year and interest earned will be adjusted) after the PI submits the following documents to the Programme Officer HLC:**
- a) Claim in Form-II quoting the reference of the sanction issued for the first year.
  - b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
  - c) Statement of Accounts (SA) as on 31st March of the preceding financial year should be updated on the website. Interest earned in previous year should be reflected in the Statement of Accounts. A printout of the same should be sent to BRNS after it is duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
  - d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee, alongwith HRA CLAIM (if applicable), should be uploaded in a single pdf file under the file head "Staff Appointment Details". In addition, the details of the appointed staff should also be updated in the available menu.
  - e) The inventory of equipment also should be updated in the menu, besides uploading the purchase order of the items costing more than 1 Lakh.
  - f) A One Page report on the progress of work during first year.
- C. Third and subsequent years (if any) the Sanction Letter and the grant will be released on fulfillment of the following requirements:**
- i) **Renewal/ Extension Application:** Principal Investigator (PI) is required to upload by January 15 a pdf copy of duly signed renewal/ extension application in the prescribed form-(PRA) after logging into his/her account at <https://brns.res.in>. All applications received shall be examined by experts from the field and Pis may be invited to a Technical Programme Discussion Meeting (TPDM). Renewal of the project will be based on the recommendations of the TPDM, Advisory Committee and the Board.
  - ii) **Sanction Letter:** If the progress is found to be satisfactory the renewal sanction for the year will be issued in the beginning of that financial year in April/May.
  - iii) **Claim:** On receipt of the renewal sanction, the PI shall claim the funds sanctioned by submitting the following documents to Programme Officer HLC, 316-C, Common Facility Building, BARC, Trombay, Mumbai-400085:
    - a) Claim in Form-II quoting reference of the renewal sanction.
    - b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant. should be reflected in the Statement of Accounts.
    - c) Statement of Accounts (SA) as on 31st March of the preceding financial year including the amount of Interest earned in previous year and duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.



d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee.

e) An inventory of equipment and the copy of Purchase order of equipments costing more than 1 Lakh.

D. At the end of Terminal Year the Settlement Grant and the Balance 7.5% Overheads will be released on fulfillment of the following requirements:

a) Claim Form-II if any,

b) The final Consolidated Statement of Accounts (SA) and Consolidated Utilization Certificate duly audited by an external Chartered Accountant or the Statutory (Govt.) Auditor. It is mandatory to include the amount of bank interest earned on the grant released into the SA.

c) Final Consolidated Progress Report and a brief report as per format given in Form-VII.

5. AAO (Cheque), DAE, Anushakti Bhavan, CSM Marg, Mumbai - 400 001 - With a request that the amount granted for the first year of the project may be released.

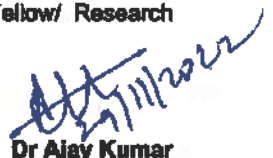
6. Member Secretary (HLC) : Dr. Amit Kumar, [amitk@barc.gov.in](mailto:amitk@barc.gov.in); Ph:+91-02225590418 / 2559 5978

7. Co-Investigator (CI) : Dr. Parameswaran Vijayakumar, Sathyabama Institute of Science and Technology, JEPPIAAR Nagar, Rajiv Gandhi Salai Chennai 600119, Email : [paramesh.cor@sathyabama.ac.in](mailto:paramesh.cor@sathyabama.ac.in), Mobile : 7708838628

8. Project Collaborator (PC): Dr. Harapriya Mohapatra, Associate Professor School of Biological Sciences National Institute of Science Education and Research Bhubaneswar Odisha 752050, Email : [hm@niser.ac.in](mailto:hm@niser.ac.in), Mobile : 6742494225

9. Member Secretary (HLC) : Dr. Amit Kumar, [amitk@barc.gov.in](mailto:amitk@barc.gov.in); Ph:+91-02225590418 022-2559 5978

You or your nominee may please be the DAE representative for selection of Research Fellow/ Research Associate for the project.

  
Dr Amit Kumar

Note:

1. Please quote the Sanction Number 54/14/04/2022-BRNS/ In all your correspondence with BRNS

  
28/11/2022

भारत सरकार  
Government of India  
पृथ्वी विज्ञान मंत्रालय  
Ministry of Earth Sciences

Prithvi Bhawan,  
Lodhi Road, New Delhi-110003  
Dated: -06-2019

Administrative Order

**विषय:** Revised A.O. of Earth Science & Technology Cell (ESTC) Network Project entitled "Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology (SIST), Chennai under Research & Development in Earth and Atmospheric Sciences.

In supersession of Ministry's A.O. of even number dated 07/08/2018, sanction of President is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules, 1978 for implementation of the project(s) of "Earth Science & Technology Cell (ESTC) on Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology, Chennai, deemed to be University at an estimated cost of **Rs. 3,12,11,740 (Rupees Three crore twelve lakhs eleven thousand seven hundred and forty only)** for the period of 3 years (Rs. 2,02,45,020/- during 1st Year(2019-20), Rs. 55,68,690/- during 2nd Year(2020-21) and Rs. 53,98,030/- during 3rd Year(2021-22).

**2.0 Objectives:** The main objectives of establishment of ESTC on "Marine Biotechnological Studies (MBS)" under Marine Ecology & Biology(MEB) and its initial network projects are as following.

- To augment marine living resources and biotechnology in collaboration with Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai..
- To identify the R&D requirements and to fulfill the gap to develop potent marine bioactive products.
- To establish collaboration between National and international Institutions. .
- To create infrastructure facilities related to advance research in marine biotechnological studies.

**3.0 Programs:-**

The main purpose of the ESTC on Marine Biotechnological Studies (ESTC-MBS) is innovation and application of high end biotechnologies upon Marine Bio Resources of Indian Coast for genetic characterization, assessment, conservation and bio-prospection of and potent bioactive molecules for sustainable utilization, Intellectual Property rights, economical benefits and Posterity. Vision is to realize the potential of Marine Biotechnology for safe marine environment and marine bioproducts, leading to overall socio-economic growth, welfare and progress of humanity. This ESTC (MBS) will promote, support and facilitate the research to

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18/6/2019

utilize the marine living resources to improve the quality of human resources interaction in biotechnology industries for societal applications with join collaboration of Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai.

**4.0 Implementing Organizations:** Sathyabama Institute of Science and Technology, Deemed to be University, Chennai.

#### 5.0 Estimated Project Cost

The estimated total cost of the ESTC project(s) and operational expenses of ESTC (MBS) Cell is Rs. Rs. 3,12,11,740 /- for 3 years from date of commencing / release, with year-wise break-up ( 1<sup>st</sup> year : Rs. 2,02,45,020/-; 2<sup>nd</sup> Year: Rs. 55,68,690/-; 3<sup>rd</sup> year: Rs. 53,98,030/-), as per details given below.

(Amount in Rupees)

| Items                                                                                                                                                                   | Institute Name: Sathyabama University |              |              | Grand Total<br><br>(Rs.) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------|--------------|--------------------------|
|                                                                                                                                                                         | Year 1 (Rs.)                          | Year 2 (Rs.) | Year 3 (Rs.) |                          |
| A. Non-Recurring                                                                                                                                                        |                                       |              |              |                          |
| Equipment                                                                                                                                                               | 1,48,28,000                           | -            | -            | 1,48,28,000              |
| B. Recurring                                                                                                                                                            |                                       |              |              |                          |
| Manpower for networking projects (JRF/SRF)-6<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680    | 31,24,800    | 86,60,160                |
| Manpower for ESTC cell operations<br>Field Assistant-1<br>@ Rs. 10,500/pm<br>Accounts Assistant-1<br>@ Rs. 10,500/pm                                                    | 2,52,000                              | 2,52,000     | 2,52,000     | 7,56,000                 |
| Travel                                                                                                                                                                  | 2,80,000                              | 2,75,000     | 2,30,000     | 7,85,000                 |
| Consumables                                                                                                                                                             | 13,50,000                             | 15,00,000    | 10,50,000    | 39,00,000                |
| Contingency                                                                                                                                                             | 62,000                                | 62,000       | 74,000       | 1,98,000                 |
| Other expenses (Sample analysis -Out sourcing)                                                                                                                          | 2,58,000                              | 2,58,000     | 2,26,000     | 7,42,000                 |
| ESTC cell Operational expenses (Expense on meeting of SSE committee travel, consumables etc.,)                                                                          | 2,50,000                              | 2,50,000     | 2,50,000     | 7,50,000                 |
| Overhead                                                                                                                                                                | 1,97,340                              | 2,04,010     | 1,91,230     | 5,92,580                 |
| Total (B)                                                                                                                                                               | 54,17,020                             | 55,68,690    | 53,98,030    | 1,63,83,740              |
| Total (A+B)                                                                                                                                                             | 2,02,45,020                           | 55,68,690    | 53,98,030    | 3,12,11,740              |

Dr. S. Srinivasan  
18/6/2019

The detailed break-up of the budget of each of ESTC (MBS) project(s) viz. Project-1, Project-2, Project-3, Project-4, Project-5 and the Operational Expenses of ESTC Cell at Sathyabama Institute of Science & Technology (SIST), Chennai, is given in Annexure-I.

#### 6.0 Manpower requirements:

The manpower requirement for network project under different components including manpower and for main Institute for the operational requirement component (ESTC Cell) of the project is as detailed below:

| Items                                                                                                                                                                     | Institute Name: Sathyabama University |                                 |                                 | Grand Total<br>(Rs.) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|---------------------------------|----------------------|
|                                                                                                                                                                           | 1 <sup>st</sup> Year<br>2018-19       | 2 <sup>nd</sup> Year<br>2019-20 | 3 <sup>rd</sup> Year<br>2020-21 |                      |
| Manpower for networking projects (JRF/SRF)-6.<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680                       | 31,24,800                       | 86,60,160            |
| Manpower for ESTC cell operations                                                                                                                                         |                                       |                                 |                                 |                      |
| Field Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                      | 2,52,000                              | 2,52,000                        | 2,52,000                        | 7,56,000             |
| Accounts Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                   |                                       |                                 |                                 |                      |
| <b>Total</b>                                                                                                                                                              | <b>30,19,680</b>                      | <b>30,19,680</b>                | <b>33,76,800</b>                | <b>94,16,160</b>     |

#### 7.0 Duration of the Project / Description of time schedule of the program (Three Years): Annexure-II

8.0 Release of fund: A memorandum of understanding (MoU) will be signed between Sathyabama Institute of Science & Technology (SIST), Chennai and MoES, prior to funding the ESTC project(s). Funds will be released directly to the Sathyabama, Institute of Science & Ocean Technology, Chennai. Subsequent release of funds shall be based on the progress of projects and recommendations of Scientific Steering Committee (SSC) on Marine Ecology & Biology(MEB) as per Ministry's OM No. MoES/16/29/11-RDEAS(ESTC/SSC-MEB) dated 20<sup>th</sup> May, 2019.

Dr. S. N. Y. N.  
18/6/2019



**9.0 Implementation, Monitoring and Evaluation:** Program will be implemented by the ESTC (Marine Biotechnological Studies-MBS) and will be coordinated by Project Coordinator (PC), Dr B. Sheela Rani (Director-Research) at Sathyabama Institute of Science & Ocean Technology (SIST), Chennai, in collaboration with National Institute of Technology (NIOT) Chennai and Centre For Marine Living Resources & Ecology (CMLRE), Kochi. The overall monitoring and periodic review of the progress of the said ESTC project(s) towards their implementation as per objectives and time line will be done by a Scientific Steering Committee (SSC) on MEB and at ESTC level by the Project Coordinator (PC) as per terms of references laid down in Ministry's OM No. MoES/16/29/11-RDEAS (ESTC-NP) and (ESTC/SSC-MEB) dated 23<sup>rd</sup> May, 2014 and dated 20/5/2019. The SSC on subject will send its periodic report to the Chairman of Ministry's Apex Committee.

**10.0** The expenditure involved is debitable to the following Head of Accounts-

|                  |   |                                                   |
|------------------|---|---------------------------------------------------|
| Major Head '3425 | - | Other Scientific Research (Major Head)            |
| 60.200           | - | Assistant to Other Scientific Bodies (Minor Head) |
| 52               | - | Research Education & Training Outreach            |
| 52.00.31         | - | Grant-in-Aid (General)                            |
| 52.00.35         | - | Grants for Creation of Capital Assets             |

**11.0 Other Terms and Conditions:**

- Allocation of budget is tentative and subject to change after review of progress, both physical and financial as recommended by the committee of experts.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- The equipments procured out of the grants from MoES will be maintained by institute and will be available for use by other researchers.
- All equipments/assets procured from MoES funds shall be maintained in the stock register and no asset/equipment shall be diverted and/ or disposed off without prior approval of the competent authority in MoES.
- Codal provisions as conveyed in GFR, Manual on Policies and Procedures for purchase of goods and GOI instruction issued from time to time for service and requisition of research personnel shall be followed. Also information on direct benefit transfer (DBT) of manpower shall be provided to MoES on monthly basis.
- While implementing the programme all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- Utilization certificate and statement of expenditure for the expenditure incurred on the project shall be submitted periodically in the prescribed format as per GFR 2017, alongwith scanned copy of same by email to Program Head/Program Director ESTC, MoES.
- This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned/ accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled dated of completion of the project.

Dr. S. R. Rani  
18/6/2019

- The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- Failure to comply with the terms and conditions of the terms will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
- The grant-in-aid being released is subject to the condition that

i. A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organisation under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

ii. While submitting Utilization Certificate/Statement of Expenditure the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

- End-to-end e-tendering to be followed for procurements of items/services having value above Rs.2.00 lakh as per MoF O.M. dated 09/01/2014.
- Grants released by the Ministry to be kept in interest bearing account and the interest earned shall be refunded to the Govt. of India account as per 230(8) of GFR-2017.
- Expenditure, Advance and Transfer (EAT) module of PFMS should be activated for the grants released under the project and expenditure under the project shall be monitored through EAT module. No HRA is allowed in case of accommodation provided by the institute.

**12.0** This issues under powers delegated to this Ministry with the approval of Secretary MoES vide Dy. No. Nil dated 10/05/2019 and with the concurrence of IFD vide their Dy. No. 120/IFD/1427/2019-20/REACHOUT dated 07.05.2019.

*(Signature)*  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

To

The Pay & Accounts officer,  
Ministry of Earth Sciences,  
Prithvi Bhavan, Lodhi Road,  
New Delhi-110 003.

Copy to:

1. Cash Section, MoES for information.
2. The Principal Director of Audit(Scientific Department), AGCR Building, I.P. Estate, New Delhi.
3. Dr. B. Sheela Rani, PC(ESTC-MBS), Director (Research), Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- kavisheela66@gmail.com)

*(Signature)*  
19/6/19

4. Director, National Institute of Technology (NIOT), Chennai. (Email:- director@niot.res.in )
5. Director, Centre for Marine Living Resources & Ecology (CMLRE), Kochi. (Email:- director@cmlre.gov.in)
6. Dr.Radhika Rajasree S.R., Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- radhiin@gmali.com)
7. Dr. D. Inbakandan, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119.(Email:- inbakandan@gmail.com )
8. Dr. L. Stanley Abraham, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- stanleyabraham.cor@gmail.com)
9. Dr. V. Ganesh Kumar, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- ganesv@gmail.com)
10. Dr. K. GOVINDARAJU, Scientist C, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600119. (Email:- goindaraju@sathyabamauniversity.ac.in)
11. ProgrammeHead(GI)/Sci.'F'(JVS,jv).(Email:- gopal.iyenger@nic.insingh.moes@nic.in)
12. Controller of Accounts, Prithvi Bhavan, Lodhi Road, New Delhi.
13. Sanction folder/Guard file.

श्री. मंजुला दानियल  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

B/C

### Annexure-I

## Project – 1

**Project title: “Studies on the implications of engineered nanoparticles and bio-nanocomposites in aquatic animal health”**

**Principal Investigator:** Dr.Radhika Rajasree S.R., Scientist E

**Co-Investigator:** Dr. D Inbakandan, Scientist E and Dr.L Stanley Abraham, Scientist E

| Budget (In Rupees)                                                                                                                        |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Item                                                                                                                                      | Year 1           | Year 2           | Year 3           | Total            |
| <b>A. Non-Recurring</b>                                                                                                                   |                  |                  |                  |                  |
| <b>Specific equipment</b>                                                                                                                 |                  |                  |                  |                  |
| 1. Stand alone rack-zebra fish housing with light enclosure                                                                               | 12,10,000        |                  |                  | 12,10,000        |
| 2. Digital microtome plus tissue processor and stainer                                                                                    | 3,30,000         |                  |                  | 3,30,000         |
| 3. Continuous flow through proportional diluter                                                                                           | 8,80,000         |                  |                  | 8,80,000         |
| 4. Coulter counter                                                                                                                        | 6,60,000         |                  |                  | 6,60,000         |
| <b>Total (A)</b>                                                                                                                          | <b>30,80,000</b> |                  |                  | <b>30,80,000</b> |
| <b>B. Recurring</b>                                                                                                                       |                  |                  |                  |                  |
| <b>1 Research staff</b>                                                                                                                   |                  |                  |                  |                  |
| JRF – 2 Nos.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 9,22,560         | 9,22,560         | 10,41,600        | 28,86,720        |
| 2 Consumable                                                                                                                              | 5,00,000         | 5,00,000         | 2,00,000         | 12,00,000        |
| 3 Contingencies                                                                                                                           | 10,000           | 10,000           | 10,000           | 30,000           |
| 4 Other expenses (Cost of samples analysis/ outsource, etc.)                                                                              | 40,000           | 40,000           | 40,000           | 1,20,000         |
| 5 Travel                                                                                                                                  | 15,000           | 10,000           | 10,000           | 35,000           |
| 6 Over head                                                                                                                               | 61,870           | 61,640           | 50,138           | 1,73,648         |
| <b>Total (B)</b>                                                                                                                          | <b>15,49,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>44,45,368</b> |
| <b>Grand total (A+B)</b>                                                                                                                  | <b>46,29,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>75,25,368</b> |

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18/6/2019



**Project – 2**

**Project title: “Surface modification nanotechnological approach for antifouling and anticorrosion applications”**

**Principal Investigator : Dr. D. Inbakandan, Scientist E**

**Co- Principal Investigator : Dr.L.Stanley Abraham, Scientist E and Dr.Radhika Rajsree S R., Scientist E**

**Brief Budget Estimation (In Rupees)**

| Item                                                                                                                                 | Year 1           | Year 2          | Year 3          | Total            |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|-----------------|------------------|
| <b>A. Non- Recurring</b>                                                                                                             |                  |                 |                 |                  |
| <b>Specific equipment</b>                                                                                                            |                  |                 |                 |                  |
| 1. Fluorescence microscope with image analyzer                                                                                       | 14,40,000        | -               | -               | 14,40,000        |
| 2. Impedance spectrophotometer                                                                                                       | 17,20,000        | -               | -               | 17,20,000        |
| 3. Luminometer                                                                                                                       | 8,00,000         | -               | -               | 8,00,000         |
| <b>Total (A)</b>                                                                                                                     | <b>39,60,000</b> | <b>-</b>        | <b>-</b>        | <b>39,60,000</b> |
| <b>B. Recurring</b>                                                                                                                  |                  |                 |                 |                  |
| <b>1 Research staff</b>                                                                                                              |                  |                 |                 |                  |
| JRF – 1 no.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm+24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280        | 5,20,800        | 14,43,360        |
| 2 Consumable                                                                                                                         | 1,00,000         | 1,00,000        | 1,00,000        | 3,00,000         |
| 3 Contingencies                                                                                                                      | 10,000           | 10,000          | 10,000          | 30,000           |
| 4 Other expenses (Cost of samples analysis/outsource, etc.)                                                                          | 60,000           | 60,000          | 60,000          | 1,80,000         |
| 5 Travel                                                                                                                             | 50,000           | 50,000          | 50,000          | 1,50,000         |
| 6 Over head                                                                                                                          | 28,060           | 28,060          | 30,213          | 86,333           |
| <b>Total B</b>                                                                                                                       | <b>7,09,340</b>  | <b>7,09,340</b> | <b>7,71,013</b> | <b>21,89,693</b> |
| <b>Grand total (A+B)</b>                                                                                                             | <b>46,69,340</b> | <b>7,09,340</b> | <b>7,71,013</b> | <b>61,49,693</b> |

Dr. S. Inbaraj  
18/6/2019

**Project - 3**

**Project title: "Enhancement of marine microbial by-products for biomedical applications"**

**Principal Investigator : Dr. L. Stanley Abraham, Scientist E**

**Co - Investigator : Dr. D. Inbakandan, Scientist E and Dr. Radhika Rajasree S.R., Scientist E**

**Budget Estimates (In Rupees)**

| <b>Budget Head</b>                                                                                                             | <b>Year 1<br/>(Rs.)</b> | <b>Year 2<br/>(Rs.)</b> | <b>Year 3<br/>(Rs.)</b> | <b>Total<br/>(Rs.)</b> |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| <b>A. Non-Recurring</b>                                                                                                        |                         |                         |                         |                        |
| Specific equipment                                                                                                             | 1, 10, 500              | -                       | -                       | 1, 10, 500             |
| SS Extraction Vessels                                                                                                          |                         |                         |                         |                        |
| Vacuum oven                                                                                                                    | 2, 11, 000              | -                       | -                       | 2, 11, 000             |
| Ultra centrifuge                                                                                                               | 27, 09, 000             | -                       | -                       | 27, 09, 000            |
| <b>Total (A)</b>                                                                                                               | <b>30,30,500</b>        | <b>-</b>                | <b>-</b>                | <b>30,30,500</b>       |
| <b>B. Recurring</b>                                                                                                            |                         |                         |                         |                        |
| Research staff                                                                                                                 |                         |                         |                         |                        |
| 1. Manpower                                                                                                                    |                         |                         |                         |                        |
| a) JRF - 1no.                                                                                                                  | 4,61,280                | 4,61,280                | 5,20,800                | 14,43,360              |
| @Rs.31,000/pm + 24%<br>HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year<br>and Rs.35,000/pm +24%<br>HRA for 3 <sup>rd</sup> year |                         |                         |                         |                        |
| 2 Consumable                                                                                                                   | 1,50,000                | 1,00,000                | 1,50,000                | 4, 00, 000             |
| 3 Contingencies                                                                                                                | 12,000                  | 12,000                  | 24,000                  | 48,000                 |
| 4 Other expenses (Cost<br>of samples<br>analysis/outsource, etc.)                                                              | 38,000                  | 38,000                  | 26,000                  | 1, 02, 000             |
| 5 Travel                                                                                                                       | 75,000                  | 75, 000                 | 50, 000                 | 2,00, 000              |
| 6 Over head                                                                                                                    | 30,590                  | 28,290                  | 31,593                  | 90,473                 |
| <b>Total (B)</b>                                                                                                               | <b>7,66,870</b>         | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>22,83,833</b>       |
| <b>Grand total (A+B)</b>                                                                                                       | <b>37,97,370</b>        | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>53,14,333</b>       |

Dr. Stanley Abraham  
18/6/2019

**Project – 4**

**Project title: “Biofunctionalization nanoparticles for anticancer applications using marine biosources”**

**Principal Investigator** : Dr. V. Ganesh Kumar, Scientist E

**Co- Principal Investigator** : Dr. L. Stanley Abraham, Scientist E and Dr. K. Govindaraju, Scientist C

**Budget Estimates (In Rupees)**

| Item                                                                                                                | Year 1           | Year 2           | Year 3          | Total            |
|---------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                             |                  |                  |                 |                  |
| <b>Specific equipments</b>                                                                                          |                  |                  |                 |                  |
| i. Particle size analyzer                                                                                           | 15,40,000        | -                | -               | 15,40,000        |
| ii. Phase contrast microscope with accessories                                                                      | 5,50,000         | -                | -               | 5,50,000         |
| iii. Hot air oven                                                                                                   | 82,500           | -                | -               | 82,500           |
| iv. Microfuge                                                                                                       | 1,10,000         | -                | -               | 1,10,000         |
| <b>Total (A)</b>                                                                                                    | <b>22,82,500</b> | <b>-</b>         | <b>-</b>        | <b>22,82,500</b> |
| <b>B. Recurring</b>                                                                                                 |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                             |                  |                  |                 |                  |
| JRF-1                                                                                                               |                  |                  |                 |                  |
| (31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                 | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                              | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                  | 60,000           | 60,000           | 60,000          | 1,80,000         |
| <b>5 Travel</b>                                                                                                     | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                  | 38,410           | 43,010           | 40,103          | 1,21,523         |
| <b>Total (B)</b>                                                                                                    | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,95,903</b> | <b>29,89,883</b> |
| <b>Grand total (A+B)</b>                                                                                            | <b>32,27,190</b> | <b>10,49,290</b> | <b>9,95,903</b> | <b>52,72,383</b> |

Dr. S. S. S. S. S.  
18/6/2019

**Project – 5**

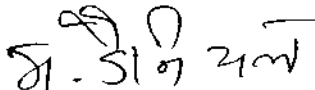
**Project title: “Isolation and identification of bioactive compounds from marine sponges for white spot syndrome virus (WSSV) control”**

**Principal Investigator : Dr. K. GOVINDARAJU, Scientist C**

**Co- Principal Investigator : Dr.D.Inbakandan, Scientist E and Dr.V.Ganesh Kumar, Scientist E**

**Budget Estimates (In Rupees)**

| Item                                                                                                                   | Year 1           | Year 2           | Year 3          | Total            |
|------------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                                |                  |                  |                 |                  |
| <b>Specific equipment</b>                                                                                              |                  |                  |                 |                  |
| 1.Biosafety cabinet                                                                                                    | 2,20,000         | -                | -               | 2,20,000         |
| (Laminar flow)                                                                                                         | 5,50,000         | -                | -               | 5,50,000         |
| 2. ELISA reader with accessories                                                                                       |                  |                  |                 |                  |
| 3.Cooling centrifuge                                                                                                   | 1,65,000         | -                | -               | 1,65,000         |
| 4. Osmometer                                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 5. CO <sub>2</sub> incubator                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 6. Inverted phase contrast microscope                                                                                  | 4,40,000         | -                | -               | 4,40,000         |
| <b>Total (A)</b>                                                                                                       | <b>24,75,000</b> | <b>-</b>         | <b>-</b>        | <b>24,75,000</b> |
| <b>B. Recurring</b>                                                                                                    |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                                |                  |                  |                 |                  |
| JRF-I                                                                                                                  |                  |                  |                 |                  |
| Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                    | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                                 | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                     | 60,000           | 60,000           | 40,000          | 1,60,000         |
| <b>5 Travel</b>                                                                                                        | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                     | 38,410           | 43,010           | 39,183          | 1,20,603         |
| <b>Total (B)</b>                                                                                                       | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,74,983</b> | <b>29,68,963</b> |
| <b>Grand total (A+B)</b>                                                                                               | <b>34,19,690</b> | <b>10,49,290</b> | <b>9,74,983</b> | <b>54,43,963</b> |

  
18/6/2019



**Title: Operational expenses of ESTC (MBS) Cell at Sathyabama Institute of Science & Technology Deemed to be Univ, Chennai**

| Items                                                                                                   |                 |                 |                 | Grand Total      |
|---------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|------------------|
|                                                                                                         | Year 1 (Rs.)    | Year 2 (Rs.)    | Year 3 (Rs.)    | (Rs.)            |
| <b>A ESTC cell Operational expenses</b> (Expense on meeting of SSC committee travel, consumables etc.,) | 2,50,000        | 2,50,000        | 2,50,000        | 7,50,000         |
| <b>B Manpower for ESTC cell operations</b>                                                              |                 |                 |                 |                  |
| <b>i) Field Assistant-1</b><br>@Rs. 10500/pm                                                            | 2,52,000        | 2,52,000        | 2,52,000        | 7,56,000         |
| <b>ii) Accounts Assistant-1</b><br>@Rs. 10500/pm                                                        |                 |                 |                 |                  |
| <b>Total(A+B) =</b>                                                                                     | <b>5,02,000</b> | <b>5,02,000</b> | <b>5,02,000</b> | <b>15,06,000</b> |

Dr. S. Srinivasan  
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## Annexure-II

| S. No. | Research Element                                                                                                                                                                                                        | 1 <sup>st</sup> Year |      | 2 <sup>nd</sup> Year |      | 3 <sup>rd</sup> Year |      |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|----------------------|------|----------------------|------|
|        |                                                                                                                                                                                                                         | 1-6                  | 7-12 | 1-6                  | 7-12 | 1-6                  | 7-12 |
|        | <b>Recruitment of Project staff, Purchase of consumables and Equipment :-</b>                                                                                                                                           |                      |      |                      |      |                      |      |
| 1.     | Manpower recruitment and Purchase of consumables and perment equipments Preparation and characterization of biofunctionalized gold nanoparticles                                                                        |                      |      |                      |      |                      |      |
| 2      | <b>In vitro anti cancer activity Cell culture:-</b><br>The biofunctionalized properties of nanoparticles and its activity in cell culture.                                                                              |                      |      |                      |      |                      |      |
| 3      | <b>Assessment of cell morphology and viability Hoechst 33258 Staining &amp; DNA ladder analysis:-</b><br>Cell Morphology and cell viability will be carried out to check the anticancer potential of the nanomaterials. |                      |      |                      |      |                      |      |
| 4      | <b>In-vivo studies on anticancer activity:-</b><br>The animals will be kept in plastic cages undr hygienic conditions and will be provided standard animal feed for anticancer studies.                                 |                      |      |                      |      |                      |      |
| 5      | <b>Experimental protocol</b><br>Collection of serum Histopathology Immunohistochemistry of PCNA Flow cytometric analysis for plasma membrane potential of bacteria and fungi                                            |                      |      |                      |      |                      |      |
| 6      | <b>Protein extraction</b><br>Western blot analysis Real-time polymerase chain reaction (RT-PCR) for the detection of mRNA expression of different genes Product development                                             |                      |      |                      |      |                      |      |
|        |                                                                                                                                                                                                                         |                      |      |                      |      |                      |      |

म. सिंगल  
18/6/2019

भारत सरकार  
Government of India  
पृथ्वी विज्ञान मंत्रालय  
Ministry of Earth Sciences

Prithvi Bhawan,  
Lodhi Road, New Delhi-110003  
Dated: -06-2019

Administrative Order

**विषय:** Revised A.O. of Earth Science & Technology Cell (ESTC) Network Project entitled "Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology (SIST), Chennai under Research & Development in Earth and Atmospheric Sciences.

In supersession of Ministry's A.O. of even number dated 07/08/2018, sanction of President is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules, 1978 for implementation of the project(s) of "Earth Science & Technology Cell (ESTC) on Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology, Chennai, deemed to be University at an estimated cost of **Rs. 3,12,11,740 (Rupees Three crore twelve lakhs eleven thousand seven hundred and forty only)** for the period of 3 years (Rs. 2,02,45,020/- during 1st Year(2019-20), Rs. 55,68,690/- during 2nd Year(2020-21) and Rs. 53,98,030/- during 3rd Year(2021-22).

**2.0 Objectives:** The main objectives of establishment of ESTC on "Marine Biotechnological Studies (MBS)" under Marine Ecology & Biology(MEB) and its initial network projects are as following.

- To augment marine living resources and biotechnology in collaboration with Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai..
- To identify the R&D requirements and to fulfill the gap to develop potent marine bioactive products.
- To establish collaboration between National and international Institutions. .
- To create infrastructure facilities related to advance research in marine biotechnological studies.

**3.0 Programs:-**

The main purpose of the ESTC on Marine Biotechnological Studies (ESTC-MBS) is innovation and application of high end biotechnologies upon Marine Bio Resources of Indian Coast for genetic characterization, assessment, conservation and bio-prospection of and potent bioactive molecules for sustainable utilization, Intellectual Property rights, economical benefits and Posterity. Vision is to realize the potential of Marine Biotechnology for safe marine environment and marine bioproducts, leading to overall socio-economic growth, welfare and progress of humanity. This ESTC (MBS) will promote, support and facilitate the research to

म. विज्ञान  
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utilize the marine living resources to improve the quality of human resources interaction in biotechnology industries for societal applications with join collaboration of Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai.

**4.0 Implementing Organizations:** Sathyabama Institute of Science and Technology, Deemed to be University, Chennai.

#### 5.0 Estimated Project Cost

The estimated total cost of the ESTC project(s) and operational expenses of ESTC (MBS) Cell is Rs. Rs. 3,12,11,740 /- for 3 years from date of commencing / release, with year-wise break-up ( 1<sup>st</sup> year : Rs. 2,02,45,020/-; 2<sup>nd</sup> Year: Rs. 55,68,690/-; 3<sup>rd</sup> year: Rs. 53,98,030/-), as per details given below.

(Amount in Rupees)

| Items                                                                                                                                                                   | Institute Name: Sathyabama University |              |              | Grand Total<br><br>(Rs.) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------|--------------|--------------------------|
|                                                                                                                                                                         | Year 1 (Rs.)                          | Year 2 (Rs.) | Year 3 (Rs.) |                          |
| A. Non-Recurring                                                                                                                                                        |                                       |              |              |                          |
| Equipment                                                                                                                                                               | 1,48,28,000                           | -            | -            | 1,48,28,000              |
| B. Recurring                                                                                                                                                            |                                       |              |              |                          |
| Manpower for networking projects (JRF/SRF)-6<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680    | 31,24,800    | 86,60,160                |
| Manpower for ESTC cell operations<br>Field Assistant-1<br>@ Rs. 10,500/pm<br>Accounts Assistant-1<br>@ Rs. 10,500/pm                                                    | 2,52,000                              | 2,52,000     | 2,52,000     | 7,56,000                 |
| Travel                                                                                                                                                                  | 2,80,000                              | 2,75,000     | 2,30,000     | 7,85,000                 |
| Consumables                                                                                                                                                             | 13,50,000                             | 15,00,000    | 10,50,000    | 39,00,000                |
| Contingency                                                                                                                                                             | 62,000                                | 62,000       | 74,000       | 1,98,000                 |
| Other expenses (Sample analysis -Out sourcing)                                                                                                                          | 2,58,000                              | 2,58,000     | 2,26,000     | 7,42,000                 |
| ESTC cell Operational expenses (Expense on meeting of SSE committee travel, consumables etc.,)                                                                          | 2,50,000                              | 2,50,000     | 2,50,000     | 7,50,000                 |
| Overhead                                                                                                                                                                | 1,97,340                              | 2,04,010     | 1,91,230     | 5,92,580                 |
| Total (B)                                                                                                                                                               | 54,17,020                             | 55,68,690    | 53,98,030    | 1,63,83,740              |
| Total (A+B)                                                                                                                                                             | 2,02,45,020                           | 55,68,690    | 53,98,030    | 3,12,11,740              |

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The detailed break-up of the budget of each of ESTC (MBS) project(s) viz. Project-1, Project-2, Project-3, Project-4, Project-5 and the Operational Expenses of ESTC Cell at Sathyabama Institute of Science & Technology (SIST), Chennai, is given in Annexure-I.

#### 6.0 Manpower requirements:

The manpower requirement for network project under different components including manpower and for main Institute for the operational requirement component (ESTC Cell) of the project is as detailed below:

| Items                                                                                                                                                                     | Institute Name: Sathyabama University |                                 |                                 | Grand Total<br>(Rs.) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|---------------------------------|----------------------|
|                                                                                                                                                                           | 1 <sup>st</sup> Year<br>2018-19       | 2 <sup>nd</sup> Year<br>2019-20 | 3 <sup>rd</sup> Year<br>2020-21 |                      |
| Manpower for networking projects (JRF/SRF)-6.<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680                       | 31,24,800                       | 86,60,160            |
| Manpower for ESTC cell operations                                                                                                                                         |                                       |                                 |                                 |                      |
| Field Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                      | 2,52,000                              | 2,52,000                        | 2,52,000                        | 7,56,000             |
| Accounts Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                   |                                       |                                 |                                 |                      |
| <b>Total</b>                                                                                                                                                              | <b>30,19,680</b>                      | <b>30,19,680</b>                | <b>33,76,800</b>                | <b>94,16,160</b>     |

#### 7.0 Duration of the Project / Description of time schedule of the program (Three Years): Annexure-II

**8.0 Release of fund:** A memorandum of understanding (MoU) will be signed between Sathyabama Institute of Science & Technology (SIST), Chennai and MoES, prior to funding the ESTC project(s). Funds will be released directly to the Sathyabama, Institute of Science & Ocean Technology, Chennai. Subsequent release of funds shall be based on the progress of projects and recommendations of Scientific Steering Committee (SSC) on Marine Ecology & Biology(MEB) as per Ministry's OM No. MoES/16/29/11-RDEAS(ESTC/SSC-MEB) dated 20<sup>th</sup> May, 2019.

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**9.0 Implementation, Monitoring and Evaluation:** Program will be implemented by the ESTC (Marine Biotechnological Studies-MBS) and will be coordinated by Project Coordinator (PC), Dr B. Sheela Rani (Director-Research) at Sathyabama Institute of Science & Ocean Technology (SIST), Chennai, in collaboration with National Institute of Technology (NIOT) Chennai and Centre For Marine Living Resources & Ecology (CMLRE), Kochi. The overall monitoring and periodic review of the progress of the said ESTC project(s) towards their implementation as per objectives and time line will be done by a Scientific Steering Committee (SSC) on MEB and at ESTC level by the Project Coordinator (PC) as per terms of references laid down in Ministry's OM No. MoES/16/29/11-RDEAS (ESTC-NP) and (ESTC/SSC-MEB) dated 23<sup>rd</sup> May, 2014 and dated 20/5/2019. The SSC on subject will send its periodic report to the Chairman of Ministry's Apex Committee.

**10.0** The expenditure involved is debitable to the following Head of Accounts-

|                  |   |                                                   |
|------------------|---|---------------------------------------------------|
| Major Head '3425 | - | Other Scientific Research (Major Head)            |
| 60.200           | - | Assistant to Other Scientific Bodies (Minor Head) |
| 52               | - | Research Education & Training Outreach            |
| 52.00.31         | - | Grant-in-Aid (General)                            |
| 52.00.35         | - | Grants for Creation of Capital Assets             |

**11.0 Other Terms and Conditions:**

- Allocation of budget is tentative and subject to change after review of progress, both physical and financial as recommended by the committee of experts.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- The equipments procured out of the grants from MoES will be maintained by institute and will be available for use by other researchers.
- All equipments/assets procured from MoES funds shall be maintained in the stock register and no asset/equipment shall be diverted and/ or disposed off without prior approval of the competent authority in MoES.
- Codal provisions as conveyed in GFR, Manual on Policies and Procedures for purchase of goods and GOI instruction issued from time to time for service and requisition of research personnel shall be followed. Also information on direct benefit transfer (DBT) of manpower shall be provided to MoES on monthly basis.
- While implementing the programme all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- Utilization certificate and statement of expenditure for the expenditure incurred on the project shall be submitted periodically in the prescribed format as per GFR 2017, alongwith scanned copy of same by email to Program Head/Program Director ESTC, MoES.
- This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned/ accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled dated of completion of the project.

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- The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- Failure to comply with the terms and conditions of the terms will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
- The grant-in-aid being released is subject to the condition that

i. A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organisation under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

ii. While submitting Utilization Certificate/Statement of Expenditure the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

- End-to-end e-tendering to be followed for procurements of items/services having value above Rs.2.00 lakh as per MoF O.M. dated 09/01/2014.
- Grants released by the Ministry to be kept in interest bearing account and the interest earned shall be refunded to the Govt. of India account as per 230(8) of GFR-2017.
- Expenditure, Advance and Transfer (EAT) module of PFMS should be activated for the grants released under the project and expenditure under the project shall be monitored through EAT module. No HRA is allowed in case of accommodation provided by the institute.

**12.0** This issues under powers delegated to this Ministry with the approval of Secretary MoES vide Dy. No. Nil dated 10/05/2019 and with the concurrence of IFD vide their Dy. No. 120/IFD/1427/2019-20/REACHOUT dated 07.05.2019.

*(Signature)*  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

To

The Pay & Accounts officer,  
Ministry of Earth Sciences,  
Prithvi Bhavan, Lodhi Road,  
New Delhi-110 003.

Copy to:

1. Cash Section, MoES for information.
2. The Principal Director of Audit(Scientific Department), AGCR Building, I.P. Estate, New Delhi.
3. Dr. B. Sheela Rani, PC(ESTC-MBS), Director (Research), Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- kavisheela66@gmail.com)

*(Signature)*  
19/6/19

4. Director, National Institute of Technology (NIOT), Chennai. (Email:- director@niot.res.in )
5. Director, Centre for Marine Living Resources & Ecology (CMLRE), Kochi. (Email:- director@cmlre.gov.in)
6. Dr.Radhika Rajasree S.R., Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- radhiin@gmail.com)
7. Dr. D. Inbakandan, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119.(Email:- inbakandan@gmail.com )
8. Dr. L. Stanley Abraham, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- stanleyabraham.cor@gmail.com)
9. Dr. V. Ganesh Kumar, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- ganesv@gmail.com)
10. Dr. K. GOVINDARAJU, Scientist C, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600119. (Email:- goindaraju@sathyabamauniversity.ac.in)
11. ProgrammeHead(GI)/Sci.'F'(JVS,jv).(Email:- gopal.iyenger@nic.insingh.moes@nic.in)
12. Controller of Accounts, Prithvi Bhavan, Lodhi Road, New Delhi.
13. Sanction folder/Guard file.

श्री. मंजुला दानियल  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

B/C



### Annexure-I

## Project – 1

**Project title: “Studies on the implications of engineered nanoparticles and bio-nanocomposites in aquatic animal health”**

**Principal Investigator:** Dr.Radhika Rajasree S.R., Scientist E

**Co-Investigator:** Dr. D Inbakandan, Scientist E and Dr.L Stanley Abraham, Scientist E

| Budget (In Rupees)                                                                                                                        |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Item                                                                                                                                      | Year 1           | Year 2           | Year 3           | Total            |
| <b>A. Non-Recurring</b>                                                                                                                   |                  |                  |                  |                  |
| <b>Specific equipment</b>                                                                                                                 |                  |                  |                  |                  |
| 1. Stand alone rack-zebra fish housing with light enclosure                                                                               | 12,10,000        |                  |                  | 12,10,000        |
| 2. Digital microtome plus tissue processor and stainer                                                                                    | 3,30,000         |                  |                  | 3,30,000         |
| 3. Continuous flow through proportional diluter                                                                                           | 8,80,000         |                  |                  | 8,80,000         |
| 4. Coulter counter                                                                                                                        | 6,60,000         |                  |                  | 6,60,000         |
| <b>Total (A)</b>                                                                                                                          | <b>30,80,000</b> |                  |                  | <b>30,80,000</b> |
| <b>B. Recurring</b>                                                                                                                       |                  |                  |                  |                  |
| <b>1 Research staff</b>                                                                                                                   |                  |                  |                  |                  |
| JRF – 2 Nos.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 9,22,560         | 9,22,560         | 10,41,600        | 28,86,720        |
| 2 Consumable                                                                                                                              | 5,00,000         | 5,00,000         | 2,00,000         | 12,00,000        |
| 3 Contingencies                                                                                                                           | 10,000           | 10,000           | 10,000           | 30,000           |
| 4 Other expenses (Cost of samples analysis/ outsource, etc.)                                                                              | 40,000           | 40,000           | 40,000           | 1,20,000         |
| 5 Travel                                                                                                                                  | 15,000           | 10,000           | 10,000           | 35,000           |
| 6 Over head                                                                                                                               | 61,870           | 61,640           | 50,138           | 1,73,648         |
| <b>Total (B)</b>                                                                                                                          | <b>15,49,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>44,45,368</b> |
| <b>Grand total (A+B)</b>                                                                                                                  | <b>46,29,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>75,25,368</b> |

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18/6/2019

**Project – 2**

**Project title: “Surface modification nanotechnological approach for antifouling and anticorrosion applications”**

**Principal Investigator : Dr. D. Inbakandan, Scientist E**

**Co- Principal Investigator : Dr.L.Stanley Abraham, Scientist E and Dr.Radhika Rajsree S R., Scientist E**

**Brief Budget Estimation (In Rupees)**

| Item                                                                                                                                 | Year 1           | Year 2          | Year 3          | Total            |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|-----------------|------------------|
| <b>A. Non- Recurring</b>                                                                                                             |                  |                 |                 |                  |
| <b>Specific equipment</b>                                                                                                            |                  |                 |                 |                  |
| 1. Fluorescence microscope with image analyzer                                                                                       | 14,40,000        | -               | -               | 14,40,000        |
| 2. Impedance spectrophotometer                                                                                                       | 17,20,000        | -               | -               | 17,20,000        |
| 3. Luminometer                                                                                                                       | 8,00,000         | -               | -               | 8,00,000         |
| <b>Total (A)</b>                                                                                                                     | <b>39,60,000</b> | <b>-</b>        | <b>-</b>        | <b>39,60,000</b> |
| <b>B. Recurring</b>                                                                                                                  |                  |                 |                 |                  |
| <b>1 Research staff</b>                                                                                                              |                  |                 |                 |                  |
| JRF – 1 no.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm+24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280        | 5,20,800        | 14,43,360        |
| 2 Consumable                                                                                                                         | 1,00,000         | 1,00,000        | 1,00,000        | 3,00,000         |
| 3 Contingencies                                                                                                                      | 10,000           | 10,000          | 10,000          | 30,000           |
| 4 Other expenses (Cost of samples analysis/outsource, etc.)                                                                          | 60,000           | 60,000          | 60,000          | 1,80,000         |
| 5 Travel                                                                                                                             | 50,000           | 50,000          | 50,000          | 1,50,000         |
| 6 Over head                                                                                                                          | 28,060           | 28,060          | 30,213          | 86,333           |
| <b>Total B</b>                                                                                                                       | <b>7,09,340</b>  | <b>7,09,340</b> | <b>7,71,013</b> | <b>21,89,693</b> |
| <b>Grand total (A+B)</b>                                                                                                             | <b>46,69,340</b> | <b>7,09,340</b> | <b>7,71,013</b> | <b>61,49,693</b> |

Dr. Stanley Abraham  
18/6/2019

**Project - 3**

**Project title: "Enhancement of marine microbial by-products for biomedical applications"**

**Principal Investigator : Dr. L. Stanley Abraham, Scientist E**

**Co – Investigator : Dr. D. Inbakandan, Scientist E and Dr.Radhika Rajasree S.R., Scientist E**

**Budget Estimates (In Rupees)**

| <b>Budget Head</b>                                                                                                             | <b>Year 1<br/>(Rs.)</b> | <b>Year 2<br/>(Rs.)</b> | <b>Year 3<br/>(Rs.)</b> | <b>Total<br/>(Rs.)</b> |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| <b>A. Non-Recurring</b>                                                                                                        |                         |                         |                         |                        |
| Specific equipment                                                                                                             | 1, 10, 500              | -                       | -                       | 1, 10, 500             |
| SS Extraction Vessels                                                                                                          |                         |                         |                         |                        |
| Vacuum oven                                                                                                                    | 2, 11, 000              | -                       | -                       | 2, 11, 000             |
| Ultra centrifuge                                                                                                               | 27, 09, 000             | -                       | -                       | 27, 09, 000            |
| <b>Total (A)</b>                                                                                                               | <b>30,30,500</b>        | <b>-</b>                | <b>-</b>                | <b>30,30,500</b>       |
| <b>B. Recurring</b>                                                                                                            |                         |                         |                         |                        |
| Research staff                                                                                                                 |                         |                         |                         |                        |
| 1.Manpower                                                                                                                     |                         |                         |                         |                        |
| a) JRF - 1no.                                                                                                                  | 4,61,280                | 4,61,280                | 5,20,800                | 14,43,360              |
| @Rs.31,000/pm + 24%<br>HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year<br>and Rs.35,000/pm +24%<br>HRA for 3 <sup>rd</sup> year |                         |                         |                         |                        |
| 2 Consumable                                                                                                                   | 1,50,000                | 1,00,000                | 1,50,000                | 4, 00, 000             |
| 3 Contingencies                                                                                                                | 12,000                  | 12,000                  | 24,000                  | 48,000                 |
| 4 Other expenses (Cost<br>of samples<br>analysis/outsource, etc.)                                                              | 38,000                  | 38,000                  | 26,000                  | 1, 02, 000             |
| 5 Travel                                                                                                                       | 75,000                  | 75, 000                 | 50, 000                 | 2,00, 000              |
| 6 Over head                                                                                                                    | 30,590                  | 28,290                  | 31,593                  | 90,473                 |
| <b>Total (B)</b>                                                                                                               | <b>7,66,870</b>         | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>22,83,833</b>       |
| <b>Grand total (A+B)</b>                                                                                                       | <b>37,97,370</b>        | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>53,14,333</b>       |

Dr. Stanley Abraham  
18/6/2019

# **Project – 4**

**Project title: “Biofunctionalization nanoparticles for anticancer applications using marine biosources”**

**Principal Investigator** : Dr. V. Ganesh Kumar, Scientist E

**Co- Principal Investigator** : Dr. L. Stanley Abraham, Scientist E and Dr. K. Govindaraju, Scientist C

## **Budget Estimates (In Rupees)**

| Item                                                                                                                | Year 1           | Year 2           | Year 3          | Total            |
|---------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                             |                  |                  |                 |                  |
| <b>Specific equipments</b>                                                                                          |                  |                  |                 |                  |
| i. Particle size analyzer                                                                                           | 15,40,000        | -                | -               | 15,40,000        |
| ii. Phase contrast microscope with accessories                                                                      | 5,50,000         | -                | -               | 5,50,000         |
| iii. Hot air oven                                                                                                   | 82,500           | -                | -               | 82,500           |
| iv. Microfuge                                                                                                       | 1,10,000         | -                | -               | 1,10,000         |
| <b>Total (A)</b>                                                                                                    | <b>22,82,500</b> | <b>-</b>         | <b>-</b>        | <b>22,82,500</b> |
| <b>B. Recurring</b>                                                                                                 |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                             |                  |                  |                 |                  |
| JRF-1                                                                                                               |                  |                  |                 |                  |
| (31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                 | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                              | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                  | 60,000           | 60,000           | 60,000          | 1,80,000         |
| <b>5 Travel</b>                                                                                                     | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                  | 38,410           | 43,010           | 40,103          | 1,21,523         |
| <b>Total (B)</b>                                                                                                    | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,95,903</b> | <b>29,89,883</b> |
| <b>Grand total (A+B)</b>                                                                                            | <b>32,27,190</b> | <b>10,49,290</b> | <b>9,95,903</b> | <b>52,72,383</b> |

Dr. S. S. S. S. S.  
18/6/2019



**Project – 5**

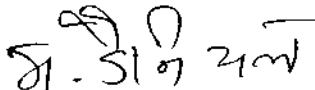
**Project title: “Isolation and identification of bioactive compounds from marine sponges for white spot syndrome virus (WSSV) control”**

**Principal Investigator : Dr. K. GOVINDARAJU, Scientist C**

**Co- Principal Investigator : Dr.D.Inbakandan, Scientist E and Dr.V.Ganesh Kumar, Scientist E**

**Budget Estimates (In Rupees)**

| Item                                                                                                                   | Year 1           | Year 2           | Year 3          | Total            |
|------------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                                |                  |                  |                 |                  |
| <b>Specific equipment</b>                                                                                              |                  |                  |                 |                  |
| 1.Biosafety cabinet                                                                                                    | 2,20,000         | -                | -               | 2,20,000         |
| (Laminar flow)                                                                                                         | 5,50,000         | -                | -               | 5,50,000         |
| 2. ELISA reader with accessories                                                                                       |                  |                  |                 |                  |
| 3.Cooling centrifuge                                                                                                   | 1,65,000         | -                | -               | 1,65,000         |
| 4. Osmometer                                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 5. CO <sub>2</sub> incubator                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 6. Inverted phase contrast microscope                                                                                  | 4,40,000         | -                | -               | 4,40,000         |
| <b>Total (A)</b>                                                                                                       | <b>24,75,000</b> | <b>-</b>         | <b>-</b>        | <b>24,75,000</b> |
| <b>B. Recurring</b>                                                                                                    |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                                |                  |                  |                 |                  |
| JRF-I                                                                                                                  |                  |                  |                 |                  |
| Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                    | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                                 | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                     | 60,000           | 60,000           | 40,000          | 1,60,000         |
| <b>5 Travel</b>                                                                                                        | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                     | 38,410           | 43,010           | 39,183          | 1,20,603         |
| <b>Total (B)</b>                                                                                                       | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,74,983</b> | <b>29,68,963</b> |
| <b>Grand total (A+B)</b>                                                                                               | <b>34,19,690</b> | <b>10,49,290</b> | <b>9,74,983</b> | <b>54,43,963</b> |

  
18/6/2019

**Title: Operational expenses of ESTC (MBS) Cell at Sathyabama Institute of Science & Technology Deemed to be Univ, Chennai**

| Items                                                                                                   |                 |                 |                 | Grand Total      |
|---------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|------------------|
|                                                                                                         | Year 1 (Rs.)    | Year 2 (Rs.)    | Year 3 (Rs.)    | (Rs.)            |
| <b>A ESTC cell Operational expenses</b> (Expense on meeting of SSC committee travel, consumables etc.,) | 2,50,000        | 2,50,000        | 2,50,000        | 7,50,000         |
| <b>B Manpower for ESTC cell operations</b>                                                              |                 |                 |                 |                  |
| <b>i) Field Assistant-1</b><br>@Rs. 10500/pm                                                            | 2,52,000        | 2,52,000        | 2,52,000        | 7,56,000         |
| <b>ii) Accounts Assistant-1</b><br>@Rs. 10500/pm                                                        |                 |                 |                 |                  |
| <b>Total(A+B) =</b>                                                                                     | <b>5,02,000</b> | <b>5,02,000</b> | <b>5,02,000</b> | <b>15,06,000</b> |

Dr. S. Srinivasan  
18/6/2019

## Annexure-II

| S. No. | Research Element                                                                                                                                                                                                        | 1 <sup>st</sup> Year |      | 2 <sup>nd</sup> Year |      | 3 <sup>rd</sup> Year |      |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|----------------------|------|----------------------|------|
|        |                                                                                                                                                                                                                         | 1-6                  | 7-12 | 1-6                  | 7-12 | 1-6                  | 7-12 |
|        | <b>Recruitment of Project staff, Purchase of consumables and Equipment :-</b>                                                                                                                                           |                      |      |                      |      |                      |      |
| 1.     | Manpower recruitment and Purchase of consumables and perment equipments Preparation and characterization of biofunctionalized gold nanoparticles                                                                        |                      |      |                      |      |                      |      |
| 2      | <b>In vitro anti cancer activity Cell culture:-</b><br>The biofunctionalized properties of nanoparticles and its activity in cell culture.                                                                              |                      |      |                      |      |                      |      |
| 3      | <b>Assessment of cell morphology and viability Hoechst 33258 Staining &amp; DNA ladder analysis:-</b><br>Cell Morphology and cell viability will be carried out to check the anticancer potential of the nanomaterials. |                      |      |                      |      |                      |      |
| 4      | <b>In-vivo studies on anticancer activity:-</b><br>The animals will be kept in plastic cages undr hygienic conditions and will be provided standard animal feed for anticancer studies.                                 |                      |      |                      |      |                      |      |
| 5      | <b>Experimental protocol</b><br>Collection of serum Histopathology Immunohistochemistry of PCNA Flow cytometric analysis for plasma membrane potential of bacteria and fungi                                            |                      |      |                      |      |                      |      |
| 6      | <b>Protein extraction</b><br>Western blot analysis Real-time polymerase chain reaction (RT-PCR) for the detection of mRNA expression of different genes Product development                                             |                      |      |                      |      |                      |      |
|        |                                                                                                                                                                                                                         |                      |      |                      |      |                      |      |

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18/6/2019

भारत सरकार  
Government of India  
पृथ्वी विज्ञान मंत्रालय  
Ministry of Earth Sciences

Prithvi Bhawan,  
Lodhi Road, New Delhi-110003  
Dated: -06-2019

Administrative Order

**विषय:** Revised A.O. of Earth Science & Technology Cell (ESTC) Network Project entitled "Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology (SIST), Chennai under Research & Development in Earth and Atmospheric Sciences.

In supersession of Ministry's A.O. of even number dated 07/08/2018, sanction of President is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules, 1978 for implementation of the project(s) of "Earth Science & Technology Cell (ESTC) on Marine Biotechnological Studies (MBS)" of Sathyabama Institute of Science and Technology, Chennai, deemed to be University at an estimated cost of **Rs. 3,12,11,740 (Rupees Three crore twelve lakhs eleven thousand seven hundred and forty only)** for the period of 3 years (Rs. 2,02,45,020/- during 1st Year(2019-20), Rs. 55,68,690/- during 2nd Year(2020-21) and Rs. 53,98,030/- during 3rd Year(2021-22).

**2.0 Objectives:** The main objectives of establishment of ESTC on "Marine Biotechnological Studies (MBS)" under Marine Ecology & Biology(MEB) and its initial network projects are as following.

- To augment marine living resources and biotechnology in collaboration with Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai..
- To identify the R&D requirements and to fulfill the gap to develop potent marine bioactive products.
- To establish collaboration between National and international Institutions. .
- To create infrastructure facilities related to advance research in marine biotechnological studies.

**3.0 Programs:-**

The main purpose of the ESTC on Marine Biotechnological Studies (ESTC-MBS) is innovation and application of high end biotechnologies upon Marine Bio Resources of Indian Coast for genetic characterization, assessment, conservation and bio-prospection of and potent bioactive molecules for sustainable utilization, Intellectual Property rights, economical benefits and Posterity. Vision is to realize the potential of Marine Biotechnology for safe marine environment and marine bioproducts, leading to overall socio-economic growth, welfare and progress of humanity. This ESTC (MBS) will promote, support and facilitate the research to

प्र. विज्ञान  
18/6/2019



utilize the marine living resources to improve the quality of human resources interaction in biotechnology industries for societal applications with join collaboration of Centre For Marine Living Resources and Ecology(CMLRE), Kochi and National Institute of Ocean Technology(NIOT), Chennai.

**4.0 Implementing Organizations:** Sathyabama Institute of Science and Technology, Deemed to be University, Chennai.

#### 5.0 Estimated Project Cost

The estimated total cost of the ESTC project(s) and operational expenses of ESTC (MBS) Cell is Rs. **Rs. 3,12,11,740** /- for 3 years from date of commencing / release, with year-wise break-up ( 1<sup>st</sup> year : Rs. **2,02,45,020/-**; 2<sup>nd</sup> Year: Rs. **55,68,690/-**; 3<sup>rd</sup> year: Rs. **53,98,030/-**), as per details given below.

(Amount in Rupees)

| Items                                                                                                                                                                   | Institute Name: Sathyabama University |              |              | Grand Total<br><br>(Rs.) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------|--------------|--------------------------|
|                                                                                                                                                                         | Year 1 (Rs.)                          | Year 2 (Rs.) | Year 3 (Rs.) |                          |
| A. Non-Recurring                                                                                                                                                        |                                       |              |              |                          |
| Equipment                                                                                                                                                               | 1,48,28,000                           | -            | -            | 1,48,28,000              |
| B. Recurring                                                                                                                                                            |                                       |              |              |                          |
| Manpower for networking projects (JRF/SRF)-6<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680    | 31,24,800    | 86,60,160                |
| Manpower for ESTC cell operations<br>Field Assistant-1<br>@ Rs. 10,500/pm<br>Accounts Assistant-1<br>@ Rs. 10,500/pm                                                    | 2,52,000                              | 2,52,000     | 2,52,000     | 7,56,000                 |
| Travel                                                                                                                                                                  | 2,80,000                              | 2,75,000     | 2,30,000     | 7,85,000                 |
| Consumables                                                                                                                                                             | 13,50,000                             | 15,00,000    | 10,50,000    | 39,00,000                |
| Contingency                                                                                                                                                             | 62,000                                | 62,000       | 74,000       | 1,98,000                 |
| Other expenses (Sample analysis -Out sourcing)                                                                                                                          | 2,58,000                              | 2,58,000     | 2,26,000     | 7,42,000                 |
| ESTC cell Operational expenses (Expense on meeting of SSE committee travel, consumables etc.,)                                                                          | 2,50,000                              | 2,50,000     | 2,50,000     | 7,50,000                 |
| Overhead                                                                                                                                                                | 1,97,340                              | 2,04,010     | 1,91,230     | 5,92,580                 |
| Total (B)                                                                                                                                                               | 54,17,020                             | 55,68,690    | 53,98,030    | 1,63,83,740              |
| Total (A+B)                                                                                                                                                             | 2,02,45,020                           | 55,68,690    | 53,98,030    | 3,12,11,740              |

Dr. S. Srinivasan  
18/6/2019

The detailed break-up of the budget of each of ESTC (MBS) project(s) viz. Project-1, Project-2, Project-3, Project-4, Project-5 and the Operational Expenses of ESTC Cell at Sathyabama Institute of Science & Technology (SIST), Chennai, is given in Annexure-I.

#### 6.0 Manpower requirements:

The manpower requirement for network project under different components including manpower and for main Institute for the operational requirement component (ESTC Cell) of the project is as detailed below:

| Items                                                                                                                                                                     | Institute Name: Sathyabama University |                                 |                                 | Grand Total<br>(Rs.) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|---------------------------------|----------------------|
|                                                                                                                                                                           | 1 <sup>st</sup> Year<br>2018-19       | 2 <sup>nd</sup> Year<br>2019-20 | 3 <sup>rd</sup> Year<br>2020-21 |                      |
| Manpower for networking projects (JRF/SRF)-6.<br>Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year | 27,67,680                             | 27,67,680                       | 31,24,800                       | 86,60,160            |
| Manpower for ESTC cell operations                                                                                                                                         |                                       |                                 |                                 |                      |
| Field Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                      | 2,52,000                              | 2,52,000                        | 2,52,000                        | 7,56,000             |
| Accounts Assistant-1<br>@ Rs. 10,500/pm                                                                                                                                   |                                       |                                 |                                 |                      |
| <b>Total</b>                                                                                                                                                              | <b>30,19,680</b>                      | <b>30,19,680</b>                | <b>33,76,800</b>                | <b>94,16,160</b>     |

#### 7.0 Duration of the Project / Description of time schedule of the program (Three Years): Annexure-II

**8.0 Release of fund:** A memorandum of understanding (MoU) will be signed between Sathyabama Institute of Science & Technology (SIST), Chennai and MoES, prior to funding the ESTC project(s). Funds will be released directly to the Sathyabama, Institute of Science & Ocean Technology, Chennai. Subsequent release of funds shall be based on the progress of projects and recommendations of Scientific Steering Committee (SSC) on Marine Ecology & Biology(MEB) as per Ministry's OM No. MoES/16/29/11-RDEAS(ESTC/SSC-MEB) dated 20<sup>th</sup> May, 2019.

Dr. S. N. Y. N.  
18/6/2019

**9.0 Implementation, Monitoring and Evaluation:** Program will be implemented by the ESTC (Marine Biotechnological Studies-MBS) and will be coordinated by Project Coordinator (PC), Dr B. Sheela Rani (Director-Research) at Sathyabama Institute of Science & Ocean Technology (SIST), Chennai, in collaboration with National Institute of Technology (NIOT) Chennai and Centre For Marine Living Resources & Ecology (CMLRE), Kochi. The overall monitoring and periodic review of the progress of the said ESTC project(s) towards their implementation as per objectives and time line will be done by a Scientific Steering Committee (SSC) on MEB and at ESTC level by the Project Coordinator (PC) as per terms of references laid down in Ministry's OM No. MoES/16/29/11-RDEAS (ESTC-NP) and (ESTC/SSC-MEB) dated 23<sup>rd</sup> May, 2014 and dated 20/5/2019. The SSC on subject will send its periodic report to the Chairman of Ministry's Apex Committee.

**10.0** The expenditure involved is debitable to the following Head of Accounts-

|                  |   |                                                   |
|------------------|---|---------------------------------------------------|
| Major Head '3425 | - | Other Scientific Research (Major Head)            |
| 60.200           | - | Assistant to Other Scientific Bodies (Minor Head) |
| 52               | - | Research Education & Training Outreach            |
| 52.00.31         | - | Grant-in-Aid (General)                            |
| 52.00.35         | - | Grants for Creation of Capital Assets             |

**11.0 Other Terms and Conditions:**

- Allocation of budget is tentative and subject to change after review of progress, both physical and financial as recommended by the committee of experts.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- The equipments procured out of the grants from MoES will be maintained by institute and will be available for use by other researchers.
- All equipments/assets procured from MoES funds shall be maintained in the stock register and no asset/equipment shall be diverted and/ or disposed off without prior approval of the competent authority in MoES.
- Codal provisions as conveyed in GFR, Manual on Policies and Procedures for purchase of goods and GOI instruction issued from time to time for service and requisition of research personnel shall be followed. Also information on direct benefit transfer (DBT) of manpower shall be provided to MoES on monthly basis.
- While implementing the programme all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- Utilization certificate and statement of expenditure for the expenditure incurred on the project shall be submitted periodically in the prescribed format as per GFR 2017, alongwith scanned copy of same by email to Program Head/Program Director ESTC, MoES.
- This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned/ accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled dated of completion of the project.

Dr. S. R. Rani  
18/6/2019

- The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
- Failure to comply with the terms and conditions of the terms will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
- The grant-in-aid being released is subject to the condition that

i. A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organisation under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

ii. While submitting Utilization Certificate/Statement of Expenditure the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

- End-to-end e-tendering to be followed for procurements of items/services having value above Rs.2.00 lakh as per MoF O.M. dated 09/01/2014.
- Grants released by the Ministry to be kept in interest bearing account and the interest earned shall be refunded to the Govt. of India account as per 230(8) of GFR-2017.
- Expenditure, Advance and Transfer (EAT) module of PFMS should be activated for the grants released under the project and expenditure under the project shall be monitored through EAT module. No HRA is allowed in case of accommodation provided by the institute.

**12.0** This issues under powers delegated to this Ministry with the approval of Secretary MoES vide Dy. No. Nil dated 10/05/2019 and with the concurrence of IFD vide their Dy. No. 120/IFD/1427/2019-20/REACHOUT dated 07.05.2019.

*(Signature)*  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

To

The Pay & Accounts officer,  
Ministry of Earth Sciences,  
Prithvi Bhavan, Lodhi Road,  
New Delhi-110 003.

Copy to:

1. Cash Section, MoES for information.
2. The Principal Director of Audit(Scientific Department), AGCR Building, I.P. Estate, New Delhi.
3. Dr. B. Sheela Rani, PC(ESTC-MBS), Director (Research), Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- kavisheela66@gmail.com)

*(Signature)*  
19/6/19



4. Director, National Institute of Technology (NIOT), Chennai. (Email:- director@niot.res.in )
5. Director, Centre for Marine Living Resources & Ecology (CMLRE), Kochi. (Email:- director@cmlre.gov.in)
6. Dr.Radhika Rajasree S.R., Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- radhiin@mai.com)
7. Dr. D. Inbakandan, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119.(Email:- inbakandan@gmail.com )
8. Dr. L. Stanley Abraham, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- stanleyabraham.cor@gmail.com)
9. Dr. V. Ganesh Kumar, Scientist E, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600119. (Email:- ganesv@gmail.com)
10. Dr. K. GOVINDARAJU, Scientist C, Sathyabama, Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600119. (Email:- goindaraju@sathyabamauniversity.ac.in)
11. ProgrammeHead(GI)/Sci.'F'(JVS,jv).(Email:- gopal.iyenger@nic.insingh.moes@nic.in)
12. Controller of Accounts, Prithvi Bhavan, Lodhi Road, New Delhi.
13. Sanction folder/Guard file.

श्री. मंजुला दानियल  
18/6/2019

(Manjula Daniel)

Under Secretary to the Govt. of India

B/C

## Annexure-I

Project – 1

**Project title: “Studies on the implications of engineered nanoparticles and bio-nanocomposites in aquatic animal health”**

**Principal Investigator:** Dr.Radhika Rajasree S.R., Scientist E

**Co-Investigator:** Dr. D Inbakandan, Scientist E and Dr.L Stanley Abraham, Scientist E

| Budget (In Rupees)                                                                                                                        |                  |                  |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Item                                                                                                                                      | Year 1           | Year 2           | Year 3           | Total            |
| <b>A. Non-Recurring</b>                                                                                                                   |                  |                  |                  |                  |
| <b>Specific equipment</b>                                                                                                                 |                  |                  |                  |                  |
| 1. Stand alone rack-zebra fish housing with light enclosure                                                                               | 12,10,000        |                  |                  | 12,10,000        |
| 2. Digital microtome plus tissue processor and stainer                                                                                    | 3,30,000         |                  |                  | 3,30,000         |
| 3. Continuous flow through proportional diluter                                                                                           | 8,80,000         |                  |                  | 8,80,000         |
| 4. Coulter counter                                                                                                                        | 6,60,000         |                  |                  | 6,60,000         |
| <b>Total (A)</b>                                                                                                                          | <b>30,80,000</b> |                  |                  | <b>30,80,000</b> |
| <b>B. Recurring</b>                                                                                                                       |                  |                  |                  |                  |
| <b>1 Research staff</b>                                                                                                                   |                  |                  |                  |                  |
| JRF – 2 Nos.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and<br>Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 9,22,560         | 9,22,560         | 10,41,600        | 28,86,720        |
| 2 Consumable                                                                                                                              | 5,00,000         | 5,00,000         | 2,00,000         | 12,00,000        |
| 3 Contingencies                                                                                                                           | 10,000           | 10,000           | 10,000           | 30,000           |
| 4 Other expenses (Cost of samples analysis/ outsource, etc.)                                                                              | 40,000           | 40,000           | 40,000           | 1,20,000         |
| 5 Travel                                                                                                                                  | 15,000           | 10,000           | 10,000           | 35,000           |
| 6 Over head                                                                                                                               | 61,870           | 61,640           | 50,138           | 1,73,648         |
| <b>Total (B)</b>                                                                                                                          | <b>15,49,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>44,45,368</b> |
| <b>Grand total (A+B)</b>                                                                                                                  | <b>46,29,430</b> | <b>15,44,200</b> | <b>13,51,738</b> | <b>75,25,368</b> |

Dr. S. S. S. S. S.  
18/6/2019

**Project – 2**

**Project title: “Surface modification nanotechnological approach for antifouling and anticorrosion applications”**

**Principal Investigator : Dr. D. Inbakandan, Scientist E**

**Co- Principal Investigator : Dr.L.Stanley Abraham, Scientist E and Dr.Radhika Rajsree S R., Scientist E**

**Brief Budget Estimation (In Rupees)**

| Item                                                                                                                                 | Year 1           | Year 2          | Year 3          | Total            |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|-----------------|------------------|
| <b>A. Non- Recurring</b>                                                                                                             |                  |                 |                 |                  |
| <b>Specific equipment</b>                                                                                                            |                  |                 |                 |                  |
| 1. Fluorescence microscope with image analyzer                                                                                       | 14,40,000        | -               | -               | 14,40,000        |
| 2. Impedance spectrophotometer                                                                                                       | 17,20,000        | -               | -               | 17,20,000        |
| 3. Luminometer                                                                                                                       | 8,00,000         | -               | -               | 8,00,000         |
| <b>Total (A)</b>                                                                                                                     | <b>39,60,000</b> | <b>-</b>        | <b>-</b>        | <b>39,60,000</b> |
| <b>B. Recurring</b>                                                                                                                  |                  |                 |                 |                  |
| <b>1 Research staff</b>                                                                                                              |                  |                 |                 |                  |
| JRF – 1 no.<br>(Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm+24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280        | 5,20,800        | 14,43,360        |
| 2 Consumable                                                                                                                         | 1,00,000         | 1,00,000        | 1,00,000        | 3,00,000         |
| 3 Contingencies                                                                                                                      | 10,000           | 10,000          | 10,000          | 30,000           |
| 4 Other expenses (Cost of samples analysis/outsource, etc.)                                                                          | 60,000           | 60,000          | 60,000          | 1,80,000         |
| 5 Travel                                                                                                                             | 50,000           | 50,000          | 50,000          | 1,50,000         |
| 6 Over head                                                                                                                          | 28,060           | 28,060          | 30,213          | 86,333           |
| <b>Total B</b>                                                                                                                       | <b>7,09,340</b>  | <b>7,09,340</b> | <b>7,71,013</b> | <b>21,89,693</b> |
| <b>Grand total (A+B)</b>                                                                                                             | <b>46,69,340</b> | <b>7,09,340</b> | <b>7,71,013</b> | <b>61,49,693</b> |

Dr. S. Inbaraj  
18/6/2019

**Project - 3**

**Project title: "Enhancement of marine microbial by-products for biomedical applications"**

**Principal Investigator : Dr. L. Stanley Abraham, Scientist E**

**Co – Investigator : Dr. D. Inbakandan, Scientist E and Dr.Radhika Rajasree S.R., Scientist E**

**Budget Estimates (In Rupees)**

| <b>Budget Head</b>                                                                                                             | <b>Year 1<br/>(Rs.)</b> | <b>Year 2<br/>(Rs.)</b> | <b>Year 3<br/>(Rs.)</b> | <b>Total<br/>(Rs.)</b> |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| <b>A. Non-Recurring</b>                                                                                                        |                         |                         |                         |                        |
| Specific equipment                                                                                                             | 1, 10, 500              | -                       | -                       | 1, 10, 500             |
| SS Extraction Vessels                                                                                                          |                         |                         |                         |                        |
| Vacuum oven                                                                                                                    | 2, 11, 000              | -                       | -                       | 2, 11, 000             |
| Ultra centrifuge                                                                                                               | 27, 09, 000             | -                       | -                       | 27, 09, 000            |
| <b>Total (A)</b>                                                                                                               | <b>30,30,500</b>        | <b>-</b>                | <b>-</b>                | <b>30,30,500</b>       |
| <b>B. Recurring</b>                                                                                                            |                         |                         |                         |                        |
| Research staff                                                                                                                 |                         |                         |                         |                        |
| 1.Manpower                                                                                                                     |                         |                         |                         |                        |
| a) JRF - 1no.                                                                                                                  | 4,61,280                | 4,61,280                | 5,20,800                | 14,43,360              |
| @Rs.31,000/pm + 24%<br>HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year<br>and Rs.35,000/pm +24%<br>HRA for 3 <sup>rd</sup> year |                         |                         |                         |                        |
| 2 Consumable                                                                                                                   | 1,50,000                | 1,00,000                | 1,50,000                | 4, 00, 000             |
| 3 Contingencies                                                                                                                | 12,000                  | 12,000                  | 24,000                  | 48,000                 |
| 4 Other expenses (Cost<br>of samples<br>analysis/outsource, etc.)                                                              | 38,000                  | 38,000                  | 26,000                  | 1, 02, 000             |
| 5 Travel                                                                                                                       | 75,000                  | 75, 000                 | 50, 000                 | 2,00, 000              |
| 6 Over head                                                                                                                    | 30,590                  | 28,290                  | 31,593                  | 90,473                 |
| <b>Total (B)</b>                                                                                                               | <b>7,66,870</b>         | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>22,83,833</b>       |
| <b>Grand total (A+B)</b>                                                                                                       | <b>37,97,370</b>        | <b>7,14,570</b>         | <b>8,02,393</b>         | <b>53,14,333</b>       |

Dr. Stanley Abraham  
18/6/2019



**Project – 4**

**Project title: “Biofunctionalization nanoparticles for anticancer applications using marine biosources”**

Principal Investigator : Dr. V. Ganesh Kumar, Scientist E

Co- Principal Investigator : Dr. L. Stanley Abraham, Scientist E and Dr. K. Govindaraju, Scientist C

**Budget Estimates (In Rupees)**

| Item                                                                                                                | Year 1           | Year 2           | Year 3          | Total            |
|---------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                             |                  |                  |                 |                  |
| <b>Specific equipments</b>                                                                                          |                  |                  |                 |                  |
| i. Particle size analyzer                                                                                           | 15,40,000        | -                | -               | 15,40,000        |
| ii. Phase contrast microscope with accessories                                                                      | 5,50,000         | -                | -               | 5,50,000         |
| iii. Hot air oven                                                                                                   | 82,500           | -                | -               | 82,500           |
| iv. Microfuge                                                                                                       | 1,10,000         | -                | -               | 1,10,000         |
| <b>Total (A)</b>                                                                                                    | <b>22,82,500</b> | <b>-</b>         | <b>-</b>        | <b>22,82,500</b> |
| <b>B. Recurring</b>                                                                                                 |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                             |                  |                  |                 |                  |
| JRF-1                                                                                                               |                  |                  |                 |                  |
| (31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm +24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                 | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                              | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                  | 60,000           | 60,000           | 60,000          | 1,80,000         |
| <b>5 Travel</b>                                                                                                     | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                  | 38,410           | 43,010           | 40,103          | 1,21,523         |
| <b>Total (B)</b>                                                                                                    | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,95,903</b> | <b>29,89,883</b> |
| <b>Grand total (A+B)</b>                                                                                            | <b>32,27,190</b> | <b>10,49,290</b> | <b>9,95,903</b> | <b>52,72,383</b> |

Dr. S. S. S. S. S.  
18/6/2019

**Project – 5**

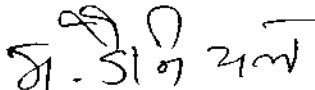
**Project title: “Isolation and identification of bioactive compounds from marine sponges for white spot syndrome virus (WSSV) control”**

**Principal Investigator : Dr. K. GOVINDARAJU, Scientist C**

**Co- Principal Investigator : Dr.D.Inbakandan, Scientist E and Dr.V.Ganesh Kumar, Scientist E**

**Budget Estimates (In Rupees)**

| Item                                                                                                                   | Year 1           | Year 2           | Year 3          | Total            |
|------------------------------------------------------------------------------------------------------------------------|------------------|------------------|-----------------|------------------|
| <b>A. Non-Recurring</b>                                                                                                |                  |                  |                 |                  |
| <b>Specific equipment</b>                                                                                              |                  |                  |                 |                  |
| 1.Biosafety cabinet                                                                                                    | 2,20,000         | -                | -               | 2,20,000         |
| (Laminar flow)                                                                                                         | 5,50,000         | -                | -               | 5,50,000         |
| 2. ELISA reader with accessories                                                                                       |                  |                  |                 |                  |
| 3.Cooling centrifuge                                                                                                   | 1,65,000         | -                | -               | 1,65,000         |
| 4. Osmometer                                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 5. CO <sub>2</sub> incubator                                                                                           | 5,50,000         | -                | -               | 5,50,000         |
| 6. Inverted phase contrast microscope                                                                                  | 4,40,000         | -                | -               | 4,40,000         |
| <b>Total (A)</b>                                                                                                       | <b>24,75,000</b> | <b>-</b>         | <b>-</b>        | <b>24,75,000</b> |
| <b>B. Recurring</b>                                                                                                    |                  |                  |                 |                  |
| <b>1 Research Staff</b>                                                                                                |                  |                  |                 |                  |
| JRF-I                                                                                                                  |                  |                  |                 |                  |
| Rs.31,000/pm + 24% HRA for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs.35,000/pm + 24% HRA for 3 <sup>rd</sup> year) | 4,61,280         | 4,61,280         | 5,20,800        | 14,43,360        |
| <b>2 Consumable</b>                                                                                                    | 3,00,000         | 4,00,000         | 3,00,000        | 10,00,000        |
| <b>3 Contingencies</b>                                                                                                 | 15,000           | 15,000           | 15,000          | 45,000           |
| <b>4 Other expenses (Cost of samples analysis/outsource, etc.)</b>                                                     | 60,000           | 60,000           | 40,000          | 1,60,000         |
| <b>5 Travel</b>                                                                                                        | 70,000           | 70,000           | 60,000          | 2,00,000         |
| <b>6 Over head</b>                                                                                                     | 38,410           | 43,010           | 39,183          | 1,20,603         |
| <b>Total (B)</b>                                                                                                       | <b>9,44,690</b>  | <b>10,49,290</b> | <b>9,74,983</b> | <b>29,68,963</b> |
| <b>Grand total (A+B)</b>                                                                                               | <b>34,19,690</b> | <b>10,49,290</b> | <b>9,74,983</b> | <b>54,43,963</b> |

  
18/6/2019

**Title: Operational expenses of ESTC (MBS) Cell at Sathyabama Institute of Science & Technology Deemed to be Univ, Chennai**

| Items                                                                                                   |                 |                 |                 | Grand Total      |
|---------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|------------------|
|                                                                                                         | Year 1 (Rs.)    | Year 2 (Rs.)    | Year 3 (Rs.)    | (Rs.)            |
| <b>A ESTC cell Operational expenses</b> (Expense on meeting of SSC committee travel, consumables etc.,) | 2,50,000        | 2,50,000        | 2,50,000        | 7,50,000         |
| <b>B Manpower for ESTC cell operations</b>                                                              |                 |                 |                 |                  |
| <b>i) Field Assistant-1</b><br>@Rs. 10500/pm                                                            | 2,52,000        | 2,52,000        | 2,52,000        | 7,56,000         |
| <b>ii) Accounts Assistant-1</b><br>@Rs. 10500/pm                                                        |                 |                 |                 |                  |
| <b>Total(A+B) =</b>                                                                                     | <b>5,02,000</b> | <b>5,02,000</b> | <b>5,02,000</b> | <b>15,06,000</b> |

Dr. S. Srinivasan  
18/6/2019

## Annexure-II

| S. No. | Research Element                                                                                                                                                                                                        | 1 <sup>st</sup> Year |      | 2 <sup>nd</sup> Year |      | 3 <sup>rd</sup> Year |      |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|----------------------|------|----------------------|------|
|        |                                                                                                                                                                                                                         | 1-6                  | 7-12 | 1-6                  | 7-12 | 1-6                  | 7-12 |
|        | <b>Recruitment of Project staff, Purchase of consumables and Equipment :-</b>                                                                                                                                           |                      |      |                      |      |                      |      |
| 1.     | Manpower recruitment and Purchase of consumables and perment equipments Preparation and characterization of biofunctionalized gold nanoparticles                                                                        |                      |      |                      |      |                      |      |
| 2      | <b>In vitro anti cancer activity Cell culture:-</b><br>The biofunctionalized properties of nanoparticles and its activity in cell culture.                                                                              |                      |      |                      |      |                      |      |
| 3      | <b>Assessment of cell morphology and viability Hoechst 33258 Staining &amp; DNA ladder analysis:-</b><br>Cell Morphology and cell viability will be carried out to check the anticancer potential of the nanomaterials. |                      |      |                      |      |                      |      |
| 4      | <b>In-vivo studies on anticancer activity:-</b><br>The animals will be kept in plastic cages under hygienic conditions and will be provided standard animal feed for anticancer studies.                                |                      |      |                      |      |                      |      |
| 5      | <b>Experimental protocol</b><br>Collection of serum Histopathology Immunohistochemistry of PCNA Flow cytometric analysis for plasma membrane potential of bacteria and fungi                                            |                      |      |                      |      |                      |      |
| 6      | <b>Protein extraction</b><br>Western blot analysis Real-time polymerase chain reaction (RT-PCR) for the detection of mRNA expression of different genes Product development                                             |                      |      |                      |      |                      |      |
|        |                                                                                                                                                                                                                         |                      |      |                      |      |                      |      |

म. सिंगल  
18/6/2019

Science and Engineering Research Board  
 3rd & 4th Floor, Block II  
 Technology Bhavan, New Mehrauli Road  
 New Delhi - 110016

Dated: 16 March, 2022

**ORDER**

Subject: Financial Sanction of the research project titled "**Toxicity of Microplastics and Phthalates, as well as their Abundance, Distribution and Drivers, in groundwater and surface water from Ennore to Kovalam on the east coast of India.**" under the guidance of Dr. Puliyaikurichi Mookkan Velmurugan, Center for Earth and Atmospheric Science, Sathyabama Institute of Science and Technology, Sathyabama university, jeppiaar nagar, rajiv gandhi road, chennai, Chennai, Tamil nadu-600119 and by Dr. Prabhu Dass Batvari, Scientist-C, Center for Earth And Atmospheric Sciences, Sathyabama Institute Of Science And Technology and by Dr. Marykutty Abraham, -, Centre For Remote Sensing And Geoinformatics, Sathyabama Institute Of Science And Technology - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 2263360/- (Rs. Twenty Two Lakh Sixty Three Thousand Three Hundred and Sixty Only) with break-up of Rs. 0/- under Capital (Non-recurring) head and Rs. 2263360/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 2263360/- has been approved are given below:  
 The following budget may be considered for Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai

| S. No     | Head                                                   | Total (in Rs.) |
|-----------|--------------------------------------------------------|----------------|
| <b>A</b>  | <b>Non-recurring</b>                                   |                |
| 1         | Equipment                                              | 0              |
| <b>A'</b> | <b>Total (Non-Recurring)</b>                           | 0              |
| <b>B</b>  | <b>Recurring Items</b>                                 |                |
| 1         | Recurring - I : (Manpower)                             | 1443360        |
|           | Recurring - II : ( Consumables, Travel, Contingencies) | 600000         |
|           | Recurring - III : Scientific Social Responsibility     | 20000          |
| 2         | Recurring - IV : (Overhead Charges)                    | 200000         |
| <b>B'</b> | <b>Total (Recurring)</b>                               | 2263360        |
| <b>C</b>  | <b>Total cost of the project (A' + B')</b>             | 2263360        |

2. Sanction of the SERB is also accorded to the payment of Rs. 800000/- (Rupees Eight Lakh only) under 'Grants-in-aid General' to Registrar, Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai being the first installment of the grant for the year 2021-2022 for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER)  
 This release is being made under Core Research Grant. (PAC Earth & Atmospheric Sciences)

4. The Sanction has been issued to Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai with the approval of the competent authority under delegated powers on 11 March, 2022 and vide Diary No. SERB/F/10382/2021-2022 dated 15 March, 2022

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ([www.serb.gov.in](http://www.serb.gov.in)).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

8. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activities enlisted under SSR norms and under no circumstances it can be reappropriated.

9. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

10. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

11. The release amount of Rs. 800000/- (Rupees Eight Lakh only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

|                               |                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------|
| <b>PFMS Unique Code</b>       | SU                                                                                 |
| <b>Account Name</b>           | Sathyabama Institute of Science and Technology, Research                           |
| <b>Account Number</b>         | 6089858032                                                                         |
| <b>Bank Name &amp; Branch</b> | INDIAN BANK SATHYABAMA UNIVERSITY JEPPIAAR NAGAR RAJIV GANDHI SALAI SHOLINGANALLUR |
| <b>IFSC/RTGS Code</b>         | IDIB000S201                                                                        |



|                        |                            |
|------------------------|----------------------------|
| Email id of A/C Holder | registrar@sathyabama.ac.in |
| Email id of PI         | velapmv@gmail.com          |

12. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

13. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

14. The project File no. CRG/2021/004694 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

15. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any, beyond the duration of the project

16. As this is the first grant being released for the project, no previous U/C is required.

17. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

19. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board.

(Dr. Prahlad Ram)  
Scientist D  
prahlad@serb.gov.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R. Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2. | Sanction Folder, SERB, New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4. | <p><b>Dr. Puliyaikurichi Mookkan Velmurugan</b><br/>Center for Earth and Atmospheric Science<br/>Sathyabama Institute of Science and Technology, Sathyabama university, jeppiar nagar, rajiv gandhi road, chennai, Chennai, Tamil nadu-600119<br/>Email: velapmv@gmail.com<br/>Mobile: 919087512526</p> <p><b>Dr. Prabhu Dass Batvari</b><br/>Center for Earth And Atmospheric Sciences<br/>Sathyabama Institute Of Science And Technology</p> <p><b>Dr. Marykutty Abraham</b><br/>Centre For Remote Sensing And Geoinformatics<br/>Sathyabama Institute Of Science And Technology<br/>(Start date of the project may be intimated by name to the undersigned. For guidance, terms &amp; Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a>.)</p> |
| 5. | <p><b>Registrar,</b><br/><b>Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai</b></p> <p>(Receipt of Grant may be intimated by name to the undersigned)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

(Dr. Prahlad Ram)  
Scientist D  
prahlad@serb.gov.in

FILE NO. SUR/2022/005077  
**SCIENCE & ENGINEERING RESEARCH BOARD (SERB)**  
(A statutory body of the Department of Science & Technology, Government of India)

Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 20 September, 2023

**ORDER**

Subject: Financial Sanction of the research project titled **Toxicity of microplastics and phthalates, their quantity, distribution, and causes in groundwater and surface water, and essential preventative measures on the east coast of Tamil Nadu, India, from Cuddalore to Nagapattinam.** under the guidance of Dr. SANJAIGANDHI KALIYAPERUMAL, GEOLOGY, Periyar University Centre for Postgraduate and Research Studies, 656f+97q, dharmapuri, Dharmapuri, Tamil nadu-635205 and by Dr. Puliakurichi Mookkan Velmurugan, Scientist-E / Associate Professor, Center For Earth And Atmospheric Science, Sathyabama Institute Of Science And Technology - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of **Rs. 2997570/-** (Rs. Twenty Nine Lakh Ninety Seven Thousand Five Hundred and Seventy Only) with break-up of **Rs. 1137950/- under Capital (Non-recurring) head** and **Rs.1859620/- under General (Recurring) head** for a duration of 36 months. The items of expenditure for which the total allocation of **Rs. 2997570/-** has been approved are given below:

The following budget may be considered for **Periyar University Centre For Postgraduate And Research Studies, 656F+97Q, Dharmapuri**

| S. No    | Head                                                                                                                                                                           | Total (in Rs.)         |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>A</b> | <b>Non-recurring</b>                                                                                                                                                           |                        |
| 1        | Equipment<br>-> Analytical balance<br>-> Fourier Transform Infrared Spectroscopy<br>-> Vertical deep freezer.                                                                  | 1137950                |
| A'       | Total (Non-Recurring)                                                                                                                                                          | 1137950                |
| <b>B</b> | <b>Recurring Items</b>                                                                                                                                                         |                        |
| 1        | Recurring - I : (Research Personnel -> Junior Research Fellow)<br>Recurring - II : ( Consumables, Travel, Contingencies)<br>Recurring - III : Scientific Social Responsibility | 1257120<br>330000<br>0 |
| 2        | Recurring - IV : (Overhead Charges)                                                                                                                                            | 272500                 |
| B'       | Total (Recurring)                                                                                                                                                              | 1859620                |
| <b>C</b> | <b>Total cost of the project (A' + B')</b>                                                                                                                                     | <b>2997570</b>         |

2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ([www.serb.gov.in](http://www.serb.gov.in)).

3. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

4. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 90,000 each should be spent for travel and contingency.

5. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

6. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

7. The institute will furnish to the SERB, separate Utilization certificate (UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an



audited statement of accounts pertaining to the grant immediately after the end of each financial year.

8. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

9. The research personnel sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any beyond the duration of the project

10. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

11. The project File no. SUR/2022/005077 should be mentioned in all communications arising from the above project. The organization/institute/university should ensure that the technical support/financial assistance provided to them by SERB should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by SERB.

12. Sanction order for release of funds under a) Non-recurring and b) Recurring will be issued separately depending on the availability of funds. The project become operational from the day the first release of grant received by the implementing Institute.



(Dr. V Ramesh)

ms\_pac\_sure@serbonline.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2. | Sanction Folder, SERB , New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4. | <p><b>Dr. SANJAIGANDHI KALIYAPERUMAL</b><br/><b>GEOLOGY</b><br/><b>Periyar University Centre for Postgraduate and Research Studies , 656f+97q, dharmapuri,</b><br/><b>Dharmapuri, Tamil nadu-635205</b><br/><b>Email: sanjai81kj@gmail.com</b><br/><b>Mobile: 919841468830</b></p> <p><b>Dr. Puliyakurichi Mookkan Velmurugan</b><br/><b>Center For Earth And Atmospheric Science</b><br/><b>Sathyabama Institute Of Science And Technology</b><br/>(Start date of the project may be intimated by name to the undersigned. For guidance, terms &amp; Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a>.)</p> |
| 5. | <p><b>THE REGISTRAR,</b><br/><b>Periyar University Centre For Postgraduate And Research Studies, 656F+97Q, Dharmapuri</b><br/>(Receipt of Grant may be intimated by name to the undersigned)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                              |



(Dr. V Ramesh)

ms\_pac\_sure@serbonline.in



FILE NO. SUR/2022/005077-G

**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**

(A statutory body of the Department of Science & Technology, Government of India)

Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 20 September, 2023

**ORDER**

Subject: Research project entitled **Toxicity of microplastics and phthalates, their quantity, distribution, and causes in groundwater and surface water, and essential preventative measures on the east coast of Tamil Nadu, India, from Cuddalore to Nagapattinam.** under the guidance of **Dr. SANJAIGANDHI KALIYAPERUMAL, GEOLOGY, Periyar University Centre for Postgraduate and Research Studies, 656f+97q, Dharmapuri, Dharmapuri, Tamil nadu-635205** and by **Dr. Puliakurichi Mookkan Velmurugan, Scientist-E / Associate Professor, Center For Earth And Atmospheric Science, Sathyabama Institute Of Science And Technology .**

1. In continuation of SERB's sanction order No. SUR/2022/005077 dated 20 September, 2023, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs.620050/-** under 'Grants-in-aid General' to Periyar University Centre For Postgraduate And Research Studies, 656f+97q, Dharmapuri, Dharmapuri, Tamil Nadu-635205 being the grant for the financial year 2023-2024 for implementation of the above said project.
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website ([www.serb.gov.in](http://www.serb.gov.in)) and as mentioned in the sanction order of even number dated 20 September, 2023.
3. As this is the first grant being released under 'Grants-in-aid General' for the project, no previous U/C is required.
4. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under **State University Research Excellence (SERB SURE) (General) (PAC SERB SURE).**
5. The Sanction has been issued with the approval of the competent authority on **24 August, 2023** and vide Diary No. **SERB/F/5338/2023-2024** dated **26 August, 2023.**
6. The release amount of **Rs. 620050/-** (Rupees Six Lakh Twenty Thousand and Fifty only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

|                        |                                                                         |
|------------------------|-------------------------------------------------------------------------|
| PFMS Unique Code       | PERIUNIVSLM                                                             |
| Account Name           | THE REGISTRAR PERIYAR UNIVERSITY                                        |
| Account Number         | 8450101005357                                                           |
| Bank Name & Branch     | CANARA BANK PERIYAR UNIVERSITY BRANCH, PERIYAR UNIVERSITY, SALEM 636011 |
| IFSC/RTGS Code         | CNRB0008450                                                             |
| Email id of A/C Holder | registrarperiyar@gmail.com                                              |
| Email id of PI         | sanjai81kj@gmail.com                                                    |

*Ramesh*

(Dr. V Ramesh)

[ms\\_pac\\_sure@serbonline.in](mailto:ms_pac_sure@serbonline.in)

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                          |
|----|------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002 |
| 2. | Sanction Folder, SERB, New Delhi.                                                        |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4. | <p><b>Dr. SANJAIGANDHI KALIYAPERUMAL</b><br/> <b>GEOLOGY</b><br/> <b>Periyar University Centre for Postgraduate and Research Studies , 656f+97q, dharmapuri,</b><br/> <b>Dharmapuri, Tamil nadu-635205</b><br/> <b>Email: sanjai81kj@gmail.com</b><br/> <b>Mobile: 919841468830</b></p> <p><b>Dr. Puliyakurichi Mookkan Velmurugan</b><br/> <b>Center For Earth And Atmospheric Science</b><br/> <b>Sathyabama Institute Of Science And Technology</b><br/> (Start date of the project may be intimated by name to the undersigned. For guidance, terms &amp; Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a>.)</p> |
| 5. | <p><b>THE REGISTRAR,</b><br/> <b>Periyar University Centre For Postgraduate And Research Studies, 656F+97Q, Dharmapuri</b><br/> (Receipt of Grant may be intimated by name to the undersigned)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



(Dr. V Ramesh)  
ms\_pac\_sure@serbonline.in



FILE NO. SUR/2022/005077-C  
**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**  
(A statutory body of the Department of Science & Technology, Government of India)  
Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 20 September, 2023

**ORDER**

Subject: Research project entitled **Toxicity of microplastics and phthalates, their quantity, distribution, and causes in groundwater and surface water, and essential preventative measures on the east coast of Tamil Nadu, India, from Cuddalore to Nagapattinam.** under the guidance of Dr. SANJAIGANDHI KALIYAPERUMAL, GEOLOGY, Periyar University Centre for Postgraduate and Research Studies, 656f+97q, Dharmapuri, Dharmapuri, Tamil nadu-635205 and by Dr. Puliyakurichi Mookkan Velmurugan, Scientist-E / Associate Professor, Center For Earth And Atmospheric Science, Sathyabama Institute Of Science And Technology .

1. In continuation of SERB's sanction order No. SUR/2022/005077 dated 20 September, 2023, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs.1137950/-** under 'Grants-in-aid Capital' to Periyar University Centre For Postgraduate And Research Studies, 656f+97q, Dharmapuri, Dharmapuri, Tamil Nadu-635205 being the grant for the financial year 2023-2024 for implementation of the above said project.
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website (www.serb.gov.in) and as mentioned in the sanction order of even number dated 20 September, 2023.
3. As this is the first grant being released under 'Grants-in-aid Capital' for the project, no previous U/C is required.
4. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under **State University Research Excellence (SERB SURE) (Capital) (PAC SERB SURE)**
5. The Sanction has been issued with the approval of the competent authority on **24 August, 2023** and vide Diary No. **SERB/F/5337/2023-2024** dated **26 August, 2023**.
6. The release amount of **Rs. 1137950/-** (Rupees Eleven Lakh Thirty Seven Thousand Nine Hundred and Fifty only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

|                               |                                                                         |
|-------------------------------|-------------------------------------------------------------------------|
| <b>PFMS Unique Code</b>       | PERIUNIVSLM                                                             |
| <b>Account Name</b>           | THE REGISTRAR PERIYAR UNIVERSITY                                        |
| <b>Account Number</b>         | 8450101005357                                                           |
| <b>Bank Name &amp; Branch</b> | CANARA BANK PERIYAR UNIVERSITY BRANCH, PERIYAR UNIVERSITY, SALEM 636011 |
| <b>IFSC/RTGS Code</b>         | CNRB0008450                                                             |
| <b>Email id of A/C Holder</b> | registrarperiyar@gmail.com                                              |
| <b>Email id of PI</b>         | sanjai81kj@gmail.com                                                    |



(Dr. V Ramesh)

ms\_pac\_sure@serbonline.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                          |
|----|------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002 |
| 2. | Sanction Folder, SERB, New Delhi.                                                        |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4. | <p><b>Dr. SANJAIGANDHI KALIYAPERUMAL</b><br/> <b>GEOLOGY</b><br/> <b>Periyar University Centre for Postgraduate and Research Studies , 656f+97q, dharmapuri,</b><br/> <b>Dharmapuri, Tamil nadu-635205</b><br/> <b>Email: sanjai81kj@gmail.com</b><br/> <b>Mobile: 919841468830</b></p> <p><b>Dr. Puliyakurichi Mookkan Velmurugan</b><br/> <b>Center For Earth And Atmospheric Science</b><br/> <b>Sathyabama Institute Of Science And Technology</b><br/> (Start date of the project may be intimated by name to the undersigned. For guidance, terms &amp; Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a>.)</p> |
| 5. | <p><b>THE REGISTRAR,</b><br/> <b>Periyar University Centre For Postgraduate And Research Studies, 656F+97Q, Dharmapuri</b><br/> (Receipt of Grant may be intimated by name to the undersigned)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



(Dr. V Ramesh)

ms\_pac\_sure@serbonline.in

FILE NO. SSY/2023/001412  
**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**  
(a statutory body of the Department of Science & Technology, government of India)

Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 17 January, 2024

**ORDER**

Subject: Financial assistance for the organizing National Workshop on "National Workshop on Land, Atmosphere and Ocean response to North East Monsoon (NaWNEM-2024) " by Dr. ROJARAMAN MEKALATHUR, Sathyabama Institute Of Science And Technology (Deemed To Be University) , Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Tamil Nadu-600119 being held from 23-Jan-2024 to 24-Jan-2024 (2 days).

Sanction of **Science and Engineering Research Board (SERB)** is hereby accorded to the above mentioned project at a total cost of **Rs. 150000/- (Rs. One Lakh Fifty Thousand Only)** to Sathyabama Institute Of Science And Technology (Deemed To Be University) , Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Tamil Nadu-600119 during the financial year 2023-2024 to meet the expenses related to TA/DA to Young and Senior Indian Scientists, Pre-conference printing in connection with the above event.

2. The amount of **Rs. 150000/- (Rs. One Lakh Fifty Thousand Only)** will be drawn by Under Secretary, SERB and disbursed by the means of Cheque or Electronic Fund Transfer (NEFT/RTGS) as beneficiary's Bank Details given below.

|                               |                                                                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Agency Name</b>            | Sathyabama Institute of Science and Technology (Deemed to be University)                                                              |
| <b>PFMS Unique Code</b>       | SU                                                                                                                                    |
| <b>Account Name</b>           | Sathyabama Institute of Science and Technology Research                                                                               |
| <b>Account Number</b>         | 6089858032                                                                                                                            |
| <b>Bank Name &amp; Branch</b> | Indian Bank INDIAN BANK, Sathyabama University Branch, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Chennai 600119 |
| <b>IFSC/RTGS Code</b>         | IDIB000S201                                                                                                                           |
| <b>Email id of A/C Holder</b> | vc@sathyabama.ac.in                                                                                                                   |
| <b>Email id of PI</b>         | ramansvu@gmail.com                                                                                                                    |

to Vice Chancellor, Sathyabama Institute Of Science And Technology (Deemed To Be University) , Jeppiaar Nagar, Rajiv Gandhi Salai

3. The expenditure involved is debitable to **Fund for Science & Engineering Research (FSER)**  
**This release is being made under Seminar/Symposia. (Internal Committee). General**

4. The Sanction has been issued with the approval of competent authority under delegated powers and vide sanction number to Sathyabama Institute Of Science And Technology (Deemed To Be University) , Jeppiaar Nagar, Rajiv Gandhi Salai with the approval of the competent authority under delegated powers on **22 December, 2023** and vide Diary No. **SERB/F/10787/2023-2024** dated **16 January, 2024**

5. As per Rule 211(1) of GFRs, the accounts of the Grantee Institution shall be open to inspection by the sanctioning authority/audit whenever the institute is called upon to do so.

6. It is **mandatory** that the grantee institution is required to submit to this office, audited Statement of Income-Expenditure, Utilization Certificate (in duplicate as per prescribed format) and brief report of above event (max. 04 pages) within three months after the date of completion. .

7. The balance amount, if any, may be returned through DD in favor of "Fund for Science & Engineering Research" payable at New Delhi.

8. The Organization/Institute/University should ensure that the technical support/financial assistance provided to them by the Science and Engineering Research Board, a statutory body of the Department of Science and Technology (DST), Government of India should invariably be highlighted/acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

9. In addition, the investigator / host Institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science and Engineering Research Board, a statutory body of the Department of Science and Technology (DST), Government of India.

10. The logo of SERB is to be displayed on all Conferences / Seminars / Symposium material being used for the event.

  
(Dr. Sukumar Dey)

Scientist D

seminar.symposia@serb.gov.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R. Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                 |
| 2. | Sanction Folder, SERB, New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 4. | <b>Dr. ROJARAMAN MEKALATHUR</b><br>Center for Remote sensing and Geoinformatics<br>Sathyabama Institute of Science and Technology (Deemed to be University), Jeppiaar nagar,<br>rajiv gandhi salai, Chennai, Tamil nadu-600119<br>Email: ramansvu@gmail.com<br>Mobile: 919299155331<br>(Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a> .) |
| 5. | <b>Vice Chancellor,</b><br><b>Sathyabama Institute Of Science And Technology (Deemed To Be University), Jeppiaar Nagar,</b><br><b>Rajiv Gandhi Salai</b><br><br>(Receipt of Grant may be intimated by name to the undersigned)                                                                                                                                                                                                                                            |

  
(Dr. Sukumar Dey)

Scientist D

seminar.symposia@serb.gov.in



**MoES/SSWC/04/2022 -PC-V**  
**Government of India**  
**Ministry of Earth Sciences**

**Prithvi Bhawan,**  
**Lodhi Road, New Delhi**  
**17 /11/2023**

**SANCTION ORDER**

In continuation of the Administrative Order No. MoES/SFC-REACHOUT/2021 dated 31.08.2021 Revised A.O. of even number dated 22/06/2022 and sanction order no. MoES/REACHOUT/CNA/2022 dated 27/06/2022, Sanction of the President is hereby conveyed under rule 18 of the Delegation of Financial Power Rules, 1978 for release of an amount of Rs.2,50,000/- (**Rupees Two lakh and fifty thousand only**) to Registrar, Sathyabama Institute of Science and Technology, Centre for Remote Sensing and Geoinformatics, Rajiv Gandhi Salai, Jeppiaar Nagar, Chennai for organizing National Workshop on "Geospatial and Cutting EDGE Technologies for Coastal Protection Measures to be held from 19th to 21st December, 2023 at Centre for Remote Sensing and Geoinformatics, Sathyabama Institute of Science and Technology, Chennai.

2. The above expenditure will be debit-able to the following head of account:

|          |   |                                                    |
|----------|---|----------------------------------------------------|
| 3425     | - | Other Scientific Research (Major Head)             |
| 60       | - | Others                                             |
| 60.200   | - | Assistance to Other Scientific Bodies (Minor Head) |
| 52       | - | Research Education & Training Outreach             |
| 52.00.31 | - | Grant-in-aid-General                               |

Under demand No. 24 of the Ministry of Earth Sciences for year 2023-24.

3. The amount of Rs.2,50,000/- (**Rupees Two lakh and fifty thousand only**) will be drawn by the Director, INCOIS, Hyderabad from the central nodal agency (CNA) account (INCOIS Reachout Account) and will be disbursed to (Registrar, Sathyabama Institute of Science and Technology) through REAT/EAT module of PFMS for expenditure under GIA.

|    |                        |                                                |
|----|------------------------|------------------------------------------------|
| 1. | Name of Account Holder | Sathyabama University-Research                 |
| 2. | Name of Bank           | Indian Bank                                    |
| 3. | Name of Branch         | Sathyabama University, Jeppiaar Nagar, Chennai |
| 4. | Account Type           | Savings                                        |
| 5. | Account Number         | 6089858032                                     |
| 6. | IFSC/RTGS/NEFT Code    | IDIB000S201                                    |
| 7. | MICR Code              | 600019229                                      |

4. As per rule 238(1) of GFR 2017 relating to UC's for the fund released are not applicable at this stage the said institute would be receiving the grant for the aforesaid purpose for the first time.

5. Registrar, Sathyabama Institute of Science and Technology, Centre for Remote Sensing and Geoinformatics, Rajiv Gandhi Salai, Jeppiaar Nagar, Chennai . will furnish to MoES a Utilization Certificate in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with updated progress report (Vis-a vis Target Vs-Achievement) at the end of each Financial year.





6. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division and copy of same through email. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

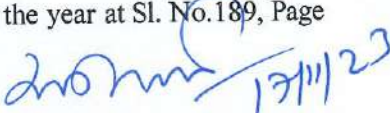
7. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the principal Account Officer of the MoES), whenever the organization is called upon to do so, as laid down under Rule 236(1) of GFR 2017.

8. The organizer is to ensure compliance of Govt's (MHA/MHFW/State Govt./SDMA/ Local Admin) advisories related to administration and for protection from covid/server weather condition like heat wave, etc

9. The grantee Institute will ensure the compliance of OM. No. F.No. 1(18)/PFMS/FCD/2021 dated March 2022 of Department of Expenditure, Ministry of Finance.

10. This issues under the power delegated Programme head vide office order no. MoES/11/10/2019 (e-file 9950) dated 27.04.2023 with the concurrence of Programme Head vide Dy. No. 9742/PH/2023 dated 31/10/2023.

11. The necessary entry has been made in Expenditure Central Registrar (ECR) for the year at Sl. No.189, Page No.55.

  
17/11/23

(Ramesh Kumar)

Under Secretary to the Govt. of India

To

The Pay & Accounts Officer, Pay & Accounts Office,  
Ministry of Earth Sciences, Prithvi Bhawna, Lodhi Road, New Delhi – 110003

Copy to:

1. Cash Section, MoES for information.
2. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110002.
3. Sh. S. Nageswara Rao, Sr. Account Officer, Indian National Centre for Ocean Information Services (INCOIS), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090.
4. The Director, Indian National Centre for Ocean Information Services (INCOIS), "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad-500090
5. Registrar, Sathyabama Institute of Science and Technology, Centre for Remote Sensing and Geoinformatics, Rajiv Gandhi Salai, Jeppiaar Nagar, Chennai . ([registrar@sathyabama.ac.in](mailto:registrar@sathyabama.ac.in), [nagamani@sathyabama.ac.in](mailto:nagamani@sathyabama.ac.in), 044-24500646).
6. Programme Head(JVS)/ Sci.'E'(Aditi).
7. Controller of Accounts, Mausam Bhavan, Lodhi Road, New Delhi.
8. Sanction folder/Guard file.

  
17/11/23

(Ramesh Kumar)

Under Secretary to the Govt. of India

भारत सरकार  
अंतरिक्ष विभाग  
**भारतीय सुदूर संवेदन संस्थान**  
4, कालिदास मार्ग, पो. बाक्स सं. 135  
देहरादून-248001, भारत  
दूरभाष : +91-135-2524399  
फैक्स : +91-135-2741987, 2748041



Government of India  
Department of Space  
**Indian Institute of Remote Sensing**  
4, Kalidas Road, P.B. No. 135,  
Dehradun - 248001, India  
Telephone : +91-135-2524399  
Fax : +91-135-2741987, 2748041

Ref: IIRS/DO/DMSP-ASCB/Cap Build/2023

Date: February 03, 2023

To,  
**Dr. K. Nagamani**  
Scientist D/Head  
Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Road, Sholinganallur  
Chennai – 600119  
Email:- nagamani@sathyabama.ac.in

**Subject:** Sanction of proposal on Capacity Building in Space based Disaster Management Support submitted by you under ISRO's Disaster Management Support Programme (DMSP).

Dear Sir,

Greeting from Indian Institute of Remote sensing (IIRS), Dehradun!

Thank you for submitting the proposals on Capacity Building in Space based Disaster Management Support in response to Announcement of Opportunity (AO) – Call for Proposals floated by IIRS under the ISRO's Disaster Management Support Programme (DMSP).

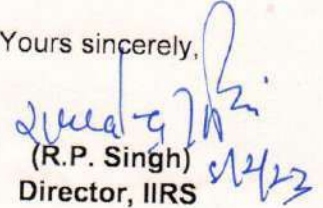
We are pleased to inform you that the following proposal has been approved for financial support.

| S.No | Capacity Building Proposal                                                                       | Budget                                                        |
|------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 1.   | Awareness Workshop: One day program on Disaster Management using advanced technologies.( 1 Day ) | Rs 2,47,000/- for 50 participants @ Rs 4940/- per participant |

It is requested to send us the duly filled-in and signed Undertaking and Terms & Conditions for the grant and Vendor Details Updation Form (for online transfer of funds) enclosed herewith at the earliest by email ([dmsp\[dot\]ascb\[at\]iirs\[dot\]gov\[dot\]in](mailto:dmsp[dot]ascb[at]iirs[dot]gov[dot]in)) and speed/registered post.

With best regards.

Yours sincerely,

  
(R.P. Singh)  
Director, IIRS

Enclosure: As above

**Copy to:** Dean (Academics), IIRS, Dehradun (Email: [deanacademics@iirs.gov.in](mailto:deanacademics@iirs.gov.in))





वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्  
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH  
मानव संसाधन विकास समूह  
Human Resource Development Group

Siva.

Signature

सी.एस.आई.आर. कॉम्प्लेक्स  
इंस्टीट्यूट ऑफ़ होटल मैनेजमेंट के सामने  
लाइब्रेरी एवेन्यू, पूसा, नई दिल्ली-110012

**C.S.I.R. Complex**

Opp. Institute of Hotel Management  
Library Avenue, Pusa, New Delhi-110012

क्रमांक : 23(0034)19/EMR-II

दिनांक : 31/05/2021

सेवा में,

Dr K Nagamani  
CTR for Remote Sens & GEO Inf  
Sathyabama Inst of Sc & Tech  
Chennai 600119 TN

विषय : डॉ० अनूप कुमार मिश्रा के इस्तीफा के बाद परियोजना के लिए डॉ० के० नागमणि को पी० आई० बनाने लिए अनुमति।

महोदय,

आपके द्वारा प्रेषित पत्र दिनांक 18/03/2021 के संदर्भ में आपको सूचित किया जाता है कि प्रधान, मानव संसाधन विकास समूह ने सीएसआईआर की परियोजना **Developing near.....over India** में डॉ० के० नागमणि को पी०आई० बनाने की सहर्ष अनुमति प्रदान कर दी है।

अतः डॉ० के नागमणि अपना Electronic Transfer of Funds (Form -K), Undertaking (Form-A) or Date Of Commencement (DOC) अतिशीघ्र प्रेषित करें। जिससे आगे की कार्यवाही सुचारू रूप से की जा सके।

भवदीय,  
31/5/2021  
(संघमित्रा रॉय)  
अनुभाग अधिकारी

प्रतिलिपि :-

1. Registrar/Principal/Director,  
Sathyabama Inst of Sc & Tech  
Chennai 600119 TN
2. Dr Anoop Kumar Mishra  
CTR for Remote Sens & GEO Inf  
Sathyabama Inst of Sc & Tech  
Chennai 600119 TN



वैज्ञानिक और औद्योगिक अनुसंधान परिषद

**SPEED POST**

## **COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH**

मानव संसाधन विकास समूह, वैज्ञानिक और औद्योगिक अनुसंधान परिषद,  
होटल प्रबंधन संस्थान के विपरीत, लाइब्रेरी एवेन्यू, पूसा, नई दिल्ली - 110012

Human Resource Development Group, CSIR Complex, Opp. Institute of Hotel Management,  
Library Avenue, Pusa, New Delhi - 110012 (India) e-mail i.d. (soemr2@csirhrdg.res.in)

FILE NO.: 23/0034/19/EMR-II

Date: 19/07/2022

✓ DR. K. NAGAMANI,  
CENTRE FOR REMOTE SENSING  
& GEO-INFORMATICS,  
SATHYABAMA INSTITUTE OF  
SCIENCE & TECHNOLOGY,  
CHENNAI 600119 TAMIL NADU.

**Subject : Renewal of grants for scheme entitled "Towards Developing.....Over India".**

Sir,

The Director-General, Council of Scientific & Industrial Research has been pleased to sanction renewal of the above scheme with the following grants for the period from **01/08/2021 to 31/03/2022 and 01/04/2022 to 31/03/2023.**

| Head         | Amount (Rupees)<br>01/08/2021-31/03/2022 | 2022-2023         | Details        |
|--------------|------------------------------------------|-------------------|----------------|
| Staff        | 3,76,000/-                               | 5,64,000/-        | RA/SRF/JRF : 1 |
| Contingency  | 66,667/-                                 | 1,00,000/-        |                |
| <b>Total</b> | <b>4,66,667/-</b>                        | <b>6,64,000/-</b> |                |

1. This grant is subject to the terms and conditions on which the scheme was originally sanctioned and as modified from time to time.
2. Bill in triplicate claiming grant sanctioned may please sent through the appropriate authority of your institution after complying with the formalities required under the rules. The position regarding unspent balance of the previous year's grants must be clearly mentioned head-wise in the bill failing which it may be returned Unpassed for compliance.
3. Particulars of Staff working in the scheme i.e. his name, Fellowship (JRF/SRF/RA) held, date of joining resignation etc. for whom claim under head "staff" is made should invariably mentioned in the bill.
4. The expenditure is debatable to budget head "Special Research Programmed Extramural Research Grants" (Res. Schemes).
5. Your attention is drawn to the rule No. 3 of the Terms & Condition of CSIR Research Grant.

**Note:** Further, funds will be sent through NEFT/RTGS/ECS mode only, to the concerned authority of your institution/university/college on receipt of the NEFT details, Consolidated Statement of Account and Utilization Certificate (1 copy each) along with the claim bill in Form 'J' (triplicate with original signatures).

Yours Faithfully,

*Abhgal*  
for (Madhuranjan Pandey)  
Under Secretary, (EMR-II)  
Phone No.: - 011-25848160

Copy to:

1. The Director, SATHYABAMA INSTITUTE OF SCIENCE & TECHNOLOGY,  
CHENNAI 600119 TAMILNADU.
2. Office Copy.





REGISTERED

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH  
EXTRAMURAL RESEARCH DIVISION  
CSIR COMPLEX, PUSA, NEW DELHI - 110 012

No. 23(0034)/19/EMR-II

From : Head, Human Resources Development Group

Dated :

22/7/2019

To

DR ANOOP KUMAR MISHRA  
CTR FOR REMOTE SENS & GEO INF  
SATHYABAMA INST OF SC & TECH  
CHENNAI 600119 T N

Subject : Grants-in-aid for your scheme entitled : TOWARDS DEVELOPING NEAR REAL TIME FLASH FLOOD RISK MONITORING SCHEME OVER INDIA

Sir,

I am directed to refer to your proposal for sanction of CSIR Scheme titled above and to convey the approval of DG CSIR as per the details given below.

|     |                                                        |                     |                     |                     |
|-----|--------------------------------------------------------|---------------------|---------------------|---------------------|
| I   | Duration of the Scheme (from the date of Commencement) | 36 Months           |                     |                     |
| II  | Staff                                                  | 1-RA /SRF/JRF       |                     |                     |
| III | Contingency (per annum in ₹)                           | 1st Year : 1,00,000 | 2nd Year : 1,00,000 | 3rd Year : 1,00,000 |
| IV  | Equipment (lumpsum in ₹)                               | 3,00,000 (LS)       |                     |                     |

- The above sanction is subject to review of periodical progress of the project by expert committee.
- DG CSIR has also approved the release of the following grants for the period 01/07/2019 to 31/03/2020

| No      | Grants      | Amount (in ₹) |
|---------|-------------|---------------|
| I       | Staff       | 4,23,000      |
| II      | Contingency | 75,000        |
| III     | Equipment   | 3,00,000      |
| Total : |             | 7,98,000      |

- Sanction of grants is subject to strict compliance of the terms and conditions enclosed or as may be modified from time to time. Please go through the instructions carefully with regard to subsequent release of grants and your obligations under this sanction. The grant for the 1st installment will be sent through EFT (Electronic Funds Transfer), to the concerned authority of your institution on receipt of undertaking (form-A), non-funding certificate and EFT Transaction Request Form.

The expenditure is debitable to budget head P81102.

Funds will be released  
Subject to receipt of  
PTR of 24(350)/17-EMR-II

Yours faithfully,

*[Signature]*  
SECTION OFFICER (EMR-II)

Encl : As above

Copy to :-

- Registrar/Principal/Director Sathyabama Instl. of Sc + Tech. The utilisation of grant is subject to compliance of para-1 of the terms and conditions stated overleaf.
- Sr F&AO(EMR) alongwith FVC for first year's grant.

Chennai-  
600119  
(TN)



**TAMIL NADU STARTUP AND INNOVATION MISSION (TANSIM)**  
(A Section 8, Company under the MSME Department, Government of Tamil Nadu)

---

173/TANSIM/2023. Dated 05.10.2023

**From**

Thiru Sivarajah Ramanathan  
Mission Director and CEO  
StartupTN

**To**

Sathyabama-TBI  
Col.Dr.Jeppiaar Research Park  
Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai,  
Chennai

**Dear Sir/Madam,**

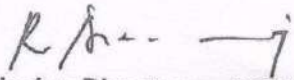
Sub. : StartupTN - Incubation Management Training Programme - Sanction Letter - Award  
of Scaleup Grant - Reg

Ref. : Scaleup Incubator Training programme conducted by StartupTN

**Greetings from StartupTN!**

We are glad to inform that "**Society of Sathyabama University - Technology Business Incubator (Sathyabama-TBI)**" is one of the fifteen Incubators from Tamil Nadu selected for the Scaleup Grant of Rs. 5,00,000/- (Rupees Five Lakh Only) towards upgradation support of the Incubation Centre.

This is in continuation of the training program conducted during the month of August, 2023, and the subsequent evaluation process. The Grant should be utilized as part of the operational expenses for Incubation Support. The Audited Utilization Certificate along with Statement of Expenditure should be submitted to this office on or before **90 days** from the disbursement of funds.

  
Mission Director and CEO  
StartupTN

---

**TAMIL NADU STARTUP AND INNOVATION MISSION**  
Entrepreneurship Development and Innovation Institute - EDII (Campus)  
Parthasarathy Koil Street, SIDCO Industrial Estate, Ekkattuthangal, Guindy, Chennai - 600 032.  
Phone: 044 - 22252084 E-mail: [ceo@startuptn.in](mailto:ceo@startuptn.in) Website: [www.startuptn.in](http://www.startuptn.in)



MoES/36/OOIS/Extra/92/2022  
Government of India  
Ministry of Earth Sciences  
Prithvi Bhawan, Lodhi Road  
New Delhi-110003

Dated: /08/2023

**ADMINISTRATIVE ORDER**

Sanction of the President is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules 1978 for implementation of the project "*Exploring fish gut associated bacteria for their aquaculture probiotic properties*" by Principal Investigator (PI), Dr. V. Gopikrishnan, Scientist-C, Centre for Drug Discovery and Development, Satyabama University, Chennai, Tamil Nadu at a total cost of **Rs. 26,28,280/- (Rupees twenty six lakhs twenty eight thousand two hundred eighty only)** for a period of three years (2023-24 to 2025-26). The details of the project are as under:

**2.0 Project Objectives:**

- To determine the distribution of fish gut-associated culturable bacteria in selected fishes collected from the West Coast of India.
- Evaluation of taxonomically distinct bacterial cultures for probiotic properties for aquaculture applications.
- Characterization and taxonomic identification of distinct bacterial cultures based on phenotypic and molecular characterization.
- Ex situ conservation of potential and taxonomically defined fish gut associated bacterial cultures.

**2.1 Programme:** Exploring fish gut associated bacteria for their aquaculture probiotic properties

**2.2 Implementing Organization:** The project will be implemented by Centre for Drug Discovery and Development, Satyabama University, Chennai, Tamil Nadu.

**2.3 Estimated Project Cost:** The total estimated cost of the project is **Rs. 26,28,280/- (Rupees twenty six lakhs twenty eight thousand two hundred eighty only)** for a period of three years (2023-24 to 2025-26). The year wise/item-wise fund requirements are as under.

**2.4 Budget requirement for the project: (Amount in Rs.)**

| S.No. | Items                                                                                  | 1 <sup>st</sup> year | 2 <sup>nd</sup> year | 3 <sup>rd</sup> year | TOTAL   |
|-------|----------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|---------|
| 1.    | Manpower- 01 JRF @ Rs.31000+27%HRA/pm for two years and Rs.35000+27%HRA for third year | 472440               | 472440               | 533400               | 1478280 |
| 2.    | Consumables                                                                            | 300000               | 300000               | 150000               | 750000  |
| 3.    | Travel                                                                                 | 40000                | 30000                | 30000                | 100000  |
| 4.    | Contingency                                                                            | 50000                | 50000                | 50000                | 150000  |
| 5.    | Consolidated Overhead Charges                                                          | 50000                | 50000                | 50000                | 150000  |
|       | Grand total                                                                            | 912440               | 902440               | 813400               | 2628280 |

*M. Daniel*  
9/8/2023



**icmr**  
INDIAN COUNCIL OF  
MEDICAL RESEARCH  
Serving the nation since 1911

भारतीय आयुर्विज्ञान अनुसंधान परिषद  
स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य एवं परिवार  
कल्याण मंत्रालय, भारत सरकार

Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

F. No. 5/8/5/ITRC/Diag/2022/ECD-1

Dated: - 21.09.2023

E-OfficeNo. 132692

To  
The Director,  
ICMR-National Institute for Research in Tuberculosis,  
Chennai – 600018

**Subject:** -Sanction and budget allotment for the 1<sup>st</sup> installment of 1<sup>st</sup> year the project Entitled,  
“Multicentric validation of phage lysin in comparison with MGIT PANTA to control normal flora  
in processed sputum specimens for rapid detection of Mycobacterium tuberculosis using BACTEC  
MGIT 960 system” under Dr. Balaji Subramanyam, National Institute for Research in Tuberculosis,  
Chennai-600018.

Sir,

1. The Director General of the Council sanctioned for the One year of the project of the above-mentioned research scheme from 15.10.2023 to 14.10.2024.
2. The Director General of the Council also sanctioned the budget allotment of **Grand Total Rs. 31,03,440/- (Rupees Thirty-One Lakhs Three Thousand Four Hundred Forty Only)** as detailed in the attached statement for one year i.e., 2023-24

**1<sup>st</sup> Installment of 1<sup>st</sup> Year Rs.27,93,096/-  
10% Hold Rs.3,10,344/-**

---

**Grand Total Rs.31,03,440/-**

3. The grant will be released to the head of the Institution either in one Installment as first and final or in two installments during the financial year on receipt of the demand in the prescribed form (Appendix -
4. While asking for the release of the installment it may be ensured that the amount for the pay and allowances of the staff who are actually in position is included. The unspent balance available as on out of the funds paid during the year 2023-24 should be intimated along with the unspent balance at the end of the project. This unspent balance at the end of the project will be adjusted against the current year's grant 2023-24 if any.
5. A separate account for the grant received and expenditure incurred shall be maintained. The account will be subjected to audit by the authorized auditors of the Institutions. In case, facilities are not available for such auditing, the account will be audited by the Council's own internal auditors. Latest by



the end of December, following the financial year for which the grant is paid, and audit certificate from the auditors to the effect that the accounts have been audited and that the money was actually spent on the objects for which it was sanctioned shall be submitted to the Council along with a list of non-expendable articles purchased out of the grant during the year. Any unspent balance would be refunded to the ICMR on termination of the scheme.

6. Further grants will be stopped unless audited statements of accounts and utilization certificate are received within a period of the year after the end of the financial year for which grant was sanctioned.

The approved duration the scheme **18 months**. The annual extension will be given after review of the work done on the scheme during the previous year.

7. The last installment of the grant will be paid on receipt of the audited certificate which should be included all the liabilities of last year, expenditure incurred before but the defrayed after termination of the scheme. The prior to which the expenditure pertains should be shown clearly.

8. The grant will not be regarded as a subvention, towards the normal work of the Institution but should be exclusively utilized for the Research activity for which it has been sanctioned.

9. Expenditure should on no account exceed the allotment sanctioned for the enquiry. Expenditure incurred over and above the sanctioned amount against one or more subheads of expenditure such as pay allowances, contingencies, etc. shall be met without reference to the ICMR by re-appropriation of savings under remaining sub-heads provided that the total expenditure incurred during the financial year.

10. No expenditure shall however, be incurred by re-appropriation of savings on items not sanctioned by the Council i.e. non-consumable equipment, stores not sanctioned by the Council Savings shall also not be re-appropriated for meeting on incurring expenditure on staff that has not been sanctioned by the Council.

11. The grant paid by the Council shall be refunded in full by the institution if and when the grantee concerned discontinues a scheme midway or does not follow the detailed technical Programme laid down and approved.

12. Receipt, realized by the project officer on behalf of ICMR project, if any, will be remitted to the Council as miscellaneous receipts and not utilized for meeting expenditure of the project.

13. All facilities for conduct of the research scheme basic equipment and ordinary laboratory chemicals, glassware, furniture and other assistance, as may be required, for the smooth working of the research scheme shall be provided by the Institute.

14. The stores purchased out of the grant of the Council shall be entered in the property stock register and presented auditors for check and endorsement. The usual forms used for these registers and all purchases made in accordance with the procedure in vogue in your institution.

15. Only such equipment for which provision has been made in the budget shall be purchased.

16. All the non-expendable articles purchased out of the funds of the Council will be the property of the Council and will not be disposed of without their concurrence and need to be returned to Council.

#### **STAFF**

17. The staff employed on the on the research schemes will not be the Council's employee but for all purposes be treated as employees of the Institute and will be subject to the rules and administrative control of the Institute and will be accordance with the normal recruitment's rules and procedures of the Institute. The duration of appointment should be strictly as per the duration of yearly sanction received from the Council and not for the whole duration of project. The term of the staff should end at the end of the year and further continuation is subject to continuation of the project by the Council.

18. The scale of pay, allowances etc. applicable to the staff of the schemes will be the same as admissible under the rules of the grantee Institution. Prior approval of the Council will however be necessary if pay higher than that admissible under the rules of the Institution is sought to be given e.g. by grant of advances increments or ad-hoc increase.

19. The Council will not be liable to bear any expenditure pension provident fund contribution and or leave salary contribution incurred or committed by the grantee and person appointed on deputation from any other organization.

#### **Report of Work Done**

21. The grant is being sanctioned on the condition that reports on the progress of work done on the research scheme will be submitted by you to the Council as and when called for. Normally a progress report of work done on the enquiry is to be submitted to the Council and when required, the enquiry may be discontinued immediately unless there is sufficient justification for non-submission of the report of work done on the research scheme.

**Publications**

22. As per Clinical Trial Agreement.

**Patents**

24. The Council shall have the right to take out patent in respect of invention/discoveries made under scheme protect financial by the Council. The Officer-in-charge or the staff employed on. ICMR scheme shall not apply or obtain patents for any invention/discovery made by them without prior approval of the Council.

25. All the patents will be registered in the name of the Indian Council of Medical Research.

**Termination of Research Scheme**

26. Prior permission of the Council shall be obtained if the investigator desires to discontinue the research scheme. The reasons for discontinuing the scheme should invariably be stated.

27. A final report is required to be submitted within one month from the date of termination of the research scheme.

28. A list (in duplicate) of non-expendable and expendable articles together with property registers and suggestions for disposal of the articles should be sent to the Council within a month from the date of termination of the research scheme.

29. The institute will maintain a **Separate Saving Bank Account** of the receipts and the expenditure incurred on the scheme and will furnish a utilization certificate and an audited statement of account pertaining to the grant.

30. **The grant shall be utilized after follows the provision laid down in GFR-2017 and T.A rules.**

31. The other terms and conditions are indicated at ICMR web site [www://icmr.nic.in](http://www://icmr.nic.in).

The receipt of this letter may please be acknowledged.

Yours Faithfully,

  
(Ved Prakash)  
Administrative Officer

**F. No. 5/8/5/6/ITRC/Diag/2022/ECD-1**

Copy together with a copy of the budget statement forwarded for information to: -

1. Dr. Balaji Subramanyam, National Institute for Research in Tuberculosis, Chennai-600018.
2. Copy together with two copies of the budget statement forwarded to the Accounts Section-V, ICMR. **RFC No.** ECD/ITRC/04/2023-2024 dated 20 Sept 2023
3. IRIS Cell (Division of P & I), ICMR.
4. Sr. Technical Officer, ECD

Administrative Officer

## Indian Council of Medical Research

### Budget Statement

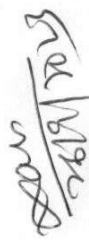
From 15.10.2023 to 14.10.2024

Project Entitled, "Multicentric validation of phage lysis in comparison with MGIT PANTA to control normal flora in processed sputum specimens for rapid detection of Mycobacterium tuberculosis using BACTEC MGIT 960 system" under Dr. Balaji Subramanyam, National Institute for Research in Tuberculosis, Chennai-600018.

| ICMR- National Institute for Research in Tuberculosis, Chennai. |                                                                         |              |           |
|-----------------------------------------------------------------|-------------------------------------------------------------------------|--------------|-----------|
| Items                                                           |                                                                         |              | 12 Month  |
| I.                                                              | Staff: Project Research Scientist I (1 post @56000 + 27% HRA =71120*12) | Rs.71,120*12 | 8,53,440  |
| II.                                                             | Recurring (Reagents & Consumables)                                      |              |           |
| 1.                                                              | MGIT Identification test reagents/kits                                  | 600 Tests    | 2,00,000  |
| 2.                                                              | MGIT 7 ml tubes                                                         | 600 Tests    | 1,50,000  |
| 3.                                                              | MGIT 960 PANTA                                                          | 600 Tests    | 50,000    |
| 4.                                                              | Plastic consumables                                                     | 600 Tests    | 1,00,000  |
| 5.                                                              | Large scale production of phage lysis (outsourcing)                     |              | 15,00,000 |
| 6.                                                              | Contingency                                                             |              | 50,000    |
| Sub-total (I+II)                                                |                                                                         |              | 29,03,440 |
| Travel                                                          |                                                                         |              | 2,00,000  |
| Total                                                           |                                                                         |              | 31,03,440 |
| Grand Total for ICMR-NIRT                                       |                                                                         |              | 31,03,440 |

RFC No. ECD/ITRC/04/2023-2024 dated 20 Sept 2023

Received Contents

  
(Ved Prakash)  
Administrative Officer



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

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[www.sathyabama.ac.in](http://www.sathyabama.ac.in)

## Minutes of the meeting

**Date of the meeting:** 10.11.2023

**Time of the meeting:** 11.30 am to 12.30 pm

**Agenda:** To discuss about a collaborative work between Centre for Drug Discovery and Development, Sathyabama Institute of Science and technology (CDDD-SIST), Chennai and ICMR- National Institute for Research in Tuberculosis, Chennai

The meeting was held in person on 10<sup>th</sup> November 2023 from 11.30 am to 12.30 pm at Seminar Hall, Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology. The following members attended the meeting

- Dr. M. Radhakrishnan Professor, CDDD-SIST.
- Dr. Krupakar Parthasarathy Associate Professor, CDDD-SIST
- Dr. Balaji Subramanyam Technical Officer-B, ICMR-NIRT
- Dr Michael Prem Kumar Technical Officer, ICMR-NIRT
- Dr Vignesh Sounderrajan ICMR RA III
- Dr Sam Ebenezer.R
- Ms. Sudhanarayani S Rao
- Ms Ranjini S

The main purpose of this meeting was to initiate a collaborate work between the two institutes for two separate projects.

**Agenda 1:** Large Scale Production of a Lysin (Phage Protein)

**Agenda 2:** LRP Assay and Evaluation for Clinical Samples

### Agenda 1

1. The BL21-clone with the lysin gene has been optimised at ICMR- NIRT and will be provided to Sathyabama Institute of Science and Technology.
2. With the provided specification, an initial batch of lysin production and purification will be carried out at SIST and validated using Western Blot. The large-scale production will be scaled up using the 10L fermenter in multiple batches.
3. The initial requirement of the lysin protein is approximately 10mg in the first batch which will be validated at ICMR-NIRT with Sputum samples.



4. The final deliverable of purified lysin protein is 1g which is to be delivered within a timeline of three months.
5. The necessary consumables will be procured by ICMR-NIRT and directly shipped to the CDDD - Sathyabama Institute of Science and Technology.
6. For this work, one manpower will be recruited by ICMR-NIRT and will be deputed at CDDD as per work requirement.

## **Agenda 2**

1. For the Second part of the project, clinical TB isolates (Approximately 400 samples) will be provided by ICMR-NIRT which has to be evaluated for LRP Assay.
2. The necessary consumables will be procured by ICMR-NIRT and directly shipped to the CDDD-Sathyabama Institute of Science and Technology.
3. Initial training will be provided by ICMR-NIRT technical officer for the LRP Assay to the SIST Staff member.
4. It is mandatory to get a prior ethical clearance at the Sathyabama Institute of Science and Technology for handling of the clinical samples.
5. All the samples will be handled in Biosafety BSL-2+ Lab at Sathyabama Institute of Science and Technology.

Members from NIRT also informed that authorship will be given to 2 persons (maximum of 3 persons) will be given to Sathyabama, when any publication coming out of this collaborative work.





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कल्याण मंत्रालय, भारत सरकार

Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

No.3/1/3/Clinical Training/HRD/2023 (115)

Dated: 07.03.2024

To,

**Dr. Krupakar Parthasarathy**  
Scientist E  
Translational Immunology and Vaccine Research Lab,  
Centre for Drug Discovery and Development,  
Sathyabama Institute of Science and Technology,  
Chennai-600119.

**Subject: Workshop on "Hands on training & Workshop on Flowcytometry and cell Sorting for Clinical and Translational Research applications " to be held on 22<sup>nd</sup> to 24<sup>th</sup> February, 2024 at Sathyabama Institute of Science and Technology, Chennai -reg**

Dear Sir,

With reference to your application on the above mentioned subject, we are pleased to inform you that your proposal has been evaluated by the Expert Committee of ICMR and has been recommended for the financial support of Rs. 2,00,000/- (Rupees Two Lakhs only) to meet the expenditure for organizing the workshop to be held on 22<sup>nd</sup> to 24<sup>th</sup> February, 2024 at Sathyabama Institute of Science and Technology, Chennai. You are requested to submit the enclosed proforma of formal bill and Mandate form (hard copies) duly filled in with your details along with cancelled cheque for remitting the financial support of Rs. 2,00,000/- The financial support is contingent upon adherence to the guidelines outlined in the provisions laid down in GFR-2017 and T.A. rules.

You are required to send the Utilization Certificate (UC) along with Statement of Expenditure (SoE) (one original & one xerox copy), Audit report and workshop proceedings report in book, souvenir/abstract summary report (Only in the prescribed format given on ICMR website) within one month of release of the grant by the ICMR. The unspent balance, if any, from the sanctioned amount of Rs.2,00,000/- should be refunded to ICMR by Cheque/DD in favour of Director General, ICMR, New Delhi.

You are requested to add a 20 min talk by Head, Division of HRD on ICMR-DHR Programs on Research Capacity Strengthening so as to disseminate and create awareness amongst the medical and non-medical students and faculty and researchers.

This issues with the approval of the Competent Authority of ICMR.

Yours faithfully

*Awasan*  
7/3/24

Administrative Officer -HRD

Enclosures:

1. Formal bill
2. Mandate form
3. Utilization Certificate along with SoE ( two copies of each)





**Federation of  
Indian Chambers  
of Commerce and Industry**

Federation House  
Tansen Marg  
New Delhi-110001  
T : +91 11 23738760 (11 lines)  
F : +91 11 23320714 / 23721504  
E : [ficci@ficci.com](mailto:ficci@ficci.com)  
W : [www.ficci.in](http://www.ficci.in)  
CIN : U99999DL 1956NPL002635  
ISO 9001 : 2015 Certified

**Sumeet Gupta**

Assistant Secretary General

**File No. - RTF/2022/000213**

**Dated: 13/12/2023**

**ORDER**

On behalf of Department of Science & Technology (Govt of India), sanction of Federation of Indian Chambers of Commerce and Industry (FICCI) is hereby accorded for award of ASEAN – India Research & Training Fellowship (AIRTF) under ASEAN-India Science & Technology Development Fund of Govt. of India to Mr. Maheswaran Solayappan, AIMST University, Malaysia for a period of 4 months starting from 02<sup>nd</sup> January 2024 to 30<sup>th</sup> April, 2024, as per the details given below –

| Research Topic                                                                                                                                                                                      | Name of the awardees                                   | Indian Host Institute and duration of the Fellowship                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Elucidating the offset effects of crispr-induced knockout of tribbles gene using zebrafish as excellent in vivo models in treating acute myeloid leukemia.,<br><br>Biological and Medical Sciences. | Mr. Maheswaran Solayappan, AIMST University, Malaysia. | Dr. S. Kumaran, Scientist C, Sathyabama Institute of Science and Technology, Sathyabama University, Chennai |

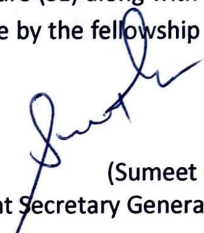
The break- up of estimated expenditure is indicated as below-

| S. No. | Items of expenditure                                                                                                                                                                                                                                                                                            | Amount                |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| i.     | Fellowship amount @Rs. 60,000/- per month for 4 months (all inclusive of accommodation and food etc )                                                                                                                                                                                                           | Rs. 2,40,000/-        |
| ii.    | International airfare from the nearest international airport from the place of employment and back by lowest economy class and subject to actuals.                                                                                                                                                              | Rs. 70,000/-          |
| iii.   | One time research contingency grant for research expenses, airport transfers, visa fee (if any), domestic travel etc.<br><b>Note: 75% of the one-time grant will be transferred to host institute at the start of the fellowship, and remaining 25% on submission of the completion report to DST and FICCI</b> | Rs. 26,667/-          |
| iv.    | Host Institute overhead charges @Rs. 2500/- per month for 4 months                                                                                                                                                                                                                                              | Rs. 10,000/-          |
|        | <b>Total</b>                                                                                                                                                                                                                                                                                                    | <b>Rs. 2,76,667/-</b> |

The total amount of Rs. 2,70,000/- be released to Sathyabama Institute of Science and Technology, Sathyabama University, Chennai. The details of the designated bank account of Sathyabama Institute of Science and Technology, Sathyabama University, Chennai are attached.

The award of this fellowship is subject to the following conditions-

- i. The air ticket for international travel shall be arranged by FICCI by lowest economy class by shortest route on receipt of travel itinerary from fellowship awardees. The fellowship amount sanctioned at (i) and (iii) above shall be released and kept at the disposal of the Indian host University i.e., Sathyabama Institute of Science and Technology, Sathyabama University, Chennai for incurring the expenditure.
- ii. No re-appropriation of funds from one sub-head to another is allowed.
- iii. Submission of Utilization Certificate (UC) and a Statement of Expenditure (SE) along with refund of un-spent balance amount and the technical report of the work done by the fellowship holder within one month of completion of the fellowship period.

  
(Sumeet Gupta)  
Assistant Secretary General, FICCI

To,

1. Dr. Sulakshana Jain, Scientist E, International Multilateral & Regional Cooperation (IMRC), Department of Science & Technology (DST)
2. Mr. Vishal Khanna, Deputy Director, FICCI (AIRTF Secretariat)
3. Mr. Maheswaran Solayappan, AIMST University, Malaysia.

**Copy to:**

1. Dr. S. Kumaran, Scientist C, Sathyabama Institute of Science and Technology, Sathyabama University, Chennai
2. Head (IMRC), DST, New Delhi-110016
3. Chief Financial Officer, FICCI
4. Sanction folder/file

  
(Sumeet Gupta)  
Assistant Secretary General, FICCI





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## MANDATE FORM

ELECTRONIC CLEARING SERVICE (CREDIT CLEARING) REAL TIME GROSS  
SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS

### A. DETAILS OF BANK ACCOUNT HOLDER:-

|                            |                                                                     |
|----------------------------|---------------------------------------------------------------------|
| NAME OF THE ACCOUNT HOLDER | Sathyabama Institute of Science and Technology - Research           |
| COMPLETE CONTACT ADDRESS   | Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119, Tamil Nadu   |
| TELEPHONE NUMBER/FAX/MAIL  | 044-2450 3065/ 044- 2450 3814<br>+919444447783/ vc@sathyabama.ac.in |

### B. BANK ACCOUNT DETAILS (GOVERNMENT BANK AND SAVING ACCOUNT ONLY):

|                                                                               |                                                                                                               |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| BANK NAME                                                                     | INDIAN BANK                                                                                                   |
| BRANCH NAME WITH COMPLETE ADDRESS, TELEPHONE NUMBER AND EMAIL                 | Sathyabama Institute of Science and Technology Branch, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119. |
| WHETHER THE BANK IS COMPUTERISED?                                             | YES                                                                                                           |
| WHETHER THE BANK IS RTGS ENABLED? IF YES, THEN WHAT IS THE BRANCH'S IFSC CODE | IDIB000S201                                                                                                   |
| IS THE BRANCH IS ALSO NEFT ENABLED?                                           |                                                                                                               |
| TYPE OF BANK ACCOUNT (SB/CURRENT/CASH CREDIT )                                | Savings Account                                                                                               |
| COMPLETE BANK ACCOUNT NUMBER (LATEST)                                         | 6089858032                                                                                                    |
| MICR CODE OF BANK                                                             | 600019229                                                                                                     |

DATE OF EFFECT:-

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect I would not hold the user Institution responsible. I have read the option invitation letter and agree to discharge responsibility expected of me as a participant under the scheme.

Date: 14-07-2023

Signature of Customer

Certified that the particulars furnished above are correct as per our records.

(Bank's Stamp)

Date : 14-07-2023

Signature of Bank Manager

Please attach a photocopy of cheque along with the verification obtained from the bank. In case your Bank is presently not "RTGS Enabled", then upon its up gradation to "RTGS Enabled" branch, please submit the information again in the above proforma to the Department at earliest.



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कल्याण मंत्रालय, भारत सरकार

Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

File No.17x(3)/Adhoc/86/2022-ITR

Dated: 18.01.2023

To,

The Registrar,  
Sathyabama Institute of Science and Technology,  
Jeppiaar Nagar, Rajiv Gandhi Road,  
Chennai-600119, Tamil Nadu.

**Subject:-**Sanction of Budget allotment for the ICMR Ad-hoc Project entitled "Bioinert/Superhydrophobic Coating – A Better Alternative for Excessive Bone Overgrowth Protection on Removable Implant Devices" under **Dr Gobi Saravanan Kaliaraj**, Scientist C, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Road, Chennai-600119.

Sir/Madam,

The Director General of the Council sanctions the above mentioned project initially for a period of **one year** i.e. from **01<sup>st</sup> Feb, 2023** to **31<sup>st</sup> Jan, 2024** subject to extension up-to total duration specified in para (3) below.

The Director General of the ICMR also sanctions the budget allotment of **Rs. 10,31,613/- (Rupees Ten Lakh Thirty One Thousand Six Hundred Thirteen Only)** as detailed in the attached statement for the period **01<sup>st</sup> Feb, 2023** to **31<sup>st</sup> Jan, 2024**.

First & final Installment of grant-in-aid of **Rs. 10,31,613/-** for the 1st year will be released out of the first year budget of **Rs. 10,31,613/-**. The payment of the grant will be made in one installment in the name of **SATHYABAMA UNIVERSITY-- RESEARCH ACCOUNT** through **RTGS Bank Account Number: 6089858032, IFSC Code No. IDIB000S201, MICR code of bank 600019229, Indian Bank, Sathyabama Institute of Science and Technology Branch, Jeppiaar Nagar, Rajiv Gandhi Road, Chennai-600119.** (A copy of Mandate Form & cancelled cheque are enclosed).

1. The first year grant will be paid generally as soon as report regarding the commencement of the project and appointment of the staff is received by the Council. The demand for payment of the subsequent installment of the grant should be placed with the Council in advance.
2. The staff appointed on the project should be paid as indicated in the attached budget statement.
3. The approved duration of the research scheme is **Two years**. The annual extension will be given after review of the work done on the research scheme during the previous year.
4. Five copies of the annual progress report of work done be submitted to the Council every year after completion of ten months of the project. Failure to submit the report in time may lead to termination of the project.

Contd.....2/-





5. The Institute will maintain a separate saving bank account of the receipts and the expenditure incurred on the research scheme and will furnish a utilization certificate and an audited statement of the account pertaining to the grant.
6. UTR no. will be available at <https://dbt.icmr.org.in>. The e-bill no. for your project grant is 230931.
7. The grant will be utilized after following provision laid down in GFR-2017 and TA rules.
8. The other terms and conditions are indicated in Annexure-1 and on the website of ICMR ([www.icmr.nic.in](http://www.icmr.nic.in), <https://epms.icmr.org.in/>) for Guidelines and operation of project for Grantees of ICMR's Research Projects.

The receipt of this letter may please be acknowledged.

Yours faithfully,

*Swason*  
18/1/23  
Administrative Officer

**Copy together with a copy of the budget statement forwarded for information to:**

1. Dr Gobi Saravanan Kaliaraj, Scientist C, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Road, Chennai-600119.
2. Copy together with copy of the budget statement forwarded to Accounts Section-V, ICMR for information and necessary action. The expenditure on the account may be met from the provision made for Division of ITR for Ad-hoc project on grant-in-aid basis in the budget of the Council for the financial year 2022-23.
3. IRIS cell, ICMR, ID.No.2021-13654  
RFC No. (P-20) ITR/Adhoc/67/2022-23 Dt. 17.01.2023



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कल्याण मंत्रालय, भारत सरकार  
Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

No. 6/9-7(328)/2023/ECD-II

Dated: 25/01/2024

To,

The Registrar  
Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Road  
Chennai - 600119  
Tamil nadu

**Subject:-Sanction and budget allotment for the New Schemes Entitled, "Exploring temperature and salinity tolerant mosquitoes along the coastal Tamil Nadu, and its influence on mosquito-borne disease dynamics" Under Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology Jeppiaar Nagar, Rajiv Gandhi Road Chennai – 600119**

Sir,

In partial modification to on letter of even number dated: 13/10/2023

The Director General of the Council sanctions the above mentioned research scheme initially for a period of **2 year** subject to extension up to the total duration specified in para 3(3) below.

The Director General of the Council also sanctions the budget allotment of **Rs.33,37,356/- (Rupees Thirty Three Lakh Thirty Seven Thousand Three Hundred Fifty Six Only)** as detailed in the attached statement for the period w.e.f **01.11.2023** year ending on **31.10.2024** during the current financial year **2023-24**.

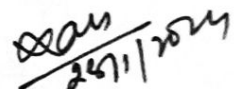
The grant-aid will be given subject to the following conditions:-

1. The payment of the grant will be made in lump-sum to the Head of the Institution. The first installment of the grant will be paid generally as soon as a report regarding the commencement of the project and appointment of the staff is received by the Council. The demand for payment of the subsequent installment of the grant should be placed with the Council in the prescribed Performa attached.
2. The staff appointed on the project should be paid as indicated in the budget statement attached.
3. The approved duration of the scheme is for **3 Years**. The annual extension will be given after review of the work done on the scheme during the previous year.
4. Fifteen copies of the Annual Progress Report of work done be submitted to the Council every year after completion of ten months of the project. Failure to submit the report in time may lead to termination of the project.



5. The institute will maintain a **Separate Saving Bank Account** of the receipts and the expenditure incurred on the scheme and will furnish a utilization certificate and an audited statement of account pertaining to the grant.
6. The grant shall be utilized after following provision laid down in GFR-2017 and TA rules.
7. The other terms and conditions are indicated in the website of ICMR ([www.icmr.nic.in](http://www.icmr.nic.in)) for "Guidelines for operation of projects for Grantees of ICMR's Extramural Research Projects". The receipt of this letter may please be acknowledged.
8. You are advised to seek concurrence of the council before disseminating the findings to journal, media or repositories."

Yours faithfully,

  
(Ved Prakash)  
Administrative Officer

**No. 6/9-7(328)/2023/ECD-II**

**Copy to:-**

1. Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Road Chennai – 600119, Tamil Nadu.
2. Copy together with a copies of the budget statement forwarded to the **Accounts Section-V, ICMR** for information and necessary action.  
**RFC No.ECD/ARS/4606/2023-2024/dt-31-10-2023**
3. Mrs. Vandana, Sr. Technical Officer-II, ICMR
4. IRIS ID No- 2022-17059

Administrative Officer

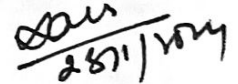
**BUDGET for the 1<sup>st</sup> year**  
**Period From 01.11.2023 to 31.10.2024**

“Exploring temperature and salinity tolerant mosquitoes along the coastal Tamil Nadu, and its influence on mosquito-borne disease dynamics” Under Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology Jeppiaar Nagar, Rajiv Gandhi Road Chennai- 600119, Tamil Nadu.

**BUDGET RECOMMENDED**

| S.No. | Staff                                                                  | 1 <sup>st</sup> Year |
|-------|------------------------------------------------------------------------|----------------------|
| 1.    | Project Research Scientist -II @ Rs 67,000/- + 27% HRA=85,090/-p.m     | 10,21,080/-          |
|       | Project Technical Support-III (TWO)@ Rs 28,000/- + 27% HRA=35,560/-p.m | 8,53,440/-           |
|       | <b>Total</b>                                                           | <b>18,74,520/-</b>   |
| 2.    | <b>Recurring</b>                                                       |                      |
|       | <b>Contingency /Consumables</b>                                        |                      |
|       | Chemicals and Consumables                                              |                      |
|       | Glass wares                                                            | 8,00,000/-           |
|       | Sanger sequencing and /or NGS outsourcing                              | 2,50,000/-           |
|       | Stationeries                                                           | 1,50,000/-           |
|       | <b>Total</b>                                                           | <b>20,000/-</b>      |
| 3.    | <b>Travel</b>                                                          | <b>12,20,000/-</b>   |
| 4.    | <b>Overhead Charges @ 3%</b>                                           | <b>1,50,000/-</b>    |
|       | <b>Total 1+2+3+4</b>                                                   | <b>33,37,356/-</b>   |

Yours faithfully,



(Ved Prakash)  
Administrative Officer

**No. 6/9-7(328)/2023/ECD-II**  
**RFC No.ECD/ARS/4606/2023-2024/dt-31-10-2023**  
**IRIS ID No-2022-17059**



**icmr**  
INDIAN COUNCIL OF  
MEDICAL RESEARCH  
Serving the Nation since 1911

भारतीय आयुर्विज्ञान अनुसंधान परिषद  
स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य एवं परिवार  
कल्याण मंत्रालय, भारत सरकार

Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

No 6/9-7(328)/2023/ECD-II

Dated: 23/01/2024

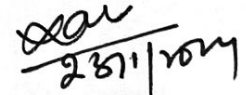
**Subject:-**Payment of 1<sup>st</sup> & Final installment for the 1<sup>st</sup> Year grant-in-aid for the research scheme entitled:- "Exploring temperature and salinity tolerant mosquitoes along the coastal Tamil Nadu, and its influence on mosquito-borne disease dynamics" Under Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology Jeppiaar Nagar, Rajiv Gandhi Road Chennai- 600119, Tamil Nadu.

### MEMORANDUM

The Director-General, ICMR sanctions the payment of **Rs.4,39,522/- (Rupees Four lakh thirty nine thousand five hundred twenty two only)** for the 1<sup>st</sup> Year grant for incurring expenditure in connection with the above mentioned research scheme. The amount **Rs.4,39,522/-** may be debited in the provision of **Rs.4,39,522/-** made for the above mentioned research scheme for the current financial year-2023-24.

A formal bill for **Rs.4,39,522/-** is sent herewith for payment by **RTGS** to **Sathyabama Institute of Science and Technology Jeppiaar Nagar, Rajiv Gandhi Road Chennai- 600119.**

Yours faithfully,

  
23/01/2024

(Ved Prakash)

Administrative Officer

#### Accounts Section, ICMR.

1. Dr. Amit Kumar, Scientist-D, Sathyabama Institute of Science and Technology Jeppiaar Nagar, Rajiv Gandhi Road Chennai – 600119, Tamil Nadu.
2. Copy together with a copies of the budget statement forwarded to the Accounts Section-V, ICMR for information and necessary action.  
RFC No.ECD/ARS/4606/2023-2024/dt-31-10-2023
3. Sr. Technical Officer-II, ICMR
4. IRIS ID No- 2022-17059

Administrative Officer

वी. रामलिंगस्वामी भवन, पोस्ट बॉक्स नं. 4911,  
अंसारी नगर, नई दिल्ली - 110 029, भारत  
V Ramalingaswami Bhawan, P.O. Box No 4911,  
Ansari Nagar, New Delhi - 110 029, India

Tel: +91-11-26588895 / 26588980 / 26589794  
+91-11-26589336 / 26588707  
Fax: +91-11-26588662 | icmr.nic.in

## **Association for Tropical Biology and Conservation (ATBC) Seed Research Grant Terms and Conditions**

The **ATBC Seed Research Grant** is subject to the following terms and conditions:

1. Funds should be used within one year (12 months) of being received. If you require an extension, please contact the [Chair of the ATBC Grants and Awards Committee](#).
2. Grant recipients will receive their awards as wire transfers to their bank of choice. ATBC will cover any bank fees associated with sending funds to recipients. Awardees can use their awarded funds to cover bank fees associated with receiving it on their end, if receipts are kept and submitted at the end.
3. **Seed Research Grant funds can be used for travel, lodging, and/or other research related expenses** (If you are unsure whether an expense is “research-related” you can confirm this by emailing the [Grants and Awards Committee Chair](#), **prior** to incurring the expense. Research funds **cannot** be used to pay for permanent equipment and items or services such as clothing, footwear, phone charges, laundry, gifts for informants/interviewees, toiletries, alcohol, nor tobacco products.
4. **Financial record keeping and reporting:**
  - a. You are required to submit itemized **receipts for each of your expenses**. If necessary, use a blank generic receipt book for those purchases for which an official receipt is not available. Make sure to obtain a signature from the vendor if you use a generic receipt.
  - b. All receipts should be glued to a blank sheet of paper, scanned (highest quality possible), organized by categories (i.e., lodging, transportation, etc.) and combined into ONE PDF file.
  - c. Please attach a short table with description of amounts (USD converted – see instructions in item 5) per category as a cover sheet to the PDF with scanned receipts.
  - d. Briefly translate each receipt and include the amount in US dollars and a copy of the conversion page (you can use any currency converter available for free online, such as [www.oanda.com](http://www.oanda.com)).
  - e. If you do not spend the full amount of your grant or if you are unable to provide receipts for all expenses, you may be required to reimburse ATBC.
5. You are responsible for obtaining visas and other travel authorizations, scientific research permits, and any other governmental and non-governmental permissions, including permissions from local sponsoring organizations and institutional review boards from the country where you will be conducting your research.
6. You are required to comply with all national and international laws applicable to your home country and the country or countries where your research is conducted. This includes any and all travel bans or restrictions, including public health-related requirements issued in your home country and in the country or countries where your research will be conducted. All research should abide by the [ATBC Resolution on Diversity, Equity, and Inclusion](#).
7. **Reporting:** Students are required to submit a one-paragraph summary; a 2-3 pages **academic report** including research findings, challenges, and at least 2 high-quality images, generally within a year of having received the funds. You will receive an email message a few months prior to the due date for the report giving you specific instructions for submission.



8. Please acknowledge the **ATBC Seed Research Grant** in any published or presented work resulting from the research funded by it, and please include a list of published work in your academic report (it can be in an extra page).
9. By signing this document, and unless we are otherwise advised at the time of report submission and for good cause, you give permission for ATBC to post your name, research project title, submitted academic report, and photos to its website and to disseminate it through its social media accounts (Facebook and Twitter).
10. **By signing below, you agree to the above conditions regarding receipt of the ATBC Seed Research Grant** and acknowledge that ATBC is not employing you, or otherwise directing your research substance and methods, but merely providing a small grant to defray all or some of the expenses associated with your research. Should you fail to abide by these conditions, ATBC reserves the right to require full reimbursement of the funds provided.



\_\_\_\_\_  
Signature of Recipient

01-07-2023

\_\_\_\_\_  
Date

KUNJULAKSHMI K

\_\_\_\_\_  
Name of Recipient



Prakash Sanjeevi <prakash.s1311@gmail.com>

---

## The Habitats Trust Grants 2023 - Seed Grant Application THT20230615093317

---

grants@thehabitatstrust.org <grants@thehabitatstrust.org>

Fri, Jul 28, 2023 at 5:47 PM

To: prakash.s1311@gmail.com

**Dear Applicant,**

Greetings from The Habitats Trust!

The Habitats Trust is delighted and would like to congratulate you on being selected as the Recipient of the **THT Seed Grant 2023!**

We welcome you to our network of partners working across the country towards a common cause of conserving India's diverse habitats and threatened species. Please accept our warm wishes for your success through this highly competitive process.

Our team will be in touch with you to finalise the MoU. Thank you for your support and we look forward to a long and fruitful association!

With best wishes,

**The Habitats Trust**

[www.thehabitatstrust.org](http://www.thehabitatstrust.org)

FILE NO. SUR/2022/005552  
**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**  
(A statutory body of the Department of Science & Technology, Government of India)

Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 07 November, 2023

**ORDER**

Subject: Financial Sanction of the research project titled **“DEVELOPMENT AND FABRICATION OF ADVANCED ELECTRODES ARCHITECTURES FOR EFFICIENT HYDROGEN PRODUCTION USING SOLID OXIDE ELECTROLYSIS CELLS”** under the guidance of Dr. S AJITH KUMAR, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology , Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119 - Release of 1st grant.

Sanction of **Science and Engineering Research Board (SERB)** is hereby accorded to the above mentioned project at a total cost of **Rs. 2085600/-** (Rs. Twenty Lakh Eighty Five Thousand Six Hundred Only) with break-up of **Rs. 0/- under Capital (Non-recurring) head** and **Rs. 2085600/- under General (Recurring) head** for a duration of 36 months. The items of expenditure for which the total allocation of **Rs. 2085600/-** has been approved are given below:

The following budget may be considered for **Sathyabama Institute Of Science And Technology (Deemed To Be University) , Jeppiaar Nagar, Rajiv Gandhi Salai**

| S. No    | Head                                                                                                                                                                        | Total (in Rs.)         |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>A</b> | <b>Non-recurring</b>                                                                                                                                                        |                        |
| 1        | Equipment                                                                                                                                                                   | 0                      |
| A'       | Total (Non-Recurring)                                                                                                                                                       | 0                      |
| <b>B</b> | <b>Recurring Items</b>                                                                                                                                                      |                        |
| 1        | Recurring - I : (Research Personnel -> Project Associate-I)<br>Recurring - II : ( Consumables, Travel, Contingencies)<br>Recurring - III : Scientific Social Responsibility | 1116000<br>780000<br>0 |
| 2        | Recurring - IV : (Overhead Charges)                                                                                                                                         | 189600                 |
| B'       | Total (Recurring)                                                                                                                                                           | 2085600                |
| <b>C</b> | <b>Total cost of the project (A' + B')</b>                                                                                                                                  | 2085600                |

2. Sanction of the **SERB** is also accorded to the payment of **Rs. 695000/-** (Rupees Six Lakh Ninety Five Thousand only) under 'Grants-in-aid General' to **Vice Chancellor, Sathyabama Institute Of Science And Technology (Deemed To Be University) , Jeppiaar Nagar, Rajiv Gandhi Salai** being the first installment of the grant for the year 2023-2024 for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER)

This release is being made under State University Research Excellence (SERB SURE). (PAC SERB SURE)

4. The Sanction has been issued to Sathyabama Institute Of Science And Technology (Deemed To Be University) , Jeppiaar Nagar, Rajiv Gandhi Salai with the approval of the competent authority under delegated powers on 09 October, 2023 and vide Diary No. SERB/F/7555/2023-2024 dated 11 October, 2023

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ( [www.serb.gov.in](http://www.serb.gov.in)).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 90,000 each should be spent for travel and contingency.

8. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

10. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

11. The release amount of Rs. 695000/- (Rupees Six Lakh Ninety Five Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

|                        |                                                                                                                                    |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| PFMS Unique Code       | SU                                                                                                                                 |
| Account Name           | Sathyabama Institute of Science and Technology - RESEARCH                                                                          |
| Account Number         | 6089858032                                                                                                                         |
| Bank Name & Branch     | INDIAN BANK Indian Bank, Sathyabama Institute of Science and Technology Branch, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600119 |
| IFSC/RTGS Code         | IDIB000S201                                                                                                                        |
| Email id of A/C Holder | vc@sathyabama.ac.in                                                                                                                |
| Email id of PI         | ajithschem@gmail.com                                                                                                               |

12. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

13. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

14. The project File no. SUR/2022/005552 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.



15. The research personnel sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any beyond the duration of the project

16. As this is the first grant being released for the project, no previous U/C is required.

17. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board.



(Dr. V Ramesh)

ms\_pac\_sure@serbonline.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R. Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                           |
| 2. | Sanction Folder, SERB, New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4. | <b>Dr. S AJITH KUMAR</b><br><b>Centre for Nanoscience and Nanotechnology</b><br><b>Sathyabama Institute of Science and Technology, Jeppiaar nagar,</b><br><b>rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119</b><br><b>Email: ajithschem@gmail.com</b><br><b>Mobile: 919043732989</b><br>(Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a> .) |
| 5. | <b>Vice Chancellor,</b><br><b>Sathyabama Institute Of Science And Technology (Deemed To Be</b><br><b>University), Jeppiaar Nagar, Rajiv Gandhi Salai</b><br>(Receipt of Grant may be intimated by name to the undersigned)                                                                                                                                                                                                                                                          |



(Dr. V Ramesh)

ms\_pac\_sure@serbonline.in



FILE NO. TAR/2022/000258  
**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**  
(A statutory body of the Department of Science & Technology, government of India)

Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 27-Jan-2023

**ORDER**

Subject: Financial Sanction under Teachers Associateship for Research Excellence (TARE) to **Dr. Gopika G, Sathyabama Institute Of Science And Technology , Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Chennai, Tamil Nadu-600119**- under the mentorship of **Dr. Sudakar Chandran**, at **Indian Institute of Technology Madras I.I.T. Post Office Chennai - 600036**- Release of 1st grant.

Sanction of **Science and Engineering Research Board (SERB)** is hereby accorded to the above mentioned grant at a total cost of **Rs. 18,30,000/- (Rs. Rupees Eighteen Lakh Thirty Thousand only Only)** for a duration of 36 months.

The date of start of the project will be 12 October, 2022 .The items of expenditure for which the total allocation of **Rs. 18,30,000/-** has been approved are given below:

The following budget is proposed for

**Sathyabama Institute Of Science And Technology , Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Chennai, Tamil Nadu-600119 (Parent)**

| Sl. No. | Budget Head    | Amount                                 |
|---------|----------------|----------------------------------------|
| 1.      | Fellowship     | Rs. 0 ( @0/- per month (consolidated)) |
| 2.      | Research Grant | Rs. 2,50,000/- per annum               |
| 3.      | Overheads      | Rs. 25,000/- per annum                 |

**Indian Institute of Technology Madras I.I.T. Post Office Chennai - 600036 (Host)**

| Sl. No. | Budget Head    | Amount                                                                                       |
|---------|----------------|----------------------------------------------------------------------------------------------|
| 1.      | Fellowship     | Rs. 60,000 ( on completion of 90 days mandatory attendance in the host institute every year) |
| 2.      | Research Grant | Rs. 2,50,000/- per annum                                                                     |
| 3.      | Overheads      | Rs. 25,000/- per annum                                                                       |

2. Sanction of the **SERB** is also accorded to the payment of **Rs. 2,75,000/- (Rupees Two Lakh Seventy Five Thousand only)** to **Sathyabama Institute Of Science And Technology , Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai , Rs. 3,35,000/- (Rupees Three Lakh Thirty Five Thousand only)** to **Indian Institute of Technology Madras I.I.T. Post Office Chennai - 600036** being the first installment of the grant for the year 2022-2023 for implementation of the said research project.

3. The expenditure involved is debitable to

**Fund for Science & Engineering Research (FSER)**

This release is being made under Teachers Associateship For Research Excellence (TARE). (Condensed Matter Physics and Materials Science)

4. The Sanction has been issued to with the approval of the competent authority vide Diary No. **SERB/F/8316/2022-2023** dated **16 December, 2022**

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ([www.serb.gov.in](http://www.serb.gov.in)).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

8. The release amount of **Rs. 2,75,000/- (Rupees Two Lakh Seventy Five Thousand only)** will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

**Sathyabama Institute of Science and Technology , Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119 (Parent) :**

|                                    |                                                                                                                                                                                 |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PFMS Unique Code                   | SU                                                                                                                                                                              |
| Account Name                       | Sathyabama Institute of Science and Technology - RESEARCH                                                                                                                       |
| Account Number                     | 6089858032                                                                                                                                                                      |
| Bank Name & Branch                 | Indian Bank Sathyabama Institute of Science and Technology Indian Bank Sathyabama Institute of Science and Technology Branch Jeppiaar Nagar Rajiv Gandhi Salai Chennai - 600119 |
| IFSC/RTGS Code                     | IDIB000S201                                                                                                                                                                     |
| Email address of PI                | <a href="mailto:gopikag1987@gmail.com">gopikag1987@gmail.com</a>                                                                                                                |
| Email id of A/C Holder             | <a href="mailto:vc@sathyabama.ac.in">vc@sathyabama.ac.in</a>                                                                                                                    |
| Email address of concerned officer | <a href="mailto:ms_ps@serbonline.in">ms_ps@serbonline.in</a>                                                                                                                    |

The release amount of **Rs. 3,35,000/- (Rupees Three Lakh Thirty Five Thousand only)** will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Indian Institute of Technology Madras I.I.T. Post Office Chennai - 600036 (Host) :

|                        |                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------|
| PFMS Unique Code       | IITM                                                                                         |
| Account Name           | The Registrar, Indian Institute of Technology - Madras                                       |
| Account Number         | 2722101016150                                                                                |
| Bank Name & Branch     | Canara Bank IIT Madras Branch Indian Institute of Technology IIT Campus IIT Chennai - 600036 |
| IFSC/RTGS Code         | CNRB0002722                                                                                  |
| Email address of PI    | gopikag1987@gmail.com                                                                        |
| Email id of A/C Holder | registrar@iitm.ac.in                                                                         |
| Email id of Mentor     | Dr. Sudakar Chandran                                                                         |

9. Both the institutes will furnish Utilization certificate(UCs) financial year wise to the SERB and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

10. The institute will maintain separate audited accounts for the fellowship. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

11. The File no. **TAR/2022/000258** may also be mentioned in all research communications arising from the above project with due acknowledgement of **SERB**.

12. As this is the first grant for the fellowship, no previous U/C is required.

13. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "**FUND FOR SCIENCE AND ENGINEERING RESEARCH**" payable at New Delhi.

14. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

15. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.

  
(Dr. Shilpi Paul)  
Scientist F  
ms\_ps@serbonline.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to:-

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2. | Sanction Folder, SERB, New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 4. | <p>(i) Dr. Gopika G<br/>Center for Nanoscience and Nanotechnology<br/>Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119<br/>Email: gopikag1987@gmail.com<br/>Mobile: 919645037589</p> <p>(ii) Dr. Sudakar Chandran<br/>Indian Institute of Technology Madras I.I.T. Post Office Chennai - 600036</p> <p>(Start date of the project may be intimated by name to the undersigned. For guidance, terms &amp; Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a>.)</p> |
| 5. | <p>(i) Vice Chancellor,<br/>Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai</p> <p>(ii) The Director<br/>Indian Institute of Technology Madras I.I.T. Post Office Chennai - 600036</p> <p>(Receipt of Grant may be intimated by name to the undersigned)</p>                                                                                                                                                                                                                                                                |

  
(Dr. Shilpi Paul)  
Scientist F  
ms\_ps@serbonline.in





Ref: CRS/2022-23/04/900

Date: 2023-03-30

### Sanction Order

To,  
The Registrar/Principal/Financial Authority,  
Through Dr. Gopika G  
Sathyabama Institute of Science and Technology  
**Co-PI:** Dr. Subhenjit Hazra  
Sathyabama Institute of Science and Technology

**Subject: Collaborative Research Scheme(CRS) Project of UGC-DAE CSR entitle 'Development of 1T Transition Metal Di-Chalcogenides based heterostructures for efficient Hydrogen Evolution Reaction (HER)' by Dr. Gopika G and Dr. Subhenjit Hazra.**

Dear Madam/Sir,

In continuation to our sanction letter the CRS project submitted to UGC-DAE CSR by **Dr. Gopika G** and **Dr. Subhenjit Hazra** of your institution has been approved by the competent authority. The principal collaborator from UGC-DAE CSR is **Dr. Gopal M. Bhalerao**. The details of the remittance are given below:

| Student fellowship(@<br>₹14,000/- pm+HRA)    | Consumable | Contingency | Total Amount | Date of remittance | PFMS Ref. No.    |
|----------------------------------------------|------------|-------------|--------------|--------------------|------------------|
| ₹                                            | ₹30000     | ₹15000      | ₹45000       | 2023-03-30         | SBIN223102462666 |
| No overheads are available under this scheme |            |             |              |                    |                  |

This project has been approved as per the guidelines given below:

1. This is a Collaborative Research Scheme (CRS) of UGC-DAE CSR. In view of the complex and involved nature of the experiments, any publication emerging under the project must be of collaborative in nature with due consents from the scientists at UGC-DAE CSR and/or DAE centres, and in consultation with the Principal Collaborator/Coordinator. Following phrase must be included in the acknowledgement: "This work was partially/fully carried out using the facilities of UGC-DAE CSR. The authors acknowledge the financial support from UGC-DAE CSR through a Collaborative Research Scheme (CRS) project number **CRS/2022-23/04/900**."
2. This project is sanctioned for **one year** but it may be extended on yearly basis subject to a total period of three years.
3. In case the CRS project has been approved without student fellowship, it will not be possible to grant student fellowship in subsequent years as well.
4. The PI must '**Apply for an Experiment Time**' through our online user portal <https://csruserportal.com/> for utilization of each experimental facility each time.

5. The project will be reviewed at the end of each year to consider sanction and financial allocation for the succeeding year.

**6. The release of grants for the subsequent years can be made only upon receipt of funds from UGC towards the scheme. A separate sanction order will be issued for the subsequent years.**

7. At the end of the financial year (i.e. by March 31) the PI should submit:

- (i) Utilization Certificate in the format provided at our website for the amount spent and
- (ii) A Statement of Expenditure duly signed by the Registrar/Principal/competent financial authority of your university/institution to the Centre-Director of respective Centre. The release of funds for the subsequent year(s) can only be made after receiving the above documents.

8. The UGC-DAE CSR will be able to reimburse the travel expenses to Project Investigators as per rules, limited to 2nd AC train fare visiting a centre on project work. However, the student participant is permitted for a sleeper class train fare by the shortest route and is as per prevailing norms of UGC-DAE CSR.

#### **Rules for selection of a CRS project fellow**

The CRS project fellow (if approved) should be made by an open selection procedure as per UGC guidelines. The recruitment procedure should be completed within 3 months after the release of the sanction order. The details for recruitment are given below:

| # | Designation                    | Remuneration  | Qualifications                                                                                                                                                                                                                 |
|---|--------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | CRS Project Fellow (Junior) -I | ₹14,000 + HRA | M.Sc. (not earlier than 3 years) with a minimum of 55% marks in the concerned subject ( <b>for Science</b> )<br>M.E. / M. Tech. (not earlier than 3 years) 1st Class ( <b>for Engineering</b> )                                |
| 2 | CRS Project Fellow (Senior)-I  | ₹16,000 + HRA | After completion of 2 years as a <b>CRS Project Fellow (Junior) -I</b><br>+ at least one research paper in a reputed SCI journal<br>+ assessment of the student by a 3 member expert committee approved by the Centre-Director |
| 3 | CRS Project Fellow (Junior)-II | ₹31,000 + HRA | <b>Same as (1)</b><br>+ valid JEST/GATE/NET-JRF/Lectureship/UGC-CSIR NET JRF/Lectureship<br>+ Ph.D. registration of the student under the supervision of the PI at the University where PI's institute is affiliated           |
| 4 | CRS Project Fellow (Senior)-II | ₹35,000 + HRA | After completion of 2 years as a <b>CRS Project Fellow (Junior)-II</b><br>+ at least one research paper in a reputed SCI journal<br>+ assessment of the student by a 3 member expert committee approved by the Centre-Director |

1. All recruitment should be authorized by a selection committee as per rules of University/Institution in which the PI is working. The advertisement should be widely circulated electronically and a copy should be sent to the Principal Collaborator.

2. For appointing a student in the CRS project, the interview panel must be approved by the Centre-Director of the respective Centre. The PI should inform the interview schedule as least 2 weeks in advance. The entire process should be conducted in an online/hybrid mode.

3. A UGC-DAR CSR nominee along with Principal Collaborator is needed for all interviews and upgradations.

4. For all appointments, it has to be mentioned that it is on purely temporary basis and will co-terminate with the CRS project. Leave rules for the appointed fellow will be as per the host institution of PI.

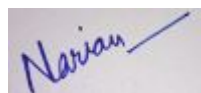
5. Appointment of student in the project is not permitted in the second or third year of the project.

6. While appointing as well as upgrading, a copy of relevant documents including CV along with educational qualification documents (incl. NET/GATE, etc.), minutes of the selection committee/upgradation committee, appointment letter, joining report etc. must be send to the Centre-Director of the respective Centre.

7. The student appointed under this project should spend a substantial amount of time at UGC-DAE CSR.

8. Contingency fund to be utilized for computational work, purchase of stationary and other consumables pertaining to the concerned project. No grant is allocated for any capital equipment/asset.

Copy to: Through User Portal to: Director, concerned Centre-Director, User Office, Dr. Gopika G, Dr. Gopal M. Bhalerao, AO for information.



Narian Kr.Lengay  
Administrative Officer-I  
(UGC-DAE CSR)



BALAJI DEVAKUMAR &lt;balajidevakumarcgc@gmail.com&gt;

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**UGC-DAE CSR \*\* CRS Project 2023-24\*\***

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UGC-DAE CSR <support@csruserportal.com>  
Reply-To: support@csruserportal.com  
To: balajidevakumarcgc@gmail.com

Thu, Feb 29, 2024 at 11:20 PM

## Welcome to UGC-DAE CSR

Dear Dr. BALAJI D,

Thank you for submitting the Collaborative Research Scheme (CRS) project proposal(CRS/2023-24/1284) at UGC-DAE CSR.

Your proposal was evaluated by the User Committee and it has been approved.

Your Project Sanction reference no. is: **CRS/2023-24/04/1300** .Please use this reference no for further communication.

Please login through your user account and submit your acceptance as soon as possible. After that, we will transfer the funds to your institution's bank account.

Please ignore this communication if you have already submitted your acceptance.

For any query please write to:

**Mr. Narian Kumar Lengay**

Administrative Officer-I

[nlengay@gmail.com](mailto:nlengay@gmail.com)

**0731-2463913 (Ext: 125)**

With best regards,

User Office, UGC-DAE CSR

Note: This is a system generated email. Please don't reply.





GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
**SP/YO/2021/2243 (G)**  
**(SEED)**

Technology Bhawan, New Delhi  
Dated: 02/07/2024

**Sanction Order**

**Subject:** Financial assistance for the project entitled “Biofilm engineering methods for enhancing the performance of microbial fuel cells” submitted by **Dr. SATHISH KUMAR R, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY CHENNAI, CHENNAI, CHENNAI, TAMILNADU, 600119** Release of the **First** installment regarding

Sanction of the President is hereby accorded to the approval to the above mention project at a total cost of **Rs. 26,55,899/- (Rupees Twenty Six Lakh Fifty Five Thousand Eight Hundred Ninety Nine only)** for a duration of **3 Years** . The detailed breakup of the grant for General as well as Capital Components are given below:-

**General Component : ₹ 26,09,053/-**

**Capital Component : ₹ 46,846/-**

| Items                                                                                                          | Budget Summary (in Rs.) |        |        |         |
|----------------------------------------------------------------------------------------------------------------|-------------------------|--------|--------|---------|
|                                                                                                                | Year-1                  | Year-2 | Year-3 | Total   |
| <b>1- Non-Recurring</b>                                                                                        |                         |        |        |         |
| Prototype fabrication for lab scale microbial fuel cell modules & prototype for 10 L capacity-. - 1            | 0                       | 46846  | 0      | 46846   |
| <b>Subtotal (Capital)</b>                                                                                      | 0                       | 46846  | 0      | 46846   |
| <b>2- Recurring</b>                                                                                            |                         |        |        |         |
| <b>Project Staff</b>                                                                                           | 472440                  | 472440 | 472440 | 1417320 |
| Research Associate-I-1 (Project Associate -I @ 31,000/- + 27% HRA via OM No. SR/S9/Z-05/2019 dated 10/07/2020) | 472440                  | 472440 | 472440 | 1417320 |
| <b>Consumables</b>                                                                                             | 200000                  | 200000 | 150000 | 550000  |
| <b>Contingency</b>                                                                                             | 50000                   | 50000  | 50000  | 150000  |
| <b>Travel</b>                                                                                                  | 40000                   | 40000  | 40000  | 120000  |
| <b>Overhead</b>                                                                                                | 60000                   | 60000  | 76733  | 196733  |
| <b>Field Testing/Demo/training-Data Acquisition Demo and Conducting Workshops</b>                              | 0                       | 100000 | 75000  | 175000  |
| <b>Subtotal (General)</b>                                                                                      | 822440                  | 922440 | 864173 | 2609053 |
| <b>Total Project Cost (Cap.+ Gen.)</b>                                                                         | 822440                  | 969286 | 864173 | 2655899 |

2. The sanction of the President is also accorded to the release of **Rs. 8,22,440/- (Rupees Eight Lakh Twenty Two Thousand Four Hundred Forty only)** to the “**Director/Registrar/Principal/Controller/Comptroller, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY CHENNAI**” being the **First** installment of grant as mentioned above table under “**General Component**” for the above mentioned project.

*[Signature]*  
27/7/2024

3. The expenditure involved is debitable to **Demand No. 89**, Department of Science & Technology for the year **2024-2025**:

|                      |                                                   |
|----------------------|---------------------------------------------------|
| 3425                 | Other Scientific Research(Major Head)             |
| 3425.60              | Others : (Sub-Major Head)                         |
| 3425.60.200          | Assistance to Other Scientific Bodies(Minor Head) |
| 3425.60.200.70       | Innovation,Technology Development and Deployment  |
| 3425.60.200.70.00    | Detailed Head                                     |
| 3425.60.200.70.00.31 | Grants-in-aid General                             |
|                      | (Previous: 3425.60.200.08.11.31)                  |

4. The amount of Rs. 1/- (Rupee One only) against the sanctioned amount of 8,22,440/- (Rupees Eight Lakh Twenty Two Thousand Four Hundred Forty only) will be drawn by DDO, DST and disbursed to the "CNA account of SERB in respect of Innovation,Technology Development and Deployment Scheme".

|                           |                                                     |
|---------------------------|-----------------------------------------------------|
| Name of A/C Holder        | Innovation Technology Development and Deployment    |
| Bank A/C No               | 349902010051240                                     |
| Name of the Bank & branch | Union Bank of India, Safdarjang Enclave - New Delhi |
| RTGS/IFSC code            | UBIN0534994                                         |

5. CNA shall assign/allocate the amount of Rs. 8,22,440/- (Rupees Eight Lakh Twenty Two Thousand Four Hundred Forty only) to the Director/Registrar/Principal/Controller/Comptroller, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY CHENNAI" as per details given below:-

|                           |                                       |
|---------------------------|---------------------------------------|
| Name of A/C Holder        | SATHYABAMA DST SEED SCSP STI 2021 882 |
| Bank A/C No               | 113522010000827                       |
| Name of the Bank & branch | Union Bank of India                   |
| RTGS/IFSC code            | UBIN0911356                           |

6. As per Rule 234 of GFR 2017, the sanction has been entered at S. No **95** . in the register of grants maintained in the **SEED** for the scheme **Scheme for Young Scientists and Technologists** .

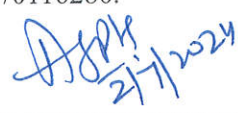
7. This issues with the concurrence of IFD vide their Concurrence Dy. No. **IFD/C/III/010724/31/01578** dated **01/07/2024**.

8. The GI will keep all the funds received in the Central Nodal Account only and shall not transfer the funds to any other account or not divert the same to Fixed Deposits/ Flexi-Account/ Multi-Option Deposit Account/ Corporate Liquid Term Deposit (CLTD) account etc. The funds released to GI shall not be parked in bank account of any other agency.

9. The GI will ensure the compliance of OM. No. F. No. **1/(18)/PFMS/FCD/2021** dated **March 9, 2022** of Department of Expenditure, Ministry of Finance.

10. The organization is registered on NGO Darpan Portal and their unique ID is **TN/2017/0116286**.

11. This sanction order is subject to the **Terms & Conditions** as annexed .

  
**Dr. AKANKSHA GUPTA**  
(Scientist - 'C')  
akanksha.g@gov.in

To,  
The Pay & Accounts Officer,  
Department of Science & Technology,  
New Delhi – 110 016.

Copy of information and necessary action to: -

1. The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, I.P. Estate, New Delhi.
2. The Financial Advisor, Integrated Finance Division, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016



3. The Internal Audit Wing, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016
4. Drawing and Disbursing Officer, DST, Cash Section. (two copies)
5. Dr. SATHISH KUMAR R, Associate Professor, Centre for Waste Management, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY CHENNAI, Chennai, Chennai, Tamilnadu - 600119
6. The Director/Registrar/Principal/Controller/Comptroller/Chief Executive Officer(CEO), SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY CHENNAI, Chennai, Chennai, Tamilnadu - 600119
7. Secretary, Science and Engineering Research Board (SERB), New Delhi ( for allocation of limits to implementing agency )
8. Head (SEED) DST
9. Sanction Folder (SEED)

  
27/1/2024

**Dr. AKANKSHA GUPTA**  
(Scientist - 'C')  
akanksha.g@gov.in





**वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद**  
**COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH**  
**मानव संसाधन विकास समूह (एचआरडीजी)**  
**HUMAN RESOURCES DEVELOPMENT GROUP (HRDG)**  
**बाह्य अनुसंधान प्रभाग (ईएमआर-II)**  
**EXTRAMURAL RESEARCH DIVISION (EMR-II)**  
**सीएसआईआर कॉम्प्लेक्स, पूसा, नई दिल्ली - 110 012**  
**CSIR COMPLEX, PUSA, NEW DELHI - 110 012**

संख्या: 03WS(024)/2023-24/EMR-II/ASPIRE

दिनांक:- 19-04-2024

**स्वीकृति आदेश/ SANCTION ORDER**

**DR. T DHARINI**  
**CENTRE FOR NANOSCIENCE AND NANOTECHNOLOGY**  
**SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY**  
**CHENNAI-600019**

Subject: Grant-in-aid & Financial Sanction of the Research Project entitled "Corrosion and Wear Resistant Behavior of Compositionally Graded NiCrYSZ Nanocomposite Coatings for Nuclear Waste Processing Applications"

महोदय,

मुझे उपरोक्त शीर्षक वाले आपके प्रस्ताव का सीएसआईआर योजना की मंजूरी के संदर्भ में आपके नीचे दिए गए विवरण के अनुसार डीजी सीएसआईआर के अनुमोदन से अवगत कराने का निर्देश दिया गया है:

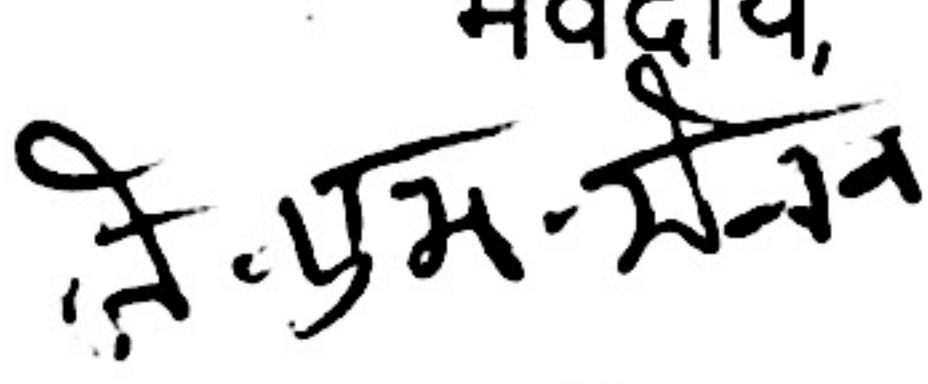
I am directed to refer to your proposal for sanction of CSIR Scheme titled above and to convey the approval of DG CSIR as per the details given below:

|     |                                                           |                                 |                                |                                |
|-----|-----------------------------------------------------------|---------------------------------|--------------------------------|--------------------------------|
| I   | Duration of the Scheme<br>(from the date of Commencement) | 36 Months                       |                                |                                |
| II  | Staff                                                     | JRF-1                           |                                |                                |
| III | Contingency<br>(Per annum in Rs.)                         | 1 <sup>st</sup> Year :235000 /- | 2 <sup>nd</sup> Year : 60000/- | 3 <sup>rd</sup> Year : 60000/- |
| IV  | Equipment (lumpsum in Rs.)<br>(E = MUFFLE FURNACE)        | Rs.424800/-                     |                                |                                |

- The above sanction is subject to review of periodical progress of the project by expert committee.
- The sanctioned scheme shall start from the date of issue of the letter or within 3 months from the date of issue of the letter or commenced as soon as some expenditure has been incurred out of the grant/date of joining of fellow, unless otherwise authorized by CSIR, failing which the scheme will be treated as withdrawn.
- The Institute should ensure to provide:
  - A certificate by the PI countersigned by the Head of the department/institution that no other aid-giving agency is funding the work proposed to be done under the scheme sanctioned by CSIR (non-funding certificate);
  - An agreement in the prescribed Form-A on non-judicial stamp paper of Rs 10/- (each page duly signed by PI);
  - Date of commencement and
  - RBI-NEFT form (Form-K) to CSIR-HRDG immediately after the receipt of sanction letter.
  - Acceptance Certificate.



4. Sanction of the grant to appointment of JRF/SRF/RA if any under this scheme is subject to the conditions as attached. Staff Stipend will be utilized from the date the Research Fellow/Associate joins duty in accordance with the rules stipulated in the terms and conditions and he/she will be paid stipend after receipt of approval of appointment from CSIR. Further, **Selection of JRF/SRF/RA should be strictly as per CSIR HRDG guidelines available on website and the sample advertisement is attached for reference. Not following the guidelines will lead to Nonformalisation of engagement of staff in the Project.**
5. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and CSIR-HRDG will have no liability to meet the fellowship and salary of supporting staff prior to formalization of selection or beyond the duration of the project.
6. "Contingency" amount may be utilized on pro-rata basis from the date of the commencement of the scheme."
7. Purchase of equipment: The proforma invoice of the supplier, with whom the order has been placed is to be furnished by PI along with the claim bill to CSIR through the Registrar/Principal/Director of the Institute upon completion of purchase formalities, in any case within 3 months from the date of receipt of the equipment grant.
8. Due acknowledgement of technical support/financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications/media releases as well as in the opening paragraphs of their Annual Reports during and after completion of the project.
9. Sanction of grants is subject to strict compliance of the terms and conditions enclosed or as may be modified from time to time. You are also required to follow the instructions /mandatory guidelines of CSIR-HRDG governing Research Schemes which are attached.
10. Funds @ 25% of the amount earmarked for the financial year in one installment will be released initially. Next installment of funds may be released after utilization of at least 75% of the funds released earlier. PI's may register institute in EAT Module on PFMS for enabling the release of grant.
11. CSIR Guidelines for Ethics in Research and in Governance attached should be followed strictly.
12. The project File no. **03WS(024)/2023-24/EMR-II/ASPIRE** may also be mentioned in all research communications arising from the above project with due acknowledgement of CSIR-HRDG.
13. All the related documents of project have to be sent to CSIR-HRDG by email to the Section Officer, EMR II at [soemr2@csirhrdg.res.in](mailto:soemr2@csirhrdg.res.in). Hard copy should follow by post invariably which should be sent to the Section Officer, Room no. 503 EMR-II, CSIR Complex, Pusa, New Delhi - 110 012.

भवदीय,  
  
(जयशंकर मेनन)  
अनुभाग अधिकारी, ईएमआर -II

**Copy to:**

1. The Director, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY CHENNAI 600019
2. Sr. DFA/DFA /FAO/SO EMR-III

Encl.: Timeline sheet, Man power draft Advertisement Circulars, EMR Bank Details ,CSIR-HRDG Guidelines, CSIR guidelines on ethics in research.



### **Obligations of the PI (Time line Sheet)**

- i) Acceptance of the grants sanctioned, an Undertaking in the prescribed form-A executed on non-judicial stamp paper of RS. 10/- each page duly signed immediately.
- ii) A certificate duly countersigned by the Head of the Department/Head of the institution that no other aid giving agency is funding your above scheme immediately.
- iii) RBI-NEFT form (Form-K) to CSIR-HRDG immediately after the receipt of sanction letter
- iv) Form G immediately after the selection of the Scholar.
- v) Communication of Date of commencement of the scheme. This should be started within 3 months from the date of issue of the letter or as soon as some expenditure has been incurred out of the grant/date of joining of fellow, unless otherwise authorized by CSIR, failing which the scheme will be treated as withdrawn.
- vi) Submission of Documents regarding Purchase of equipment: 3 months from the date of receipt of the equipment grant.
- vii) While claiming grants for the subsequent year/period the position regarding unspent balances of the previous year's grants must be mentioned head-wise in the bill failing which the same may be returned unpassed for compliance. Statement of accounts duly audited by the Account Officer and countersigned by the next higher authority in respect of the grants received and expenditure incurred with balance, if any, during the previous year should also be invariably enclosed with the bill.
- viii) Submission of Annual Progress Report to CSIR by 1st October, each year including the progress of work as on 31st Aug. (as per Form-E1) Non-receipt of this report in time will lead to the scheme being withdrawn.
- ix) Submission of Final Technical Reports in Form-F of the booklet within 3 months after completion of the work describing the original objectives of the scheme, how far these objectives have been achieved and how the results would benefit technological development or enrich the existing knowledge on the subject.
- x) Sending of copies of Research Papers published in Journals and Proceedings of Prestigious national/international conferences under this grant with due acknowledgement of CSIR support for information as and when published. The project numbers should always be mentioned in the acknowledgements.
- xi) Submission of the Audit Utilization Certificate and audited statement of accounts for the grants paid by the CSIR immediately on termination of the scheme.

**ALL INSTRUMENTS/EQUIPMENT PURCHASED OUT OF/PROVIDED BY CSIR  
EXTRAMURAL RESEARCH FUND SHOULD CARRY THE LABEL "CSIR FUNDED"**





37

**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**  
Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

**File No.58-100/Margdarshak Cell/2024-25**

**29<sup>th</sup> April, 2024**

**Sanction Letter**

**The Drawing and Disbursing Officer**  
All India Council for Technical Education  
Nelson Mandela Marg,  
Vasant Kunj, New Delhi-110070

**Sub: Release of Grants under Margdarshan Scheme during the current financial year 2024-25.**

Sir,

This is to convey the sanction of the Council for allotment of grant-in-aid of Rs. 6,00,000/- under the **"Margdarshan Scheme"** to Institute (given below), for meeting the expenditure for implementing the scheme in order to improve the quality of technical education as a whole through accreditation by providing access to the facilities available in host institute, spread awareness about various initiative of AICTE and also provide guidance and support for achieving better NIRF ranking. Overall, the Margdarshan Scheme will serve as a comprehensive framework for institutional development and accreditation enhancement in higher education.

|    |                                                                        |                                                                            |
|----|------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 1. | Name of the Beneficiary Institution : University / College / Institute | Sathyabama Institute of Science and Technology, Chennai Tamil Nadu 600 119 |
| 2. | Chief Coordinator's Name                                               | D.T.Sasipraba (VICE-CHANCELLOR)                                            |
| 3. | Grant-in-aid Sanctioned                                                | Rs. 6,00,000/-                                                             |
| 4. | Amount to be released as first instalment (40%)                        | Rs. 2,40,000/-                                                             |
| 5. | Duration                                                               | 3 Years                                                                    |

1. The sanctioned grant-in-aid is debitable to the major Head 602.18 Margdarshan Scheme General & valid for payment during the Financial Year 2024-25.
2. The amount of grant-in-aid shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the account of Principal/Director/ Registrar Sathyabama Institute of Science and Technology through RTGS.
3. The Principal/Director/Registrar of the institute and the Chief Coordinator of the project are requested to verify the correctness of the under mentioned bank account/RTGS details submitted by them along with the proposal, in which the Grant is being released:

| Institute PAN Number | Bank Name   | Bank Branch Name    | Bank Branch Address                                             | Account Holder Name | Account Type | Account Number | IFSC Code   |
|----------------------|-------------|---------------------|-----------------------------------------------------------------|---------------------|--------------|----------------|-------------|
| AAITS6572P           | Indian Bank | Sathyabama & 00S201 | OMR Road, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600 119. | Chancellor          | Saving       | 6089858032     | IDIB000S201 |

**In case of any omission, the same should be reported to AICTE immediately.**

*Raj*





Government of India  
Department of Atomic Energy (DAE)  
Board of Research in Nuclear Sciences (BRNS)

DAE COPY

Hemant Prakash Agnihotri  
Programme Officer (DIR)

BRNS Secretariat,  
316-C, CFB,  
BARC, Trombay, Mumbai - 400085  
Phone: +91-22-25593470  
Email: hemant\_brns@barc.gov.in

No: 59/14/03/2024-BRNS/ 562

Date : 29/08/2024

**OFFICE MEMORANDUM**

Sub: R/P entitled " High Durability and Flexible Polymeric Nanocomposite Material for Electromagnetic Shielding" under **Dr. Sanjeevi Prasath**, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai 600619, Tamil Nadu bearing Sanction No. 59/14/03/2024 with DIR, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for **3 years** beginning from financial year **2024-2025** with a total grant of ₹ **33,47,700/- (Rupees Thirty Three Lakh Fourty Seven Thousand Seven Hundred only)** for the project as under :

| Item of expenditure | Year 1<br>(2024-2025) | Year 2<br>(2025-2026) | Year 3<br>(2026-2027) |
|---------------------|-----------------------|-----------------------|-----------------------|
| Equipments          | 1400000               | 0                     | 0                     |
| Staff Salary - JRF  | 444000                | 444000                | 0                     |
| Staff Salary - SRF  | 0                     | 0                     | 504000                |
| Consumables         | 30000                 | 30000                 | 20000                 |
| Travel - PI         | 20000                 | 20000                 | 20000                 |
| Contingencies       | 20000                 | 20000                 | 20000                 |
| Overheads           | 100000                | 37050                 | 40800                 |
| <b>Total(INR)</b>   | <b>2014000</b>        | <b>551050</b>         | <b>604800</b>         |

Note: \* Dynamic Mechanical Analyzer

JRF salary calculated @ ₹37,000/- p.m. for first two years and on re-designation by committee on in third year as SRF @ ₹42,000/- p.m.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads (₹1,77,850/-) shall be released only on meeting the requirements specified.

- I am also pleased to convey the sanction of the President of India to incur an expenditure of ₹20,14,000/- (Rupees Twenty Lakh Fourteen Thousand only) towards grant for the year 2024-2025. (See Annex-B).
- The expenditure involved is debitable to: **03 3401 00 004 27 0231**.
- This is issued with the concurrence of the competent authority in the Department.

*[Signature]*  
29/08/24

Hemant Prakash Agnihotri

Pay & Accounts Officer, DAE, Mumbai 400001



Copy forwarded to:

1. Director of Audit, Scientific Department, AEAP, OYC, CSM Marg, Mumbai-400 001.
2. Joint Secretary (R&D), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001.
3. Vice Chancellor, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai 600119, Tamil Nadu.
4. Principal Investigator (PI): **Dr. Sanjeevi Prasath**, Sathyabama Institute of Science & Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai 600119, Tamil Nadu, Mobile 8807186033, Email sanjeeviprasath.irc@sathyabama.ac.in.

A. First year grant is being released in full along with this Sanction Letter through Pay & Accounts Officer, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai-400 001 directly. You may await a Money transfer (MT) through ECS and The amount would be credited electronically to A/C No: 6089858032, A/C Name: Sathyabama Institute of Science and Technology-Research, IFSC: IDIB000S201, Indian Bank, Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai-600119.

i) Acceptance of this sanction and the MT for the amount sanctioned for the first financial year may please be acknowledged (Form-I).

ii) A sticker of the BRNS LOGO (Copy Enclosed) should be pasted on all the items procured under the project.

iii) THIS SANCTION IS FURTHER SUBJECT TO THE CONDITIONS STIPULATED IN ANNEX (ENCLOSED), WHICH MAY BE GONE THROUGH CAREFULLY.

B. Second year Sanction Letter will be issued automatically in the month of April/May of the 2nd financial year, however, the grant will be released (unspent balance of previous year and Interest earned will be adjusted) after the PI submits the following documents to the Programme Officer DIR:

a) Claim in Form-II quoting the reference of the sanction issued for the first year.

b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.

c) Statement of Accounts (SA) as on 31st March of the preceding financial year should be updated on the website. Interest earned in previous year should be reflected in the Statement of Accounts. A printout of the same should be sent to BRNS after it is duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.

d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee, alongwith HRA CLAIM (if applicable), should be uploaded in a single pdf file under the file head "Staff Appointment Details". In addition, the details of the appointed staff should also be updated in the available menu.

e) The inventory of equipment also should be updated in the menu, besides uploading the purchase order of the items costing more than 1 Lakh.

f) A One Page report on the progress of work during first year.

C. Third and subsequent years (if any) the Sanction Letter and the grant will be released on fulfillment of the following requirements:

i) Renewal/ Extension Application: Principal Investigator (PI) is required to upload by January 15 a pdf copy of duly signed renewal/ extension application in the prescribed form-(PRA) after logging into his/her account at <https://brns.res.in>. All applications received shall be examined by experts from the field and PIs may be invited to a Technical Programme Discussion Meeting (TPDM). Renewal of the project will be based on the recommendations of the TPDM, Advisory Committee and the Board.

ii) Sanction Letter: If the progress is found to be satisfactory the renewal sanction for the year will be issued in the beginning of that financial year in April/May.

iii) Claim: On receipt of the renewal sanction, the PI shall claim the funds sanctioned by submitting the following documents to Programme Officer DIR, 316-C, Common Facility Building, BARC, Trombay, Mumbai-400085:

a) Claim in Form-II quoting reference of the renewal sanction.

b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant. should be reflected in the Statement of Accounts.

- c) Statement of Accounts (SA) as on 31st March of the preceding financial year including the amount of Interest earned in previous year and duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
- d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee.
- e) An inventory of equipment and the copy of Purchase order of equipments costing more than 1 Lakh.
- D. At the end of Terminal Year the Settlement Grant and the Balance 7.5% Overheads will be released on fulfillment of the following requirements:
- a) Claim Form-II if any,
- b) The final Consolidated Statement of Accounts (SA) and Consolidated Utilization Certificate duly audited by an external Chartered Accountant or the Statutory (Govt.) Auditor. It is mandatory to include the amount of bank interest earned on the grant released into the SA.
- c) Final Consolidated Progress Report and a brief report as per format given in Form-VII .
5. AAO (Cheque), DAE, Anushakti Bhavan, CSM Marg, Mumbai - 400 001 – With a request that the amount granted for the first year of the project may be released.
6. **Member Secretary (DIR)** : Dr. Nagaraj Alangi, ms9.brns@barc.gov.in; Ph:+91-02225594396
7. **Co-Investigator (CI)** : Brijitta.J, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai- 600119, Email : brijitta@sathyabama.ac.in, Mobile :6374918795
8. **Project Collaborator (PC)**: Dr. Nagaraj Alangi, ATLAD, BARC, Trombay, Mumbai 400085, Email : ms9.brns@barc.gov.in, Phone +91-22-25594396

  
25/8/24

**Hemant Prakash Agnihotri**

Note:

1. Please quote the Sanction Number **59/14/03/2024** in all your correspondence with BRNS

बिल स Bill No:

34035

तिथि

28/08/2024

Countersigned for ₹20,14,000/- Rupees Twenty Lakh Fourteen Thousand only.

अनुमोदन

Approved



कार्यक्रम अधिकारी

Programme Officer DIR

परमाणु ऊर्जा विभाग

DEPARTMENT OF ATOMIC ENERGY

नाभिकीय विज्ञान अनुसंधान मंडल

BOARD OF RESEARCH IN NUCLEAR SCIENCES

DAE COPY

Application Number:

कृपया निम्नलिखित को सुचित करते हुए  
राशी का भुगतान इन्हे करें।

Please pay the amount to

A/C No: **6089858032**, A/C Name: Sathyabama Institute of Science and Technology-Research, IFSC: **IDIB000S201**, Indian Bank, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600119, Tamil Nadu

PFMS Unique Code : **SU**

Under intimation to

Dr. Sanjeevi Prasath

Mobile Number: **8807186033**

Email : **sanjeeviprasath.irc@sathyabama.ac.in**

द्योतन एवं लेखन अधिकारी, प.ऊ.वि,

Pay & Accounts Officer, DAE





केन्द्रीय यूनानी चिकित्सा अनुसंधान परिषद्  
आयुष मंत्रालय, भारत सरकार  
CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Ministry of Ayush, Government of India  
F. No. 3-217/2023-CCRUM/Tech



Date: 02.04.2024

To,

Dr. Y. Swarnalatha  
Professor & Dean (Higher Studies),  
Sathyabama Institute of Science & Technology,  
Rajiv Gandhi Salai, OMR, Sholinganallur,  
Chennai – 600119

**Subject: Awarding of Project under Expression of Interest Scheme subject to prior clarifications of SAC Expert Comments-reg.**

Sir/Madam,

I am directed to refer to a project entitled “Preclinical and clinical validation of safety and efficacy of traditional Unani formulation Sharbath Mundi pertaining to its hepatoprotective effect” submitted by you under Expression of Interest (EOI) Scheme for study in collaboration mode with CCRUM, New Delhi.

2. The SAC considered and recommended the project with an estimated budget of Rs.41,37,840/- (Rupees Forty One Lakh Thirty Seven Thousand Eight Hundred Forty only) for three years. Project has been duly approved by Competent Authority of CCRUM prior to clarification of SAC Expert Comments.

3. In this regard, you are requested to submit the following documents as early as possible to enable the Council to release the 1<sup>st</sup> year installment of Rs. 14,42,960/- (Rupees Fourteen Lakh Forty Two Thousand Nine Hundred Sixty only)

- 02 hard copies and soft copies of final project with revised estimate duly signed by PI and Co-PIs and forwarded by competent authority.
- MoU between CCRUM and Sathyabama Institute of Science & Technology, Chennai on Non-Judicial stamp paper for undertaking collaborative project as per format.
- Bond on Non-Judicial stamp paper (Rs.100/-) as per format.
- Clearance from Ethics Committee and also proceedings of the meeting of the Ethics committee.
- Undertaking / Certificate as per format.
- Pre-receipt bill as per format.
- Certificate regarding availability of the relevant machinery and equipments with the institute.
- Mandate form of the Institute for Transfer of Funds.

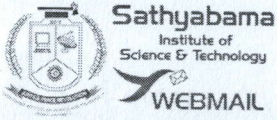
Yours faithfully,

(Dr. Naheed Parveen)  
Deputy Director General  
For Director General

Copy to :

1. Dr. Mohammad Zakir (Co-PI), Research Officer (U), NRIUMSD, Hyderabad
2. Dr. S. Sivakumar (Co-PI), Associate Professor, Department of Gunapadam, National Institute of Siddha, Chennai
3. Dr. P. Rishnamani kumar (Co-PI), Scientist B, Centre for Climate Change Studies, International Research Centre, Sathyabama Institute of Science & Technology, Chennai
4. Dr. K. Sidhika (Co-PI), Scientist B, Indian System of Medicine Laboratory, Centre for Molecular and Nanomedical Sciences, International Research Centre, Sathyabama Institute of Science & Technology, Chennai
5. Registrar, Sathyabama Institute of Science & Technology, Rajiv Gandhi Salai, Sholinganallur, Chennai
6. Concerned File





VC Office1 &lt;vcoffice1@sathyabama.ac.in&gt;

---

**Fwd: UGC-DAE CSR \*\* CRS Project 2023-24\*\***

---

**S MANJUNATH KAMATH** <manjunathkamath.irc@sathyabama.ac.in>  
To: vcoffice1@sathyabama.ac.in, vcoffice@sathyabama.ac.in

Thu, Apr 25, 2024 at 9:58 AM

----- Forwarded message -----

From: **UGC-DAE CSR** <support@csruserportal.com>  
Date: Thu, Feb 29, 2024 at 11:14 PM  
Subject: UGC-DAE CSR \*\* CRS Project 2023-24\*\*  
To: <manjunathkamath.irc@sathyabama.ac.in>

## Welcome to UGC-DAE CSR

Dear Dr. Dr. S. Manjunath Kamath,

Thank you for submitting the Collaborative Research Scheme (CRS) project proposal(CRS/2023-24/1657) at UGC-DAE CSR.

Your proposal was evaluated by the User Committee and it has been approved.

Your Project Sanction reference no. is: **CRS/2023-24/02/1123** .Please use this reference no for further communication.

Please login through your user account and submit your acceptance as soon as possible. After that, we will transfer the funds to your institution's bank account.

Please ignore this communication if you have already submitted your acceptance.

For any query please write to:

**Mr. Narian Kumar Lengay**

Administrative Officer-I

nlengay@gmail.com

**0731-2463913 (Ext: 125)**

With best regards,

User Office, UGC-DAE CSR

Note: This is a system generated email. Please don't reply.





Sony Varghese <sonysv11@gmail.com>

---

## UGC-DAE CSR \*\* CRS Project 2023-24\*\*

2 messages

---

UGC-DAE CSR <support@csruserportal.com>

Thu, Feb 29, 2024 at 11:15 PM

Reply-To: support@csruserportal.com

To: sonysv11@gmail.com

### Welcome to UGC-DAE CSR

Dear Dr. Sony Varghese,

Thank you for submitting the Collaborative Research Scheme (CRS) project proposal(CRS/2023-24/1523) at UGC-DAE CSR.

Your proposal was evaluated by the User Committee and it has been approved.

Your Project Sanction reference no. is: **CRS/2023-24/03/1215** .Please use this reference no for further communication.

Please login through your user account and submit your acceptance as soon as possible. After that, we will transfer the funds to your institution's bank account.

Please ignore this communication if you have already submitted your acceptance.

For any query please write to:

**Mr. Narian Kumar Lengay**

Administrative Officer-I

nlengay@gmail.com

**0731-2463913 (Ext: 125)**

With best regards,

User Office, UGC-DAE CSR

Note: This is a system generated email. Please don't reply.

---

Sony Varghese <sonysv11@gmail.com>

Fri, Mar 1, 2024 at 6:54 AM

To: "Sijoi A.M" <sijoi.a.m@gmail.com>

[Quoted text hidden]



CHENNAKESAVULU REDDY K &lt;chennakesavulureddy.chemistry@sathyabama.ac.in&gt;

---

**UGC-DAE CSR \*\* CRS Project 2023-24\*\***

1 message

---

**UGC-DAE CSR** <support@csruserportal.com>

Thu, Feb 29, 2024 at 11:14 PM

Reply-To: support@csruserportal.com

To: chennakesavulureddy.chemistry@sathyabama.ac.in

## Welcome to UGC-DAE CSR

Dear Dr. Dr. K. CHENNAKESAVULU,

Thank you for submitting the Collaborative Research Scheme (CRS) project proposal(CRS/2023-24/1395) at UGC-DAE CSR.

Your proposal was evaluated by the User Committee and it has been approved.

Your Project Sanction reference no. is: **CRS/2023-24/03/1205** .Please use this reference no for further communication.

Please login through your user account and submit your acceptance as soon as possible. After that, we will transfer the funds to your institution's bank account.

Please ignore this communication if you have already submitted your acceptance.

For any query please write to:

**Mr. Narian Kumar Lengay**

Administrative Officer-I

[nlengay@gmail.com](mailto:nlengay@gmail.com)

**0731-2463913 (Ext: 125)**

With best regards,

User Office, UGC-DAE CSR

Note: This is a system generated email. Please don't reply.



# Indian Council of Medical Research (ICMR)

Department of Health Research  
(Ministry of Health and Family Welfare)

## Investigator-Initiated Research Proposals

Date of submission: 27-Apr-2023 01:57:35 PM

**Proposal Id:** IIRP-2023-0726, **Version Id:** F1, **Proposal Title:** Genotypic Diversity of Microbial flora in OXIS contacts of Primary Molars - A preliminary exploratory study

### Personal Details of PI

|                                      |                                                                    |                               |                                                |
|--------------------------------------|--------------------------------------------------------------------|-------------------------------|------------------------------------------------|
| <b>Name of PI (IN BLOCK LETTERS)</b> | DR SUMAIYYA S                                                      | <b>Designation</b>            | Lecturer                                       |
| <b>Email</b>                         | <a href="mailto:SUMAIYYA.SMS@GMAIL.COM">SUMAIYYA.SMS@GMAIL.COM</a> | <b>Contact</b>                | 9789937062                                     |
| <b>Date of Birth</b>                 | 10-Aug-1992                                                        | <b>Date of Superannuation</b> | 01-Nov-2050                                    |
| <b>Nature of Employment</b>          | Permanent                                                          | <b>Institute</b>              | Satyabhama Institute of Science and Technology |

### Proposal Details PART-A

|                       |                                                                                |                                          |                                                |
|-----------------------|--------------------------------------------------------------------------------|------------------------------------------|------------------------------------------------|
| <b>Advertisement</b>  | Call for Investigator-Initiated Research Proposals for small extramural grants | <b>Institute</b>                         | Satyabhama Institute of Science and Technology |
| <b>Institute Type</b> | Private                                                                        | <b>Valid DSIR Certificate (Validity)</b> | YES (31-Aug-2026)                              |

**Title of the proposed research project** Genotypic Diversity of Microbial flora in OXIS contacts of Primary Molars - A preliminary exploratory study

### Summary (up to 250 words):

A structured summary should contain the following subheadings: Rationale/ gaps in existing knowledge, Novelty, Objectives, Methods, and Expected outcome.

Rationale Early childhood Caries (ECC) is a multi-factorial disease and has increased manifold in the recent years. Numerous risk factors are associated with ECC. Literature in the recent past has confirmed the risk of anatomic variation among the OXIS contacts of primary molars. To justify this multi- factorial nature of ECC, microbial factors need to be assessed in every anatomic variation of the contact areas of primary molars. Novelty This is the first such study to evaluate the microbial profile of OXIS contacts in primary molars. Site specific microbial profiling is necessary either to enhance the understanding of existing etiology of ECC or bring about a shift in assessing the risk factors of ECC. The outcomes of this project might pave way for antimicrobial interventions for prevention of early childhood caries. The results Objectives The primary objective of the study are to evaluate the microbial profile(genotypic diversity) of OXIS contacts of primary molars in children with and without ECC. The secondary objective is to compare the microbial profiles among O, X, I, S contacts. Methods Genotypic diversity will be studied by processing the collected plaque samples through a next generation sequencing method called Metagenomics. Bio informatics will be used to analyze the data and extrapolate the results. Expected Outcome From this project, we propose to provide a preliminary evidence of genotypic diversity of the most vulnerable anatomic sites to ECC. This could bring a paradigm shift in understanding the etiology, developing preventive strategies and accelerate the personalized approach for prevention of ECC, which is a global concern.

**Priority Area:** Non-Communicable Diseases

**Priority Area diseases:** Oral health

**Area of Research**

Descriptive

**Keywords** Six keywords separated by comma which best describe your project may be provided.

Early childhood caries, OXIS, Primary molars, microbiota, contact areas, Metagenomics, genotypic diversity

**Abbreviations** Only standard abbreviations should be used in the text. List of abbreviations maximum of ten may be given as a list.

ECC- Early Childhood Caries DNA- Deoxy Ribonucleic acid MG-RAST- Metagenomics - Rapid Annotation using Subsystems Technology ORF- Open Reading Frame CTAB- Cetyltrimethyl ammonium bromide RNA- Ribonucleic acid KEGG - Kyoto Encyclopedia of Genes and Genomes



**Problem Statement (up to 500 words):**

State the currently available information to present the problem adequately.

The oral cavity is heavily colonized by >700 species of microorganisms (Aas JA et al, 2015). Early childhood Caries (ECC) is a multi-factorial disease and has increased manifold in the recent years. The principal factor that initiates the caries process along with the dietary factor are the microbes. The most common anatomic sites for caries susceptibility are the pits and fissures and contact areas. Essentially, the broader proximal contact areas observed in primary teeth are likely to increase caries susceptibility, since the self-cleansing action would be reduced because of the limited movement, leading to greater plaque accumulation (Kennedy et al, 1986, Gohil et al, 1973, Sarig et al, 2015). Both prospective and retrospective cohort studies have provided compelling evidence that variations in interproximal contacts is a major risk factor in occurrence of Early childhood caries. However, the microbial diversity in the OXIS contacts needs to be described.

**Rationale of the study (up to 250 words)**

Mention how the research question addresses the critical barrier(s) in scientific knowledge, technical capability, and/or programmatic/clinical/lab practice and its relevance to local, national and international context with relevant bibliography.

Morphology of approximal surfaces in primary molar teeth, in particular both surfaces being concave, significantly influences the risk of developing caries (Cortes, 2018). The types of interproximal contact areas of primary molars were first described in a cross-sectional study (2018), which reported four different types of contact areas: open (O); point (X); straight (I); and curved (S) (Muthu MS et al 2021). Among the OXIS contacts, the S type was most susceptible to approximal caries due to its complex morphology followed by the I,X and O contacts which was confirmed in a prospective cohort study conducted on preschoolers of 3- 4 years of age (Muthu MS et al 2021, Kirthiga M et al 2023). However, the reason for S type being vulnerable could be the variation in the microbial profile in these contact areas. Therefore, there is a need to isolate and describe the genotypic diversity of the microorganisms in OXIS contacts with specific and sensitive newer technologies. With the establishment of new technologies, such as next generation sequencing (NGS) and machine learning algorithms, it has provided a unique opportunity to an enhanced understanding of the role of oral microbes (bacteria, fungi, and viruses) on caries development and progression (de Jesus VC et al, 2021).

**Hypothesis/ Research question (up to 100 words):**

Please provide details

Despite the wealth of studies on ECC and caries, the ecological aspects of the disease are still not fully understood (O'Connell LM et al, 2020). Therefore, studying caries with site-specific biofilm samples is essential (Fejerskov et al 2008, Gnat et al 2017). Null hypothesis tested in this study is that there is no difference in the genotypic diversity of microbial profile among the various contact areas of primary molars namely, O, X, I and S. This will aid in weighing the risk of anatomic variation against the microbial factors, thus help in understanding the caries susceptibility of an individual. The aim of the study is to evaluate and compare the microbial profile of the contact areas in primary molars of healthy children and children with Early childhood caries.

**Study Objectives (up to 25 words/ objective)**

Define the objectives clearly and in measurable terms; mention as primary and secondary objectives, if necessary. Do not include more than 3-4 objectives.

To identify the microbial profile of OXIS contacts of primary molars in children with and without Early Childhood Caries.  
To correlate microbial profile with OXIS contacts in children with and without Early Childhood Caries.

NA  
NA



VC Office1 &lt;vcoffice1@sathyabama.ac.in&gt;

---

**Fwd: Ministry of Education's Innovation Cell (MIC) – Selected for hosting the Two-Day IDE Boot Camp for School Teachers & Students during April 2024 - Submit Mandate form for Nodal Centre Last date to submit by 15th March 2024 (02:00 pm) Reg.**

---

Dean Academics <dean.academics@sathyabama.ac.in>  
To: VC Office1 <vcoffice1@sathyabama.ac.in>

Mon, Apr 8, 2024 at 11:59 AM

Thanks and regards,  
**Dr. Bharathi .B**  
Dean Academics  
Sathyabama Institute of Science and Technology  
(Deemed to be University),  
Jeppiaar Nagar, **Rajiv Gandhi Road, Chennai- 600119**  
**Tamilnadu, INDIA**  
**044-24501844 - 5015(intercom)**  
**[www.sathyabama.ac.in](http://www.sathyabama.ac.in)**

----- Forwarded message -----

From: **Ministry of Education's Innovation Cell** <[schoolinnovation@aicte-india.org](mailto:schoolinnovation@aicte-india.org)>

Date: Fri, Mar 15, 2024 at 12:00 PM

Subject: Ministry of Education's Innovation Cell (MIC) – Selected for hosting the Two-Day IDE Boot Camp for School Teachers & Students during April 2024 - Submit Mandate form for Nodal Centre Last date to submit by 15th March 2024 (02:00 pm) Reg.

To:

Dear **Nodal Centre Head**,

Greetings from the Ministry of Education's Innovation Cell (MIC), Government of India, New Delhi.

The All India Council for Technical Education (AICTE), the Ministry of Education's Innovation Cell (MIC) Department of School Education and Literacy Jointly with the Central Board of Secondary Education (CBSE) and the National Council of Education Research and Training (NCERT) proposed to organise "Innovation, Design, and Entrepreneurship (IDE) Boot camps".

This is in continuation of our earlier mail to inform you that your institute expressed interest in being the Nodal Centre for Hosting a Two-Day IDE Boot Camp for School Teachers and Students in **April 2024**.

Date of the IDE Boot Camp are: **4<sup>th</sup> & 5<sup>th</sup> April 2024**

**On behalf of MIC and AICTE, I am writing to inform you that your institute has been selected as a nodal centre for Hosting a Boot Camp on 4 and 5 April 2024.**

Bootcamp is scheduled for **two days** residential training program which will be attended by **enthusiastic** participants from **the School Innovation Council / Contest, Junior Hackathons, ATL Innovation Challenges** and **Teachers under PM SHRI Schools** to undergo intensive experiential learning on design thinking, business modeling and enterprise planning. (The participants list for the two days boot camp will be shared by AICTE / MIC next week)

In this regard, please complete the **mandate form and letter of consent** enclosed to provide information about your institute only.

Please fill out the Google form link given below before **15<sup>th</sup> March 2024 (02:00 PM)**

**Google Form link:** <https://forms.gle/Ai7R6YikbPCwCkNB7>

**Note: -**

- The amount will be issued to the Institute only, so you are requested to kindly fill Institute details only in the Mandate Form (**a detailed Annexure is Attached**).
- All the expenditures which are not part of the Grant-in-Aid or exceeding the budget grant will have to be borne by the host institute.
- Host institutes are advised to arrange the local pickup/drop-through buses to the nearest railway station/bus stop if possible.
- Food, Accommodation and Local Pickup/drop of Officials/Speakers/Experts appointed by MIC/AICTE will have to be arranged by the host institute.
- Honorarium for the Speakers/Experts appointed by the MIC/AICTE will have to be released by the institute through the Grant-in-Aid.
- Flight Booking for the Officials/Speakers/Experts appointed by the MIC/AICTE will be taken care of by the MIC/AICTE itself (if required).

We will have an online meeting with Nodal Heads and Coordinators next week.

For any further details. Please contact the following officer:

**Mr. Shivendar Mani Tripathi - +91 6388 554 380**

**Mr. Mayur Madhukar Borkar- +91 8130617707**

**Join the Whatsapp group created for the bootcamp to get regular updates through the link attached:**

<https://chat.whatsapp.com/Ir6AOgUs0SAH5WqoUDYbVV>

With Warm Regards

**Dr. Elangovan Kariappan**

Assistant Innovation Director

Innovation Cell, Ministry of Education, Government of India

AICTE HQ, New Delhi- 110070

Email: [schoolinnovation@aicte-india.org](mailto:schoolinnovation@aicte-india.org)

Website: <https://sia.mic.gov.in/>, <https://sic.mic.gov.in/>

---

**3 attachments**



**letter of consent to NC 4 & 5th.docx**

16K



**Mandate Form (Institute).doc**

54K



**Annexure -1 (Budget).pdf**

104K



Antariksh Bhavan,  
New BEL Road,  
Bengaluru - 560 094.

March 23, 2023

Vice Chancellor,  
Sathyabama Institute of Science and Technology,  
(Deemed to be University),  
Jeppiaar Nagar, Rajiv Gandhi Salai,  
Chennai – 600 119.

Sir,

Sub: Grant-in-aid – **RESPOND** - Release of grant for the new project entitled **"Development of "DMAZ" fuel that is hypergolic with hydrogen peroxide"- First year grant – 1<sup>st</sup> Instalment –** reg.

\*\*\*

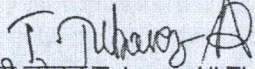
I am directed to convey the sanction of the President for taking up the new project titled **"Development of "DMAZ" fuel that is hypergolic with hydrogen peroxide"** for a period of **1 year 6 months** at a cost of Rs. **16,83,660/-** (Rupees Sixteen Lakh Eighty Three Thousand Six Hundred and Sixty only) by Sathyabama Institute of Science and Technology, Chennai and for sanction of Rs. **8,77,440/-** (Rupees Eight Lakh Seventy Seven Thousand Four Hundred and Forty only) to meet the expenditure during the first year of the project. The following guidelines may be strictly adhered to:

- a. The start date of the project would be the date of release of the funds. As approved by the RRC, the project duration would be 1 year 6 months from the start of the project.
  - b. The PI shall ensure that all the procedures with regard to procurement of the necessary equipment is completed at the earliest and purchase order shall be placed within 2 months from the start of the project.
  - c. JRF shall be engaged within a month from the start date of the project.
  - d. The project work/deliverables shall be divided into annual objective milestones and shall be assessed while arriving the progress made against these before consideration for release of grants subsequently. These shall also include milestones related to manpower engagement and procurement of equipment as mentioned above.
  - e. Progress of the project shall be monitored on quarterly basis to ensure that the same is in line with the approved project tenure.
  - f. Co-PI from the concerned ISRO centre shall be responsible towards all IPR related matters in line with RESPOND mandate.
  - g. All the requirements as spelt out in RESPOND guidelines shall be followed in toto by the grantee institution.
2. The amount of Rs. **8,77,440/-** (Rupees Eight Lakh Seventy Seven Thousand Four Hundred and Forty only) will be paid to you by the Pay & Accounts Officer, Department of Space, Antariksh Bhavan, New BEL Road, Bengaluru - 560 094 on receipt of the bill.
  3. The grant-in-aid sanctioned shall be subject to the terms and conditions mentioned in the Annexure enclosed.
  4. A separate account for the grant-in-aid sanctioned will have to be maintained which are subject to scrutiny by the Indian Audit and Accounts Department who will also have the right of access to the Book of Accounts.



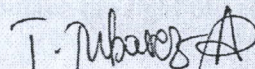
5. Accounts of expenses incurred out of grant should be prepared, maintained and authenticated by approved auditors. The final accounts statement in duplicate duly audited should be sent to the Pay & Accounts Officer, Department of Space, Bengaluru - 560 094 at the end of each financial year of support.
6. The future installment of sanctioned grant/release of new grant-in-aid shall be subject to mandatory usage of Expenditure, Advance and Transfer (EAT) module in PFMS portal. An e-Utilisation Certificate shall be submitted in GFR 12A format (GFR 2017) through PFMS- EAT module.
7. The interest earned from grants released, if any, should be returned to Pay & Accounts Officer, Department of Space, Antariksh Bhavan, New BEL Road, Bengaluru - 560 094 in the form of Demand Draft at the end of each financial year of support.
8. The expenditure involved is debit to "Head: 3402.00.103.09.00.31- Space Research- Space Sciences-Respond- GIA-General" - under 'Grant No.95 - Department of Space' for the financial year 2022-2023.

भवदीय /Yours faithfully,

  
(तबरेज़ अली तोटद/Taberez Ali Thotad)  
(वरिष्ठ लेखा अधिकारी/Sr.Accounts Officer)

Copy for information and necessary action to:

1. Scientific Secretary, ISRO
2. The Director, CBPO, ISRO Hq., Bengaluru - necessary action as follows:-
  - The project work/deliverables shall be divided into annual objective milestones and RRC shall assess the progress made against these before recommending for release of grants subsequently. These shall also include milestones related to manpower engagement and procurement of equipment as mentioned above.
  - RRC shall monitor the progress of the project quarterly and ensure that the same is in line with the approved project tenure.
  - The schedule for completion of the evaluation cycle by the RRC shall be clearly spelt out by CBPO to facilitate progress and timely release of funds subsequently.
  - CBPO shall submit a progress review report of all the projects to DOS on quarterly basis.
3. Associate Director, RESPOND & AI, ISRO Hq., Bengaluru  
(Ref No.ISRO/RESPOND/2023/3/932 dated 06.03.2023)
4. The Director General of Audit, Environment & Scientific Departments, AGCR Building, IP Estate, New Delhi - 110 002.
5. The Director, O/o the Director General of Audit, Environment & Scientific Departments, Antariksh Bhavan, New BEL Road, Bengaluru - 560 094.
6. Chief Controller of Accounts, DOS
7. Senior Accounts Officer, ISRO Hq., Bengaluru
8. The Pay & Accounts Officer, Department of Space, Bengaluru - With a request to make the payment Rs. 8,77,440/- (Rupees Eight Lakh Seventy Seven Thousand Four Hundred and Forty only) in favour of " Vice Chancellor, Sathyabama Institute of Science and Technology, Chennai" on receipt of the Bill.
9. The Senior Head (Internal Audit), DOS, Bengaluru
10. Shri. Dr. Subhenjit Hazra, Scientist C, Centre for Nonoscience and Nanotechnology, Sathyabama Institute of Science and Technology, (Deemed to be University), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

  
(तबरेज़ अली तोटद/Taberez Ali Thotad)  
(वरिष्ठ लेखा अधिकारी/Sr.Accounts Officer)



भारतीय अन्तरिक्ष अनुसंधान संगठन

अन्तरिक्ष विभाग

भारत सरकार

अन्तरिक्ष भवन

न्यू बी ई एल रोड, बेंगलूरु - 560 231, भारत

दूरभाष : +91 80 2341 5474

फैक्स :



Indian Space Research Organisation

Department of Space

Government of India

Antariksh Bhavan

New BEL Road, Bengaluru - 560 231, INDIA

Tel (Off) : +91 80 2341 5474

Fax :

Dr. M.A. Paul

Assoc. Director, RESPOND & AI

CBPO

☎ : 080-23415269/22172269

FAX-080-23412471

respond@isro.gov.in

No. ISRO/RES/3/936/22-23

March 18, 2023

Dear Dr. Dinesh Kumar,

**Subject: RESPOND Project - "RES-LPSC-2022-003: Generation of TTT and CCT diagrams for 3 nickel based superalloys (XH67, XH55, XH43) for application in liquid engines" - reg.**

-----  
This has reference to your submission of the above mentioned research proposal for funding under RESPOND Programme. The domain experts in Department of Space have reviewed the proposal. I wish to inform you that Chairman, ISRO / Secretary, DOS has approved the following:

1. Funding of the project under RESPOND Programme for a **period of Two years** at a total outlay of **₹19,00,280/- (Rupees Nineteen Lakh, Two Hundred and Eighty only)** towards meeting the expenditure of the project (budget details enclosed).
2. Release of a grant of **₹7,47,440/- (Rupees Seven Lakh Forty Seven Thousand Four Hundred and Forty only)** towards meeting the First Year expenditure of the project.

You may also note that, as per the latest guidelines issued by DOS vide order No.DS\_2B-13/1/2017-Sec. 2 dated June 20, 2022 regarding release of GIA to Institutions/Universities, the grants for "**Contingencies**" and "**Overhead charges**" will be released only after completion of the project.

**You may also kindly make a note of the point No. 6 in the enclosed DOS order regarding EAT Module in the PFMS portal.**

Further, the approval is subject to fulfillment of the following:

- (a) You will have to submit Annual Progress Report (APR), at the end of the year, indicating the progress of the work accomplished during the first year (to enable renewal of the project for second year). However, on conclusion of the project,



MoES/16/09/2018-RDEAS/THUMP-5  
Government of India  
Ministry of Earth Sciences

Prithvi Bhawan, Lodhi Road,  
New Delhi-110003  
Dated: 01.02.2023

ADMINISTRATIVE ORDER

Subject: Project entitled "Prediction and Analysis of Mesoscale Thunderstorm in India - A Computational Approach".

PI: Dr. P. Sardar Maran, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

Co-PI: Dr. B. Prabhu Dass Batvari, Centre for Earth & Atmospheric Sciences, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

Co-PI: Dr. L. Lakshmanan, Department of Computer Science & Engineering, Sathyabama Institute of Science and Technology Jeppiar Nagar, Rajiv Gandhi Road Chennai, Tamil Nadu- 600119

Sanction of the Competent authority is hereby conveyed under Rule 18 of the Delegation of Financial Power Rules 1978 for implementation of the above-mentioned project at an estimated cost of Rs. 20,73,280/- (Rupees twenty lakhs seventy three thousand and two hundred eighty only) Sathyabama Institute of Science and Technology for a period of three years (2022-23 to 2024-25).

2.0 Objectives:

- Understand the genesis, development and propagation of severe Thunderstorms over Tamil Nadu.
- To develop Mesoscale Thunderstorm prediction model with various computational methods and techniques.
- Evaluate the performance of computational models for the thunderstorm prediction over Tamil Nadu and find out suitable model

2.1 Programme:

In general, climate prediction is highly non-linear phenomena in nature. The parameters that are required to predict the thunderstorms are enormously complex and the prediction using all these parameters is enormous even for a short period. Soft computing is an innovative approach to construct computationally intelligent systems that are supposed to possess humanlike expertise within a specific domain, adapt themselves and learn to do better in changing environments, and explain how they make decisions. In that manner ANFIS processing is a good solution from radar images to predict the accurate models. I have gone through many literatures, this hybrid technology of both NWP and Doppler images data cannot be used anywhere also the anti noise reduction technique is a new era before prediction of thunderstorm using Doppler images.

The prediction model will able to ingest Doppler radar, Satellite data using various soft computing tools and techniques (ANFIS, Machine language, 2nd Generation wavelet neural network and Image processing). The proposed mesoscale thunderstorm model will identify when and where the severe thunderstorm will occur in. This alert will be of much use to the society to save life and property.

*M. Daniel*  
1/2/2023



6/23/23, 6:01 PM

Sathyabama Institute of Science and Technology (Deemed to be University) Mail - ATBC Seed Grant Award Notification

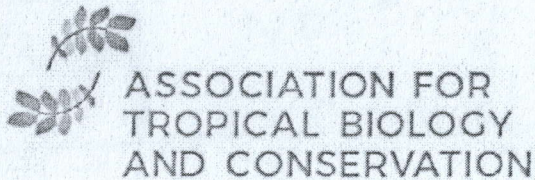


Kunjulakshmi K &lt;kunjulakshmi.cccs@sathyabama.ac.in&gt;

**ATBC Seed Grant Award Notification**

noreply@xcdsystem.com <noreply@xcdsystem.com>  
To: kunjulakshmi.cccs@sathyabama.ac.in

Fri, Jun 23, 2023 at 2:43 AM



tropicalbiology.org

P.O. Box 13916  
Gainesville, FL  
32604 USA

June 22, 2023

Dear Kunjulakshmi:

The ATBC Grants and Awards Committee met and evaluated the 31 ATBC Seed Grant proposals that we received in 2023. Based on the funds available, ATBC was able to fund 17 proposals in 2023.

We received many competitive proposals, and I am pleased to inform you that you have been awarded an ATBC Seed Research Grant in the amount of \$1,000 to support your research proposal.

Please refer to the 'terms and conditions' document for detailed information about your award disbursement and reporting requirements. ATBC requires a progress report, which will be due in December 2023, and you will be emailed later with details concerning how to submit the report.

Please also upload to this form a photo of yourself that would be suitable for display in a presentation at the Awards presentation ceremony at the annual meeting and on the ATBC website. See here for example photos from previous awardees.

Congratulations on your successful application for funding! We look forward to seeing your preliminary results at the ATBC annual meeting in 2023, if you are attending. The winners of the ATBC Seed Grant will be announced during the 2023 ATBC meeting in Coimbatore, India meeting and in the ATBC newsletter.

Don't hesitate to reach out if you have any questions.

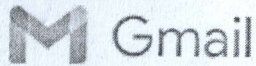
Best wishes,

Sabrina E. Russo  
Chair  
ATBC Grants and Awards Committee

<https://mail.google.com/mail/u/0/?ik=e8d071fc30&view=pt&search=all&permmsgid=msg-f:1769438857693472901&simpl=msg-f:1769438857693472901> 1/2



Transfer of host Institute Proof.



Sivasakthi Murugesan <sivasakthi.msc09@gmail.com>

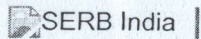
## SERB-Notification

1 message

SERB\_Administrator@serbonline.in <SERB\_Administrator@serbonline.in>

Wed, Feb 1, 2023 at 12:47 PM

To: serbinfo1@gmail.com



### Science and Engineering Research Board

(Statutory Body Established Through an Act of Parliament : SERB Act 2008)  
Department of Science and Technology, Government of India

#### SCIENCE & ENGINEERING RESEARCH BOARD (SERB)

(Statutory Body Established Through an Act of Parliament : SERB Act 2008)

Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

File Number: SPG/2021/002467

Dated: 01-Feb-2023

Subject: Project titled "OPTIMIZATION AND LIFE CYCLE ASSESSMENT OF THE ONE PART ALKALI ACTIVATOR SOLUTION FOR THE PRODUCTION GEOPOLYMER COMPOSITES".

Dear Dr. SIVASAKTHI M,

This is regarding the SERB project titled "OPTIMIZATION AND LIFE CYCLE ASSESSMENT OF THE ONE PART ALKALI ACTIVATOR SOLUTION FOR THE PRODUCTION GEOPOLYMER COMPOSITES" sanctioned vide order no. SPG/2021/002467 dated 02 August, 2022 to be implemented at SRM Institute of Science and Technology, SRM Nagar, Kattankulathur.

SERB has considered your request and hereby agrees to the transfer of the above project from SRM Institute of Science and Technology, SRM Nagar, Kattankulathur to Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai along-with all the asset/s procured in the project.

The SRM Institute of Science and Technology, SRM Nagar, Kattankulathur is also requested to transfer the unspent balance to Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai.

Also, kindly upload/update the audited final statement of expenditure and Utilisation certificate till the date you have implemented the project at SRM Institute of Science and Technology, SRM Nagar, Kattankulathur.



Bp-2023-24-11739

FILE NO. SPG/2022/001729-C  
SCIENCE & ENGINEERING RESEARCH BOARD(SERB)  
(A statutory body of the Department of Science & Technology, Government of India)  
Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 19 January, 2024

**ORDER**

Subject: Research project entitled **Development of a novel electrochemical sensor to detect biofilm and MIC and assess biocide treatment efficacy in near-real time in oil and gas pipelines under the guidance of Dr. Sudha Uthaman, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119.**

1. In continuation of SERB's sanction order No. SPG/2022/001729 dated 19 January, 2024, sanction of the competent authority is hereby accorded to the payment of a sum of Rs. 800000/- under 'Grants-in-aid Capital' to Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Chennai, Tamil Nadu-600119 being the grant for the financial year 2023-2024 for implementation of the above said project.
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website ([www.serb.gov.in](http://www.serb.gov.in)) and as mentioned in the sanction order of even number dated 19 January, 2024.
3. As this is the first grant being released under 'Grants-in-aid Capital' for the project, no previous U/C is required.
4. The expenditure involved is debit to Fund for Science & Engineering Research (FSER) This release is being made under SERB POWER Grant (Capital).
5. The Sanction has been issued with the approval of the competent authority on 08 December, 2023 and vide Diary No. SERB/F/9981/2023-2024 dated 10 January, 2024.
6. The release amount of Rs. 800000/- (Rupees Eight Lakh only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

|                        |                                                                                                                                  |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Agency Name            | Sathyabama Institute of Science and Technology (Deemed to be University)                                                         |
| PFMS Unique Code       | SU                                                                                                                               |
| Account Name           | Sathyabama Institute of Science and Technology-Research                                                                          |
| Account Number         | 6089858032                                                                                                                       |
| Bank Name & Branch     | Indian Bank Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Saalai, Sholinganallur, Chennai-600119. |
| IFSC/RTGS Code         | IDIB000S201                                                                                                                      |
| Email id of A/C Holder | vc@sathyabama.ac.in                                                                                                              |
| Email id of PI         | sudha21190@gmail.com                                                                                                             |

To,  
Under Secretary  
SERB, New Delhi  
Copy forwarded for information and necessary action to: -

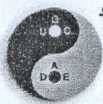
*for*

(Dr. Monika Agarwal)  
Scientist F  
[monika@serb.gov.in](mailto:monika@serb.gov.in)

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | The Principal Director of Audit, A.G.C.R. Building, IIIrd Floor I.P. Estate, Delhi-110002                                                                                                                                                                                                                                                                                                                                                                                        |
| 2. | Sanction Folder, SERB, New Delhi.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 3. | File Copy                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4. | Dr. Sudha Uthaman<br>Centre for Nanoscience and Nanotechnology<br>Sathyabama Institute of Science and Technology, Jeppiaar nagar, rajiv gandhi salai, chennai, Chennai, Tamil nadu-600119<br>Email: <a href="mailto:sudha21190@gmail.com">sudha21190@gmail.com</a><br>Mobile: 919566523176<br>(Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a> .) |

Total cost: 28,46,480/-  
3405





Ref:

Date: 15-05-2023

**Sanction Order**

To,  
The Registrar/Principal/Financial Authority,  
Through **Dr. Dr. M. Rajasekar**  
Sathyabama Institute of Science and Technology

**Subject: Collaborative Research Scheme(CRS) Project of UGC-DAE CSR entitle "** by Dr. Dr. M. Rajasekar.

Dear Madam/Sir,

In continuation to our sanction letter the CRS project submitted to UGC-DAE CSR by **Dr. Dr. M. Rajasekar** of your institution has been approved by the competent authority. The principal collaborator from UGC-DAE CSR is **Dr. Shamima Hussain**. The details of the remittance are given below:

| Student fellowship(@<br>₹14,000/- pm+HRA)    | Consumable | Contingency | Total<br>Amount | Date of<br>remittance | PFMS Ref. No.          |
|----------------------------------------------|------------|-------------|-----------------|-----------------------|------------------------|
| ₹213360                                      | ₹30,000    | ₹15,000     | ₹258360         | 2022-03-30            | SBINR52023041844241215 |
| No overheads are available under this scheme |            |             |                 |                       |                        |

This project has been approved as per the guidelines given below:

1. This is a Collaborative Research Scheme (CRS) of UGC-DAE CSR. In view of the complex and involved nature of the experiments, any publication emerging under the project must be of collaborative in nature with due consents from the scientists at UGC-DAE CSR and/or DAE centres, and in consultation with the Principal Collaborator/Coordinator. Following phrase must be included in the acknowledgement: "This work was partially/fully carried out using the facilities of UGC-DAE CSR. The authors acknowledge the financial support from UGC-DAE CSR through a Collaborative Research Scheme (CRS) project number ."
2. This project is sanctioned for **one year** but it may be extended on yearly basis subject to a total period of **three years**.
3. In case the CRS project has been approved without student fellowship, it will not be possible to grant student fellowship in subsequent years as well.
4. The PI must '**Apply for an Experiment Time**' through our online user portal <https://csruserportal.com/> for utilization of each experimental facility each time.
5. The project will be reviewed at the end of each year to consider sanction and financial allocation for the succeeding year.





Government of India  
Department of Atomic Energy (DAE)  
Board of Research in Nuclear Sciences (BRNS)

Hemant Praskash Agnihotri  
Programme Officer (MSS)

BRNS  
Secretariat, 316-C, CFB,  
BARC, Trombay,  
Mumbai-400085  
Phone: 022-25593470  
Email:  
hemant\_brns@barc.gov.in

No: 57/14/05/2022-BRNS/34074

Date: 15 FEB 2023

OFFICE MEMORANDUM

Sub: R/P entitled "Real-Time Plasma Localization System for Tokamak plasma Images in SST-1" under Dr V. Vijay Bhaskar, Professor, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600119 bearing sanction 57/14/05/2022-BRNS with MSS, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for 2 years beginning from financial year 2022-2023 with a total grant of Rs. 21,87,500/- (Rupees twenty one lakh eighty seven thousand five hundred only) for the project as under :

| Item of expenditure    | Year 1<br>(2022-2023) | Year 2<br>(2023-2024) |
|------------------------|-----------------------|-----------------------|
| Equipments             | 950000                | 0                     |
| Staff Salary - SRF (1) | 420000                | 420000                |
| Consumables            | 5000                  | 5000                  |
| Travel - PI            | 25000                 | 25000                 |
| Contingencies          | 30000                 | 30000                 |
| Overheads              | 105000                | 33750                 |
| Total(INR)             | 1535000               | 513750                |

Note: \* Accelerator, Cooling unit, Current and voltage controller, Custom motherboard, Driver License, EMI/EMC testing, Enclosure, Feeder, Frame grabber, Heatsink system with radiator, Image storage, License, Motherboard, Motherboard fabrication, Operating System, PCIe module, Processor, Processor main memory  
SRF salary calculated @35,000/- p.m.

Please note that as per the government orders under Direct Benefit Transfer (DBT) scheme, the staff salary has to be transferred to his/her bank account. Accordingly, Aadhar Number(UID) of the appointed staff, Bank Account details and the Mobile number linked to the bank account should be obtained and it should be intimated to this office.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads (Rs. 1,38,750/-) shall be released only on meeting the requirements specified (See Annex-B).

- I am also pleased to convey the sanction of the President of India to incur an expenditure of Rs. 15,35,000/- (Rupees fifteen lakh thirty five thousand only) towards grant for the year 2022-2023 .
- The expenditure involved is debit to: 3401 00 004 27 0231.
- This is issued with the concurrence of the competent authority in the Department

14/2/23

Hemant Praskash Agnihotri

Pay & Accounts Officer, DAE, Mumbai - 400 001





# ENTREPRENEURSHIP DEVELOPMENT AND INNOVATION INSTITUTE

(An autonomous society of the Government of Tamil Nadu)

ParthasarathyKoil Street, SIDCO Industrial Estate,  
Ekkaduthangal, Guindy, Chennai 600032, Tamil Nadu  
Tel : +91-44-2225-2081/82/83/84 Web : [www.edittn.in](http://www.edittn.in)



Roc.No.II-01/44/2022/EDII/2022

Date:20.03.2023

Sir,

**Sub:** EDII - Innovation Voucher Programme (IVP) - Proposal submitted under IVP – Sanctioned Order Issued – Reg.

**Ref:** 1. IVP Proposal sent by **M/S Cloud Mount Innovations Pvt Ltd.**  
2. Minutes of the Screening Committee meeting held on 11.01.2023.

\*\*\*\*\*

As per the above references, this is to inform that your proposal has been approved by the Screening Committee under “**Innovation Voucher Programme**”.

In this regard, the details of the recommendations and terms and conditions are as follows :

1. Name of the Company : **Cloud Mount Innovations Pvt Ltd**
2. Project Title : **Smart Projector** Dr. Vijaya baskar
3. Voucher Type : Voucher – A
4. Maximum Project Duration : **06 Months**
5. Knowledge Partner : Sathyabama Institute of Science and Technology
6. Total Project Cost : **Rs.2,45,000/-**

| Break up of Project Cost (In Rs.) : |                                    |                                    |                        |          |
|-------------------------------------|------------------------------------|------------------------------------|------------------------|----------|
| EDII Contribution                   |                                    |                                    | Company's Contribution | Total    |
| 1 <sup>st</sup> Installment<br>50%  | 2 <sup>nd</sup> Installment<br>40% | 3 <sup>rd</sup> Installment<br>10% |                        |          |
| 98,000                              | 78,400                             | 19,600                             | 49,000                 | 2,45,000 |

## Terms and Conditions of the grant :

- I. 1<sup>st</sup> Installment: 50 percent of the eligible grant will be released on signing of the tripartite agreement.
- II. 2<sup>nd</sup> Installment: 40 percent will be released on submission of the Progress report, Utilization Certificate, Photos & Videos, etc. and its acceptance by the EDII within the time frame stipulated in the agreement
- III. 3<sup>rd</sup> Installment: (Remaining 10 percent) will be released on completion of the project and presentation of the final report being made before the Screening committee and the completion report found acceptable.
- IV. Contribution of the company has to be paid in full to the knowledge partner before the release of 2<sup>nd</sup> Installment.
- V. Knowledge partner should release the fund to the company without any delay based on the achievement of milestones as envisaged in the project by the company.





# ENTREPRENEURSHIP DEVELOPMENT AND INNOVATION INSTITUTE

(An autonomous society of the Government of Tamil Nadu)

ParthasarathyKoil Street, SIDCO Industrial Estate,  
Ekkaduthangal, Guindy, Chennai 600032, Tamil Nadu

Tel : +91-44-2225-2081/82/83/84 Web : [www.editn.in](http://www.editn.in)



Roc.No.II-01/44/2022/EDII/2022

Date: 26.05.2023

Sir,

**Sub:** EDII - Innovation Voucher Programme (IVP) - Proposal submitted under IVP – Sanctioned Order Issued – Reg.

**Ref:** 1. IVP Proposal sent by **M/S Bhogam Agro Solutions Private Limited.**  
2. Minutes of the Screening Committee meeting held on 20.04.2023.

\*\*\*\*\*

As per the above references, this is to inform that your proposal has been approved by the Screening Committee under **"Innovation Voucher Programme"**.

In this regard, the details of the recommendations and terms and conditions are as follows :

1. Name of the Company : **Bhogam Agro Solutions Private Limited**
2. Project Title : **Media Treated seedlings for spoilage-free farming** *Dr. Sudha Uthaman*
3. Voucher Type : Voucher – A
4. Maximum Project Duration : **09 Months**
5. Knowledge Partner : Sathyabama Institute of Science and Technology
6. Total Project Cost : **Rs. 2,19,000/-**

| Break up of Project Cost (In Rs.) : |                                    |                                    |                        |          |
|-------------------------------------|------------------------------------|------------------------------------|------------------------|----------|
| EDII Contribution                   |                                    |                                    | Company's Contribution | Total    |
| 1 <sup>st</sup> Installment<br>50%  | 2 <sup>nd</sup> Installment<br>40% | 3 <sup>rd</sup> Installment<br>10% |                        |          |
| 87,600                              | 70,080                             | 17,520                             | 43,800                 | 2,19,000 |

## Terms and Conditions of the grant:

- I. 1<sup>st</sup> Installment: 50 percent of the eligible grant will be released on signing of the Tripartite agreement.
- II. 2<sup>nd</sup> Installment: 40 percent will be released on submission of the Progress report, Utilization Certificate, Photos & Videos, etc. and its acceptance by the EDII within the time frame stipulated in the agreement
- III. 3<sup>rd</sup> Installment: (Remaining 10 percent) will be released on completion of the project and presentation of the final report being made before the Screening committee and the completion report found acceptable.
- IV. Contribution of the company has to be paid in full to the knowledge partner before the release of 2<sup>nd</sup> Installment.
- V. Knowledge partner should release the fund to the company without any delay based on the achievement of milestones as envisaged in the project by the company.





# ENTREPRENEURSHIP DEVELOPMENT AND INNOVATION INSTITUTE

(An autonomous society of the Government of Tamil Nadu)

ParthasarathyKoil Street, SIDCO Industrial Estate,  
Ekkaduthangal, Guindy, Chennai 600032, Tamil Nadu

Tel : +91-44-2225-2081/82/83/84 Web : [www.editn.in](http://www.editn.in)



Roc.No.II-01/44/2022/EDII/2022

Date: 26.05.2023

Sir,

**Sub:** EDII - Innovation Voucher Programme (IVP) - Proposal submitted under IVP – Sanctioned Order Issued – Reg.

**Ref:** 1. IVP Proposal sent by **M/S Kattela Scientific Private Limited.**  
2. Minutes of the Screening Committee meeting held on 20.04.2023.

\*\*\*\*\*

As per the above references, this is to inform that your proposal has been approved by the Screening Committee under “**Innovation Voucher Programme**”.

In this regard, the details of the recommendations and terms and conditions are as follows :

1. Name of the Company : **Kattela Scientific Private Limited.**
2. Project Title : **Ozonizer for Removal of Pesticides on vegetables and Fruits** Dr Chennakesavelu
3. Voucher Type : Voucher – A
4. Maximum Project Duration : **06 Months**
5. Knowledge Partner : SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
6. Total Project Cost : **Rs.2,55,000/-**

| Break up of Project Cost (In Rs.) : |                                    |                                    |                        |          |
|-------------------------------------|------------------------------------|------------------------------------|------------------------|----------|
| EDII Contribution                   |                                    |                                    | Company's Contribution | Total    |
| 1 <sup>st</sup> Installment<br>50%  | 2 <sup>nd</sup> Installment<br>40% | 3 <sup>rd</sup> Installment<br>10% |                        |          |
| 1,00,000                            | 80,000                             | 20,000                             | 55,000                 | 2,55,000 |

## Terms and Conditions of the grant :

- I. 1<sup>st</sup> Installment: 50 percent of the eligible grant will be released on signing of the Tripartite agreement.
- II. 2<sup>nd</sup> Installment: 40 percent will be released on submission of the Progress report, Utilization Certificate, Photos & Videos, etc. and its acceptance by the EDII within the time frame stipulated in the agreement
- III. 3<sup>rd</sup> Installment: (Remaining 10 percent) will be released on completion of the project and presentation of the final report being made before the Screening committee and the completion report found acceptable.
- IV. Contribution of the company has to be paid in full to the knowledge partner before the release of 2<sup>nd</sup> Installment.
- V. Knowledge partner should release the fund to the company without any delay based on the achievement of milestones as envisaged in the project by the company.





# ENTREPRENEURSHIP DEVELOPMENT AND INNOVATION INSTITUTE

(An autonomous society of the Government of Tamil Nadu)  
ParthasarathyKoil Street, SIDCO Industrial Estate,  
Ekkaduthangal, Guindy, Chennai 600032, Tamil Nadu  
Tel : +91-44-2225-2081/82/83/84 Web : [www.editn.in](http://www.editn.in)



Roc.No.II-01/44/2022/EDII/2022

Date: 17.03.2023

Sir,

**Sub:** EDII - Innovation Voucher Programme (IVP) - Proposal submitted under IVP – Sanctioned Order Issued – Reg.

**Ref:** 1. IVP Proposal sent by **M/S V Six Inventions LLP**.  
2. Minutes of the Screening Committee meeting held on 11.01.2023.

\*\*\*\*\*

As per the above references, this is to inform that your proposal has been approved by the Screening Committee under “**Innovation Voucher Programme**”.

In this regard, the details of the recommendations and terms and conditions are as follows :

1. Name of the Company : **V Six Inventions LLP**
2. Project Title : **Smart stick for elders** Dr. Vigneshwaran
3. Voucher Type : Voucher – A
4. Maximum Project Duration : **07 Months**
5. Knowledge Partner : Sathyabama Institute of Science and Technology
6. Total Project Cost : **Rs.2,47,000/-**

| Break up of Project Cost (In Rs.) : |                                    |                                    |                        |          |
|-------------------------------------|------------------------------------|------------------------------------|------------------------|----------|
| EDII Contribution                   |                                    |                                    | Company's Contribution | Total    |
| 1 <sup>st</sup> Installment<br>50%  | 2 <sup>nd</sup> Installment<br>40% | 3 <sup>rd</sup> Installment<br>10% |                        |          |
| 98,800                              | 79,040                             | 19,760                             | 49,400                 | 2,47,000 |

## Terms and Conditions of the grant :

- I. 1<sup>st</sup> Installment: 50 percent of the eligible grant will be released on signing of the Tripartite agreement.
- II. 2<sup>nd</sup> Installment: 40 percent will be released on submission of the Progress report, Utilization Certificate, Photos & Videos, etc. and its acceptance by the EDII within the time frame stipulated in the agreement
- III. 3<sup>rd</sup> Installment: (Remaining 10 percent) will be released on completion of the project and presentation of the final report being made before the Screening committee and the completion report found acceptable.
- IV. Contribution of the company has to be paid in full to the knowledge partner before the release of 2<sup>nd</sup> Installment.
- V. Knowledge partner should release the fund to the company without any delay based on the achievement of milestones as envisaged in the project by the company.
- VI. The company should periodically furnish progress report and utilization certificate to EDII for releasing of 2<sup>nd</sup> and 3<sup>rd</sup> installment.





Federation of  
Indian Chambers  
of Commerce and Industry

Federation House  
Tansen Marg  
New Delhi-110001  
T : +91 11 23738760 (11 lines)  
F : +91 11 23320714 / 23721504  
E : ficci@ficci.com  
W : www.ficci.in  
CIN : U99999DL 1956NPL002635  
ISO 9001 : 2015 Certified

**Sumeet Gupta**

Assistant Secretary General

File No. - RTF/2022/000190

Dated: 01/01/2024

ORDER

On behalf of Department of Science & Technology (Govt of India), sanction of Federation of Indian Chambers of Commerce and Industry (FICCI) is hereby accorded for award of ASEAN – India Research & Training Fellowship (AIRTF) under ASEAN-India Science & Technology Development Fund of Govt. of India to Ms. Nay Kyi Tun, Myanmar Institute of Information Technology (MIIT), Myanmar for a period of 6 months starting from 01<sup>st</sup> February 2024 to 31<sup>st</sup> July, 2024, as per the details given below –

| Research Topic                                                                                     | Name of the awardees                                                          | Indian Host Institute and duration of the Fellowship                                                             |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Real time facemask detection on convolution neural network,<br><br>Computer Science & Engineering. | Ms. Nay Kyi Tun, Myanmar Institute of Information Technology (MIIT), Myanmar. | Dr. M.S. Godwin Premi, Professor, Sathyabama Institute of Science and Technology, Sathyabama University, Chennai |

The break-up of estimated expenditure is indicated as below-

| S. No. | Items of expenditure                                                                                                                                                                                                                                                                                     | Amount         |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| i.     | Fellowship amount @Rs. 60,000/- per month for 6 months (all inclusive of accommodation and food etc )                                                                                                                                                                                                    | Rs. 3,60,000/- |
| ii.    | International airfare from the nearest international airport from the place of employment and back by lowest economy class and subject to actuals.                                                                                                                                                       | Rs. 70,000/-   |
| iii.   | One time research contingency grant for research expenses, airport transfers, visa fee (if any), domestic travel etc.<br>Note: 75% of the one-time grant will be transferred to host institute at the start of the fellowship, and remaining 25% on submission of the completion report to DST and FICCI | Rs. 40,000/-   |
| iv.    | Host Institute overhead charges @Rs. 2500/- per month for 6 months                                                                                                                                                                                                                                       | Rs. 15,000/-   |
|        | Total                                                                                                                                                                                                                                                                                                    | Rs. 4,15,000/- |





**Nirankar Saxena**  
Deputy Secretary General

**Federation of  
Indian Chambers  
of Commerce and Industry**

Federation House  
Tansen Marg  
New Delhi 110001  
T +91 11 23738760-70 (11Lines)  
+91 11 23316542 (D)  
F +91 11 23320714  
+91 11 23721504  
E nirankar.saxena@ficci.com  
www.ficci.com  
CIN : U99999DL1956NPL002635

File No. - RTF/2022/000189

Dated: 11/07/2023

### ORDER

On behalf of Department of Science & Technology (Govt of India), sanction of Federation of Indian Chambers of Commerce and Industry (FICCI) is hereby accorded for award of ASEAN – India Research & Training Fellowship (AIRTF) under ASEAN-India Science & Technology Development Fund of Govt. of India to Dr. Kay Thinzar Phu, Myanmar Institute of Information Technology (MIIT), Myanmar for a period of 6 months starting from 01<sup>st</sup> August 2023 to 31<sup>st</sup> January, 2024, as per the details given below –

| Research Topic                                                                                             | Name of the awardees                                                              | Indian Host Institute and duration of the Fellowship                                                             |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Traffic sign recognition system using convolutional neural network,<br><br>Computer Science & Engineering. | Dr. Kay Thinzar Phu, Myanmar Institute of Information Technology (MIIT), Myanmar. | Dr. M.S. Godwin Premi, Professor, Sathyabama Institute of Science and Technology, Sathyabama University, Chennai |

The break- up of estimated expenditure is indicated as below-

| S. No. | Items of expenditure                                                                                                                                                                                                                                                                                            | Amount         |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| i.     | Fellowship amount @Rs. 60,000/- per month for 6 months (all inclusive of accommodation and food etc )                                                                                                                                                                                                           | Rs. 3,60,000/- |
| ii.    | International airfare from the nearest international airport from the place of employment and back by lowest economy class and subject to actuals.                                                                                                                                                              | Rs. 70,000/-   |
| iii.   | One time research contingency grant for research expenses, airport transfers, visa fee (if any), domestic travel etc.<br><b>Note: 75% of the one-time grant will be transferred to host institute at the start of the fellowship, and remaining 25% on submission of the completion report to DST and FICCI</b> | Rs. 40,000/-   |
| iv.    | Host Institute overhead charges @Rs. 2500/- per month for 6 months                                                                                                                                                                                                                                              | Rs. 15,000/-   |
|        | Total                                                                                                                                                                                                                                                                                                           | Rs. 4,15,000/- |





**Nirankar Saxena**  
Deputy Secretary General

**Federation of  
Indian Chambers  
of Commerce and Industry**

Federation House  
Tansen Marg  
New Delhi 110001  
T +91 11 23738760-70 (11Lines)  
+91 11 23316542 (D)  
F +91 11 23320714  
+91 11 23721504  
E nirankar.saxena@ficci.com  
www.ficci.com  
CIN : U99999DL1956NPL002635

**File No. - RTF/2022/000188**

**Dated: 11/07/2023**

**ORDER**

On behalf of Department of Science & Technology (Govt of India), sanction of Federation of Indian Chambers of Commerce and Industry (FICCI) is hereby accorded for award of ASEAN – India Research & Training Fellowship (AIRTF) under ASEAN-India Science & Technology Development Fund of Govt. of India to **Mr. Soe Paing**, Myanmar Institute of Information Technology (MIIT), Myanmar for a period of 6 months starting from **01<sup>st</sup> August 2023 to 31<sup>st</sup> January, 2024**, as per the details given below –

| Research Topic                                                                                                                     | Name of the awardees                                                        | Indian Host Institute and duration of the Fellowship                                                             |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Tomato and potato plant disease recognition and classification using convolutional neural network, Computer Science & Engineering. | Mr. Soe Paing, Myanmar Institute of Information Technology (MIIT), Myanmar. | Dr. M.S. Godwin Premi, Professor, Sathyabama Institute of Science and Technology, Sathyabama University, Chennai |

The break- up of estimated expenditure is indicated as below-

| S. No. | Items of expenditure                                                                                                                                                                                                                                                                                            | Amount         |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| i.     | Fellowship amount @Rs. 60,000/- per month for 6 months (all inclusive of accommodation and food etc )                                                                                                                                                                                                           | Rs. 3,60,000/- |
| ii.    | International airfare from the nearest international airport from the place of employment and back by lowest economy class and subject to actuals.                                                                                                                                                              | Rs. 70,000/-   |
| iii.   | One time research contingency grant for research expenses, airport transfers, visa fee (if any), domestic travel etc.<br><b>Note: 75% of the one-time grant will be transferred to host institute at the start of the fellowship, and remaining 25% on submission of the completion report to DST and FICCI</b> | Rs. 40,000/-   |
| iv.    | Host Institute overhead charges @Rs. 2500/- per month for 6 months                                                                                                                                                                                                                                              | Rs. 15,000/-   |
|        | Total                                                                                                                                                                                                                                                                                                           | Rs. 4,15,000/- |





Dr. Sulakshana Jain  
Scientist – 'E'  
International Cooperation Division  
Tel. 011- 26519947  
Fax.011- 26862418

भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
टेक्नोलॉजी भवन, नया महरौली मार्ग  
नई दिल्ली-110 016

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD  
NEW DELHI-110 016

D.O. No.

DST/INT/CVRF/2022

Dated 20.07.2023

Dear Dr. Manjunath Kamath S.,

Greetings from FICCI.

It gives me pleasure to inform you that Mr. Djimenan Boilengar from Chad has been selected for the award of 'C V Raman International Fellowship for African Researchers' under Visiting Fellowship for which you have graciously consented to be the host scientist in India. The final award to the candidate is, however, subject to fulfillment of acceptance criteria as required by DST and the host institution.

The selected African researchers are required to comply with requirements as indicated in the Annexure to this letter.

Further, as FICCI would be transferring the fellowship amount to the host institute, may I request you to send the fund transfer details (i.e. name of beneficiary/bank account, bank name and branch) along with name and details of the contact person. The host institute would be required to obtain original bills/invoices for procurement made by the fellow against contingency allocation (details given in brochure) and submit the same to FICCI along with utilization certificate (duly signed by competent authority) for the entire fellowship grant and technical progress report after completion of fellowship tenure.

We would like to extend our sincere gratitude for your kind support to 'C V Raman International Fellowship for African Researchers' program by accepting to be a host scientist. We value your partnership and believe that your support is critical for successful implementation of this ambitious program launched by Government of India. We are sure that it will help in building contacts and linkages with African researchers and at the same time serve as a goodwill building measure. We look forward to your continued support for the program in upcoming years.

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Dr. T. Rajasekar

क्षेत्रीय जैवप्रौद्योगिकी केन्द्र, जैवप्रौद्योगिकी विभाग, एच.आर.डी.पी. एम. यू

**Regional Centre for Biotechnology  
Department of Biotechnology, HRD-PMU**

**Release Order**

14<sup>th</sup> February 2023

**Ref. No. DBT TWAS/Year 2021/PG/ Mr. Bonsou Nguemo Idrios**

**Subject: Release of funds to Mr. Bonsou Nguemo Idrios from Cameroon in the F.Y. 2022-23 under the DBT-TWAS Fellowship Programme 2021.**

1. The Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India and The World Academy of Sciences (TWAS), Trieste, Italy have jointly supported the "DBT-TWAS Fellowship Programme" to foster science and technology (S&T) for scientists in developing countries of the South (excluding India) through research collaborations and capacity building. The DBT-HRD Project & Management Unit (DBT-HRD PMU) established at Regional Centre for Biotechnology, Faridabad implements and manages the DBT TWAS Fellowship programme.
2. In continuation to TWAS Award, the competent authority has approved the release of funds to **Mr. Bonsou Nguemo Idrios** from Cameroon (DBT TWAS Fellow) through the Sathyabama Institute of Science and Technology, Chennai (Indian host institution) to pursue Post Graduate (PG Sandwich) research for a **period of 12 months** under the guidance of Dr. Jerrine Joseph under the DBT TWAS Fellowship programme. The DBT TWAS Fellow has joined his Indian Host Institute on 27<sup>th</sup> September 2022 for commencement of fellowship under the programme.
3. The budget approved for the subject award is as follows:

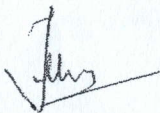
| S. No. | Fellowship/Budget Heads                                                                   | Amount (in INR)     |
|--------|-------------------------------------------------------------------------------------------|---------------------|
| 1      | Monthly Stipend of Rs. 31,000/- for an approved duration of 12 months (Rs. 31,000 X 12 M) | Rs. 3,72,000        |
| 2      | House Rent Allowances* (if applicable)                                                    | 0                   |
| 3      | Health Insurance of Rs. 600 per month (Rs. 600 X 12 M)                                    | Rs. 7,200           |
| 4      | Contingency of Rs. 50000/- per annum                                                      | Rs. 50,000          |
| 5      | <b>Total</b>                                                                              | <b>Rs. 4,29,200</b> |

\*Note: Hostel fee/ Institutional facility will not be reimbursed.

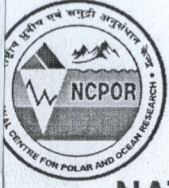
4. **Rs. 4,29,200/- (Rupees Four lakhs twenty nine thousand two hundred only)** is being released by RTGS on below-mentioned banking details submitted by the Fellow.

|                     |                                                                                       |
|---------------------|---------------------------------------------------------------------------------------|
| Bank Account Holder | Sathyabama Institute of Science and Technology - Research                             |
| Bank Name           | Indian Bank                                                                           |
| Branch Address      | Sathyabama University, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Tamil Nadu 600119 |
| Account Number      | 6089858032                                                                            |
| IFS Code            | IDIB000S201                                                                           |

The fellowship will not be convertible into foreign currency.







# राष्ट्रीय ध्रुवीय एवं समुद्री अनुसंधान केन्द्र

पृथ्वी प्रणाली विज्ञान संगठन

पृथ्वी विज्ञान मंत्रालय (भारत सरकार)

हेडलैण्ड सडा, वास्को-डा-गामा, गोवा-४०३ ८०४, भारत



## NATIONAL CENTRE FOR POLAR AND OCEAN RESEARCH

Earth System Science Organisation

Ministry of Earth Sciences, (Government of India)

Headland Sada, Vasco-da-Gama, Goa - 403 804, INDIA

डॉ रोहित श्रीवास्तव / Dr. Rohit Srivastava

वैज्ञानिक ई एवं प्रभारी / Scientist E and In-Charge

आर्कटिक अभियान संभार-तंत्र / Arctic Expedition Logistics

टेलीफोन/ Tel: 0832-2525-590

ईमेल / email: rohits@ncpor.res.in

Ref. No.: NCPOR/ARC/WIAE-2023-24/14

दिनांक/ Date: 20-Dec-2023

To,

Dr M. Radhakrishnan,

Professor (Research)

Centre for Drug Discovery and Development

Sathyabama Institute of Science and Technology

Chennai - 600 119. Tamil Nadu

**Subject: Acceptance of Project Proposal for Indian Arctic Expedition (Nov 2023- Mar 24) reg**

Dear Dr. Radhakrishnan,

I am pleased to inform you that the proposal submitted for the Indian Arctic Expedition Nov 2023 – Mar 24 titled "*Diversity and distribution of Actinobacteria in Arctic during polar nights and their adaptation properties*" by PI: Dr. M. Radhakrishnan, Professor, Sathyabama I S & T Co-PIs: Dr. K. Manigundan, Assistant Professor, Sathyabama I S & T, Dr. P V Bharkar, Scientist E, ESSO-NCPOR has been accepted.

One berth is allotted for the project by the committee. Therefore, the following suggested staff member of the project may participate in the expedition,

1. Prof. Radhakrishnan Manikkam, Professor, Sathyabama I S & T

The expenses (for a field personal as per allotted berth – 01) regarding travel, accommodation and daily allowance, foreign local conveyance, and visa charges as per eligibility of the field personal will be borne by NCPOR. The Standard Operating Procedure (SOP) for the expedition is attached.

The deputation period for the field personnel in Ny Ålesund, Svalbard, Norway (Arctic) is **05 Feb to 26 Feb 2024 (excluding the travel period).**

This issues with the approval of Hon'ble Minister of Earth Sciences, Govt. of India vide e-file No. Arctic Exp Log of e-file No. MoES/Arctic/1/2007 [Part II] dated 24.11.2023.

Thank You.

Yours Sincerely,

Dr. Rohit Srivastava





GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
CO/A/FP/ES0/2022 (G)  
(NCSTC)

Technology Bhawan, New Delhi  
Dated: 13/09/2023

Sanction Order

Subject: Financial assistance for the project entitled "Creating Awareness on Extended Technologies - Artificial Intelligence, Augmented Reality and Virtual Reality for School Children" submitted by Dr. Godwin Premi M S, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, CHENNAI, CHENNAI, TAMILNADU, 600119 Release of the First installment regarding

Sanction of the President is hereby accorded to the approval to the above mention project at a total cost of Rs. 21,58,500/- (Rupees Twenty One Lakh Fifty Eight Thousand Five Hundred only) for a duration of 1 Years. The detailed breakup of the grant for General as well as Capital Components are given below:-

General Component : ₹ 21,58,500/-  
Capital Component : ₹ 0.00/-

| Items                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Budget Summary (in Rs.) |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Year-1                  | Total   |
| <b>1- Non-Recurring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |         |
| Subtotal (Capital)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0                       |         |
| <b>2- Recurring</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |         |
| Travel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 396000                  | 396000  |
| A. Events of Organization-1. Honorarium for Resource Persons (@ Rs.2000 X 5 persons X 3 days) = Rs. 30,000/-, 2. Accommodation for outside Resource Person (@ Rs.3000 x 3 persons x 3days) = Rs. 27,000/-, 3. Design and Print of Brochures, Banners, stationaries = Rs.20,000/-, 4. Cost of Drawing competition Material (@Rs.110 for 300 students) = Rs.33,000/-, 5. Certificates and Trophies to the students, school representatives = Rs.25,000/-, 6. Expenses for Sound system, Photography and Videography for all 3 days = Rs.25,000/-, 7. Refreshment and meal 200 students and teachers for 3 days) = Rs.42,500/-, 8. Hiring of Covered Camp Space, Rent of Tents for Stalls, Chairs, Tables & other venue arrangements etc. (@ Rs.50000 x 3days) = Rs.1,50,000/-, 9. Registration Kit to students (@400 for 300 students) = Rs.1,20,000/-, 10. Event promotion / visit to schools = Rs.15,000/-, Total = Rs. 5,87,500/-, Total for 3 programme = 3 x 5,87,500/- = Rs. 17,62,500/- | 1762500                 | 1762500 |
| Subtotal (General)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2158500                 | 2158500 |
| Total Project Cost (Cap.+ Gen.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2158500                 | 2158500 |

2. The sanction of the President is also accorded to the release of Rs. 16,00,000/- (Rupees Sixteen Lakh only) to the "Director/Registrar/Principal/Controller/Comptroller, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY" being the First installment of grant as mentioned above table under "General Component" for the above mentioned project.

3. The expenditure involved is debitable to Demand No. 89, Department of Science & Technology for the year 2023-24:

|                      |                                                   |
|----------------------|---------------------------------------------------|
| 3425                 | Other Scientific Research(Major Head)             |
| 3425.60              | Others : (Sub-Major Head)                         |
| 3425.60.200          | Assistance to Other Scientific Bodies(Minor Head) |
| 3425.60.200.70       | Innovation,Technology Development and Deployment  |
| 3425.60.200.70.00    | Detailed Head                                     |
| 3425.60.200.70.00.31 | Grants-in-aid General                             |
|                      | (Previous: 3425.60.200.08.05.31)                  |

*Rajinder Singh*





**Manjunath Srinivas Kamath**

Foreign Researcher  
Sathyabama Institute of  
Science and Technology  
(Deemed to be University)



**Application**

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**Evaluation**

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**Monitoring**

[GRA Vacancy  
Inspection](#)



**Invitation**



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0



**Group Discussion**



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**Local System Setup**



**Help**



**Application > My Application**



**Application History**

| Application date | Title                                                                                                                                                                                                                                                                     | Batch       | Approved?                                                   | Role                           |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------|--------------------------------|
| 02/03/2023       | (Ref: FRGS/1/2023/SKK06/UM/01/1)<br>Isolation, characterization of antimicrobial peptides from terrestrial snails and its antimicrobial mechanism and cytotoxicity in combination with antibiotics: A novel therapeutic combination for the treatment of ESKAPE pathogens | FRGS 2023-1 | Yes.<br>Approved<br>RM174000<br><a href="#">Show Detail</a> | Member<br><a href="#">Hide</a> |

**Leader**



[Saiful Anuar Bin Karsani](#)  
Professor  
Universiti Malaya

**Members**



[Gopinath Venkatraman](#)  
Senior Lecturer  
Universiti Malaya



[PUTERI SHAFINAZ AKMAR  
BINTI ABDUL RAHMAN](#)  
Professor  
Universiti Malaya



[Kumutha Malar Vellasamy](#)  
Senior Lecturer  
Universiti Malaya

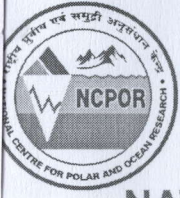


[Noor Liana Binti Mat Yajit](#)  
Others  
Universiti Malaya



[Manjunath Srinivas Kamath](#)  
Associate Professor  
Sathyabama Institute of Science and Technology (Deemed to be University)





राष्ट्रीय ध्रुवीय एवं समुद्री अनुसंधान केन्द्र

पृथ्वी प्रणाली विज्ञान संगठन

पृथ्वी विज्ञान मंत्रालय (भारत सरकार)

हेडलैण्ड सडा, वास्को-डा-गामा, गोवा-४०३ ८०४, भारत



150  
YEARS OF  
CELEBRATING  
THE MAHATMA



**NATIONAL CENTRE FOR POLAR AND OCEAN RESEARCH**

Earth System Science Organisation

Ministry of Earth Sciences, (Government of India)

Headland Sada, Vasco-da-Gama, Goa - 403 804, INDIA

Dr. Rohit Srivastava

Scientist E and In-Charge,

Arctic Expedition Logistics

Tel: 0832-2525-590

email: rohits@ncpor.res.in

NCPOR/ARC/IAE-2023-24/24

Date: 12<sup>th</sup> June, 2023

To,

Dr. K. Manigundan,

Scientist C

Centre for Drug Discovery and Development

Sathyabama Institute of Science and Technology,

Chennai

**Subject: Acceptance of Project proposal for Indian Arctic Expedition 2023-24 reg**

Dear Dr. Manigundan,

I am pleased to inform you that the proposal submitted for the Indian Arctic Expedition 2023-24 titled "*Sytematic study on vascular plant rhizosphere soil microbiota from arctic ecosystem for iron bio-fortification*" by PI: Dr. K. Manigundan, Scientist C, Sathyabama Institute of Science and Technology, Chennai, Co-PI: M. Radhakrishnan, Scientist E, Sathyabama Institute of Science and Technology, Chennai and Co-PI: P. V. Bhaskar, Scientist E, ESSO-National Centre for Polar and Ocean Research, Goa has been accepted. *1 Year*

One berth is allotted for the project by the committee. Therefore, one of the following suggested staff members of the project may participate in the expedition,

1. Dr. K. Manigundan, Scientist C, Sathyabama Institute of Science and Technology, Chennai
2. Mr. Rantim Bhattacharjee, Junior Research Fellow, ESSO-NCPOR, Goa

The expenses (for a field personal as per allotted berth – 01) regarding travel, accommodation and daily allowance, foreign local conveyance, and visa charges as per eligibility of the field personal will be borne by ESSO-NCPOR.

The deputation period for the field personal in Ny-Ålesund, Svalbard, Norway (Arctic) is 26 June to 24 July 2023 (excluding the travel period).

Thank You.

Yours Sincerely,

Dr. Rohit Srivastava





विश्वविद्यालय अनुदान आयोग  
University Grants Commission  
(शिक्षा मंत्रालय, भारत सरकार)  
(Ministry of Education, Govt. of India)



F. No. 82-7/2022(SA-III)

7 February, 2023

Registration ID: UGCES-22-GE-TAM-F-SJSGC-9264

Ms. Sudhanarayani S Rao

A 401, TCP Lakefront, Model School Road, Sholinganallur, Chennai  
600119, Tamil Nadu



**Award Letter of Savitribai Jyotirao Phule Single Girl Child Fellowship (SJSGC) 2022-23**

Dear Scholar,

With reference to your application submitted online for the year 2022-23 for Savitribai Jyotirao Phule Single Girl Child Fellowship (SJSGC), I am to inform that you have been provisionally selected for the award of fellowship subject to the fulfilment of conditions as mentioned in the guidelines of the scheme. The fellowship would be effective from 1st April of the selection year (2022-23) or the actual date of joining under the fellowship in the University/College/Institution, whichever is later. The total tenure of the fellowship is 5 years.

The guidelines of the scheme is available on UGC website: [www.ugc.ac.in](http://www.ugc.ac.in). You are requested to submit this award letter and other required documents, as mentioned in the guidelines and the notification of result published on UGC website to your research institution. You should join the fellowship within 3 months from the date of issue of Award letter, failing which the award will be treated as cancelled.

The amount of fellowship payable during the tenure of fellowship is given as under:

|                          |                                                                                                                                                      |                                                                                                                                         |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Fellowship               | JRF @ Rs. 31,000/- p.m. for initial two years<br>SRF @ Rs. 35,000/- p.m. for remaining tenure<br>(subject to satisfactory progress of research work) |                                                                                                                                         |
| Contingency              | <b>For Humanities and Social Sciences</b><br>@ Rs. 10,000/- p.a. for initial two years<br>@ Rs. 20,500/- p.a. for remaining tenure                   | <b>For Science, Engineering and Technology</b><br>@ Rs. 12,000/- p.a. for initial two years<br>@ Rs. 25,000/- p.a. for remaining tenure |
| Escort Reader Assistance | @ Rs. 3,000/- p.m. in case of 'Divyang' scholars                                                                                                     |                                                                                                                                         |

It may be noted that the fellowship is disbursed through a dedicated portal - Scholarship Fellowship Management Portal (SFMP) (<https://scholarship.canarabank.in/>). The University/College/Institution shall link the master data of the candidate and update the information (such as continuation, HRA, etc.) on SFMP on monthly basis after verifying the progress of the candidate.

The University/College/Institution may terminate the fellowship of the awardee in any of the following cases, under intimation to UGC:

1. In case, any candidate obtained the fellowship fraudulently.
2. Misconduct
3. Unsatisfactory progress of research report
4. Candidate, if at any later stage, found ineligible on account of false information provided in the online application

Yours faithfully,

(Ajay Kumar Joshi)  
Under Secretary







VC Office1 &lt;vcoffice1@sathyabama.ac.in&gt;

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**Fwd: Your Proposal DBT/CTEP/01/20230851746 has been approved**

---

**Rajasekar** <microraja09@gmail.com>

Thu, Oct 3, 2024 at 12:31 PM

To: "vcoffice1@sathyabama.ac.in" &lt;vcoffice1@sathyabama.ac.in&gt;

----- Forwarded message -----

From: &lt;ctepcell@dbt.nic.in&gt;

Date: Fri, 20 Oct, 2023, 5:34 pm

Subject: Your Proposal DBT/CTEP/01/20230851746 has been approved

To: &lt;microraja09@gmail.com&gt;

Cc: &lt;vc@sathyabama.ac.in&gt;

Respected Sir/Madam,  
Dr.T.Rajasekar  
Sathyabama Institute of Science and Technology

Congratulations!

Your proposal with ID DBT/CTEP/01/20230851746 has been approved by DBT. You have been granted financial assistance of Rs. 150000. Financial assistance would be released as per DBT-CTEP norms.

**Below is the committee's remarks:**

Recommended for Rs. 1,50,000/-

The grant would be released on submission of the following requisite documents at the earliest, subject to availability of funds:

1. Utilisation Certificate and Statement of Expenditure (UC and SE) as per the format available at CTEP Conference guidelines. The UC&SE should be duly signed and stamped by an independent Chartered Accountant in case the organisation is Non-Government.
2. A detailed report and photographs (soft copy) of the event along with the copy of publication(s)/proceedings clearly mentioning the number of participants (National & International).
3. Duly verified Bank details of your organisation (Name as per bank account, Bank Name, Branch and Address, Account No, Nature of account, IFSC code and MICR Code).

Note: Claims should be submitted within 3 months of the successful completion of the event. Any claim received beyond this period will not be considered for payment.

The recommendation is also available on our [website](#).

Sincerely yours,  
DBT-CTEP Management Cell  
Biotech Consortium India Limited,  
5th Floor, Anuvrat Bhawan | 210, Deen Dayal Upadhyaya Marg,  
New Delhi - 110002 | India,  
Tel.: 91-11-23219064-67 | Fax: 91-11-23219063,  
E-mail [ctepcell@dbt.nic.in](mailto:ctepcell@dbt.nic.in)  
(To keep receiving our mails in your mailbox, please add our email address [ctepcell@dbt.nic.in](mailto:ctepcell@dbt.nic.in) in your contact list)



**MoES/SSWC/04/2022 -PC-V**  
**Government of India**  
**Ministry of Earth Sciences**

**Prithvi Bhawan,**  
**Lodhi Road, New Delhi**

24/09/2024

**SANCTION ORDER**

In continuation of the Administrative Order No. MoES/CNA/Schemes 2021-26/2023 dated 01.05.2024, sanction of the President is hereby conveyed under rule 16 of the Delegation of Financial Power Rules, 2024 for release of an amount of **Rs.1,00,000/- (Rupees One lakh only)** to Assistant Prof. (Research), Sathyabama Institute of Science and Technology, Centre for Remote and Geoinformatics, Rajiv Gandhi Road, Jeppiaar Nagar, Chennai for National Conference on "Current Trends in Marine Biotechnology from Sustainable Bioresources for the Emerging Bioeconomy" which is to be held from **01<sup>st</sup>-02<sup>nd</sup> November 2024** at International Research Centre, Sathyabama Institute of Science and Technology, Chennai, Tamilnadu.

2. The above expenditure will be debit-able to the following head of account:

|          |   |                                                    |
|----------|---|----------------------------------------------------|
| 3425     | - | Other Scientific Research (Major Head)             |
| 60       | - | Others                                             |
| 60.200   | - | Assistance to Other Scientific Bodies (Minor Head) |
| 52       | - | Research Education & Training Outreach             |
| 52.00.31 | - | Grant-in-aid-General                               |

Under demand No. 24 of the Ministry of Earth Sciences for year 2024-25.

3. The amount of **Rs.1,00,000/- (Rupees One lakh only)** will be drawn by the Director, INCOIS, Hyderabad from the central nodal agency (CNA) account (INCOIS Reach out Account) and will be disbursed to the zero-balance subsidiary account (Assistant Prof. (Research), Sathyabama Institute of Science and Technology, Centre for Remote and Geoinformatics, Rajiv Gandhi Road, Jeppiaar Nagar, Chennai) through REAT/EAT module of PFMS for expenditure under GIA.

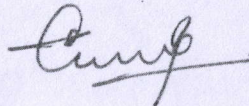
|    |                        |                                                |
|----|------------------------|------------------------------------------------|
| 1. | Name of Account Holder | Sathyabama University - Research               |
| 2. | Name of Bank           | Indian Bank                                    |
| 3. | Name of Branch         | Sathyabama University, Jeppiaar Nagar, Chennai |
| 4. | Account Type           | Saving                                         |
| 5. | Account Number         | 6089858032                                     |
| 6. | IFSC/RTGS/NEFT Code    | IDBI000S201                                    |
| 7. | MICR Code              | 600019229                                      |

4. As per rule 238(1) of GFR 2017 relating to UC's for the fund released are not applicable at this stage the said institute would be receiving the grant for the aforesaid purpose for the first time.

5. Assistant Prof. (Research), Sathyabama Institute of Science and Technology, Centre for Remote and Geoinformatics, Rajiv Gandhi Road, Jeppiaar Nagar, Chennai will furnish to MoES a Utilization Certificate in the proforma prescribed as per GFR 2017 and audited statement of expenditure along with updated progress report (Vis-a vis Target Vs-Achievement) at the end of each Financial year.

6. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division and copy of same through email. The subsequent/final instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

7. The account of the grantee organization shall be open to inspection by the sanctioning





Science and Engineering Research Board  
3rd & 4th Floor, Block II  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016

Dated: 12 October, 2023

**ORDER**

Subject: Financial assistance for the organizing National Workshop on "Hands-on training program on primer designing & RT-PCR for in Biomedical, Agricultural and Epidemiology Research" by Dr. RAJASEKAR THIRUNAVUKKARASU, Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Chennai, Tamil Nadu-600119 being held from 05-Oct-2023 to 07-Oct-2023 (3 days).

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 150000/- (Rs. One Lakh Fifty Thousand Only) to Sathyabama Institute Of Science And Technology, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai, Chennai, Tamil Nadu-600119 during the financial year 2023-2024 to meet the expenses related to TA/DA to Young and Senior Indian Scientists, Pre-conference printing in connection with the above event.

2. The amount of Rs. 150000/- (Rs. One Lakh Fifty Thousand Only) will be drawn by Under Secretary, SERB and disbursed by the means of Cheque or Electronic Fund Transfer (NEFT/RTGS) as beneficiary's Bank Details given below.

|                        |                                                                                                            |
|------------------------|------------------------------------------------------------------------------------------------------------|
| PFMS Unique Code       | SU                                                                                                         |
| Account Name           | Sathyabama Institute of Science and Technolog                                                              |
| Account Number         | 6089858032                                                                                                 |
| Bank Name & Branch     | INDIAN BANK Sathyabama Institute of Science and Technology Jeppiaar Nagar Rajiv Gandhi Road Chennai 600119 |
| IFSC/RTGS Code         | IDIB000S201                                                                                                |
| Email id of A/C Holder | vc@sathyabama.ac.in                                                                                        |
| Email id of PI         | microraja09@gmail.com                                                                                      |

to VICE CHANCELLOR, Sathyabama Institute Of Science And Technology (Deemed To Be University), Jeppiaar Nagar, Rajiv Gandhi Salai

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER)  
This release is being made under Seminar/Symposia. (Internal Committee). General

4. The Sanction has been issued with the approval of competent authority under delegated powers and vide sanction number to Sathyabama Institute Of Science And Technology (Deemed To Be University), Jeppiaar Nagar, Rajiv Gandhi Salai with the approval of the competent authority under delegated powers on 29 September, 2023 and vide Diary No. SERB/F/7369/2023-2024 dated 07 October, 2023

5. As per Rule 211(1) of GFRs, the accounts of the Grantee Institution shall be open to inspection by the sanctioning authority/audit whenever the institute is called upon to do so.

6. It is mandatory that the grantee institution is required to submit to this office, audited Statement of Income-Expenditure, Utilization Certificate (in duplicate as per prescribed format) and brief report of above event (max. 04 pages) within three months after the date of completion.

7. The balance amount, if any, may be returned through DD in favor of "Fund for Science & Engineering Research" payable at New Delhi.

8. The Organization/Institute/University should ensure that the technical support/financial assistance provided to them by the Science and Engineering Research Board, a statutory body of the Department of Science and Technology (DST), Government of India should invariably be highlighted/acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.