

MILIOLID (BENTHIC) FORAMINIFERA FROM SHALLOW WATERS OFF THE ROCKY ISLAND, ANDAMANS, INDIA

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Abstract: A thorough review of literature shows that more attention has been paid to fossil planktic foraminifera from the Andaman and Nicobar Islands compared to their benthic counterparts. This paper presents a detailed account of the taxonomy of miliolid (benthic) foraminifera from shallow waters off the Rocky Island of the archipelago. Thirty-eight taxa belonging to 3 superfamilies, 5 families and 12 genera were identified and their systematic paleontology is discussed with more emphasis on their nomenclatural aspects and ecology. Most of the species identified are illustrated in the form of SEM photographs.

Keywords: Benthic foraminifera; Miliolids; Taxonomy; Ecology; Rocky Island; Andamans

Introduction: The Andaman and Nicobar Islands of India are located between 6° N and 14° N latitudes in the north-east Indian Ocean. This archipelago, which forms the western margin of the Andaman Sea (Bandopadhyay and Carter, 2017), consists of 319 islands (Bhoothalingam, 1972) in which the Andaman group of islands comprises 258 and the Nicobar group comprises 61 islands. A channel at 10° N latitude, which is popularly known as the “Ten Degree Channel”, separates these islands. The archipelago forms a dividing line between the Bay of Bengal in the west and the Andaman Sea in the east. It is actually an emergent part of a long ridge which extends from the Arakan–Yoma ranges of western Myanmar (Burma) in the north to Sumatra in the south. One of the smaller islands, Rocky Island, was selected for the present study.

The Andaman and Nicobar Islands have been studied with respect to various aspects like geology and geomorphology (e.g., Bandopadhyay and Carter, 2017), petrology (e.g., Alam *et al.*, 2004), tectonics, depositional environments (e.g., Srinivasan and Chatterjee, 1981), facies analysis and paleoenvironment (e.g., Ghosh and Sarkar, 2013), stratigraphy (e.g., Pandey *et al.*, 2017), geophysics (e.g., Subba Rao *et al.*, 2016) fauna (e.g., Tikader *et al.*, 1986), flora (e.g., Chaturvedi, 2013), pedology (e.g., Das *et al.*, 1996) and larger foraminifera (e.g., Raju and Mishra, 1991). There have been some significant studies on benthic and planktic foraminifera as well and are summarized in the ensuing paragraphs.

Previous studies on foraminifera: Foraminifera are unicellular, micro organisms that are essentially marine, but have been reported from brackish and even some fresh water bodies. These protists are ubiquitous in the fossil record and well preserved as fossils, which has been optimally made use of in various taxonomical, ecological and distribution studies as well as in application-oriented endeavors. Late Tertiary sediments containing abundant smaller foraminifera were recorded for the first time from Little Andaman Island, Bay of Bengal, by Srinivasan (1969). Eighty-six benthonic and 25 planktonic species were recorded by him from a mudstone sample of middle Miocene (Tortonian) age; a benthonic foraminiferal assemblage including *Valvulina*, *Karreriella*, abundant *Nodosarids*, *Stilostomella*, *Osangularia*, *Oridorsalis prominula* and abundant planktonics indicated deposition of the mudstone at approximately middle bathyal depths.

Novel pyochelin-based PEGylated liposomes for enhanced delivery of antibiotics against resistant clinical isolates of *Pseudomonas aeruginosa*

Pradeep Pushparaj Selvadoss, Jayshree Nellore, Malathy Balaraman Ravindran & Uma Sekar

To cite this article: Pradeep Pushparaj Selvadoss, Jayshree Nellore, Malathy Balaraman Ravindran & Uma Sekar (2018) Novel pyochelin-based PEGylated liposomes for enhanced delivery of antibiotics against resistant clinical isolates of *Pseudomonas aeruginosa*, Artificial Cells, Nanomedicine, and Biotechnology, 46:8, 2043-2053, DOI: [10.1080/21691401.2017.1408119](https://doi.org/10.1080/21691401.2017.1408119)

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No. IA/Indo-Japanese/F-9/2019
December 11, 2018

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Sub: Indo-Japanese Joint Project on “Establishment of Young Researcher Fellowship Programme 2018-2019”

Dear **Dr. Dr.V.Karthick**,

The Indian National Science Academy (INSA) New Delhi is pleased to award you the Indo-Japanese Joint Project on “Establishment of Young Researcher Fellowship Programme 2018-2019” for conducting advance research on the project titled “*Multiwalled Carbon Nanotubes Coated Peritoneal Dialysis Catheter for Resistance Against Catheter Associated Infections*” for a duration of **five** months at International center for Materials Nanoarchitectonics (MANA), National Institute For Material Science (NIMS), 1-1 Namiki Tsukuba, Ibaraki 305-0044, Japan.

The Academy will provide funds for your international air travel and visa charges for travel as per the details given below:-

S. No.	Details	Amount / Remarks
1	Maintenance allowance @ JPY 3,62,000 per month	Will be paid by Japanese Society for Promotion of Science during the visit
2	International Air fare by economy class (Air India) including domestic and airport transportation (as per actual)	₹75,000/-
3	Visa charges, medical insurance and contingency	₹ 25,000/-

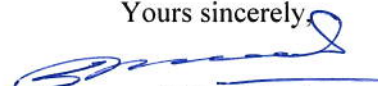
All travel must be commenced on or before **31 January 2019**. The advance payment for your visit will be released to your institute and the balance will be settled after completion of fellowship and return to India on the receipt of the detailed report, statement of expenditure, utilization certificate and other required documents as per INSA formats (Annexure-I) duly forwarded by the Head of your Institute/University. **Kindly provide Institute Bank details for release of money.**

You are requested to send your acceptance for the award of **Indo-Japanese Joint Project on “Establishment of Young Researcher Fellowship Programme 2018-2019”** to the undersigned **within 10 days from the date of issue of this letter.**

If no communication is received from you within the specified period, it will be presumed that you are not interested in availing the fellowship and no correspondence in this regard will be entertained. Kindly quote our above referred file number in all future correspondence with us.

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Yours sincerely,


(S.P. Mishra)

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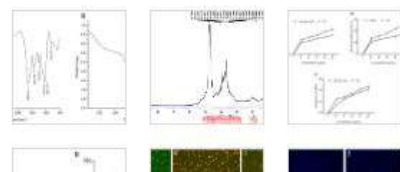
Keywords

1. Introduction
 2. Materials and methods
 3. Results and discussion
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- Acknowledgements
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International Journal of Biological Macromolecules

Volume 124, 1 March 2019, Pages 50-59



Attenuation of oxidative stress induced mitochondrial dysfunction and cytotoxicity in fibroblast cells by sulfated polysaccharide from *Padina gymnospora*

Raguraman Vasantharaja ^a, L. Stanley Abraham ^a  , Venkatraman Gopinath ^b, D. Hariharan ^c, K.M. Smita ^a

^a Centre for Ocean Research, Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai 600 119, Tamil Nadu, India

^b Department of Medical Microbiology, Faculty of Medicine, University of Malaya, Malaysia

^c Department of Medical Physics, School of Physics, Bharathidasan University, Tiruchirappalli, Tamilnadu, India

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Assessment of Surface Runoff for Tank Watershed in Tamil Nadu Using Hydrologic Modeling

Marykutty Abraham ¹ and Riya Ann Mathew ²

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Academic Editor: Yun-tai Chen

Received
01 Feb 2018

Accepted
16 Apr 2018

Published
05 Jun 2018

Abstract

Providing safe and wholesome water in sufficient quantity on a sustainable basis remains elusive for large population especially in semiarid regions and hence water balance estimation is vital to assess water availability in a watershed. The water balance study is formulated to assess the runoff that can be harvested for effective utilization. The study area is Urapakkam watershed with a chain of 3 tanks having an aerial extent of 4.576 km² with hard rock formation underneath and thus has limited scope for groundwater



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for GE training.

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training from Oct 6th - Oct 12th 2018. The
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software training during the above mentioned
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lab for the training.

Thanking You

[Signature]

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24/9/18

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INSTITUTE OF SCIENCE AND TECHNOLOGY
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Biocatalysis and Agricultural Biotechnology

Volume 16, October 2018, Pages 412-418



Biogenic synthesis of silver nanoparticle from wasp nest soil fungus, *Penicillium italicum* and its analysis against multi drug resistance pathogens

B.K. Nayak ^a, A. Nanda ^b  , V. Prabhakar ^a

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<https://doi.org/10.1016/j.bcab.2018.09.014>

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Abstract

The mortality rate has increased robustly due to the drug resistant microorganisms and is a major challenge before scientist. Since nature provides the clues to us to defend against unfavorable situation, the proposed study has focus on an insect-microbe symbiosis which plays a vital role for producing the natural product for an

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Article DOI : [10.5958/0974-360X.2018.00320.7](https://doi.org/10.5958/0974-360X.2018.00320.7)

Biodegradation of organo phosphorous chlorpyrifos using *Pseudomonas aeruginosa* PF1 isolated from paddy field

Lakshmipathy Muthukrishnan¹, Abirami S. V.², Sudhakar Thukkaram^{3,*}

¹Leather Process Technology, CSIR-Central Leather Research Institute (CLRI), Adyar, Chennai, Tamilnadu, 600 020, India

²Department of Microbiology, Jaya College of Arts and Science, CTH road, Thiruninravur, Tamilnadu, 602024, India

³ Department of Biomedical Engineering, Sathyabama University, Chennai, 600 119, India

*Corresponding Author E-mail: mlakshmipathy@gmail.com

Online published on 21 August, 2018.

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Abstract

The extensive use of pesticides is considered to be one of the major causes of soil and water pollution in agricultural sector. As it enters the food chain, humans on the other hand are directly or indirectly victimized. In order to counteract the situation, such contaminants need to be removed from the environment through biodegradation. Pesticide degrading bacteria were isolated and identified through cultural and biochemical tests. Among them, the predominant/potential strain was grown in an enrichment medium supplemented with 25, 50, 100 and 200 ppm of Chlorpyrifos and monitored using uv-vis spectrophotometer at optical density of 600nm. The result showed that among the isolated strains, *Pseudomonas aeruginosa* was the predominant and potential strain with maximum degradation of 200 ppm of chlorpyrifos in 240 h of incubation. HPTLC analysis of the residual Chlorpyrifos after 7 days of incubation showed that *Ps. aeruginosa* was able to degrade 80% of the pesticide. Our results indicated that the isolated bacteria can be effectively used for bioremediation of chlorpyrifos contaminated soil and water.

Top

Keywords

Chlorpyrifos, *Pseudomonas*, HPTLC, Organophosphorus pesticide.

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Journal Article

Heart and liver regeneration in zebrafish using silver nanoparticle synthesized from *Turbinaria conoides* – In vivo [2019]

Ali, M. Syed; Anuradha, V.; Yogananth, N.; Krishnakumar, S.;

The present study was aimed to identify the heart and liver regeneration in zebrafish using biosynthesised silver nanoparticles from *Turbinaria conoides*. This work focussed on the bioactivity of AgNP when incorporated into the zebrafish (*Danio rerio*) system. We began investigating the in vivo assays: Hepatocyte viability staining after H₂O₂ treatment, cardiomyocyte response to Ca⁺⁺, cardio vascular heart rate activity by measuring hypertrophy, cardio vascular pathology and cardio vascular regeneration, liver regeneration and liver pathology, molecular pathway target identification and hypothesis on interacting domain (AgNO₃) of the vertebrate model organism. The FTIR results of biosynthesized silver nanoparticles from *Turbinaria conoides* showed prominent peaks (range between 620.967 and 2854.14). Further, the results of XRD analysis showed the 2 γ intense values (38.11 and 70.57) within the ranges of Bragg's reflection. In addition, the SEM analysis determined the size of nanoparticle (50–100 nm). It can be concluded from the present findings that, the biosynthesised silver nanoparticles from the seaweed extract of *Turbinaria conoides* can be used as potential cardioprotective and liver protective agent.

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Biocatalysis and Agricultural Biotechnology

Volume 20, July 2019, 101184



Synthesis and characterization of bioscaffolds using freeze drying technique for bone regeneration

B. Geetha^a, J. Premkumar^a, J. Paul Pradeep^b, S. Krishnakumar^a [Show more](#) [+ Add to Mendeley](#) [Share](#) [Cite](#)<https://doi.org/10.1016/j.bcab.2019.101184>[Get rights and content](#)

Abstract

Bioscaffolds composed of polymeric biomaterials must be bio-compatible, absorbable and biodegradable upon implantation into humans. The aim of the current study is to synthesize highly porous bioscaffold that provides the appropriate environment for the regeneration of bone tissue. To accomplish this,

Development of Regenerative Braking Concept for Electric Vehicle Enhanced with Bidirectional Converter

M. Kavitha, V. Elanagai, S. Jayaprakash, V. Balasubramanian

Abstract

Due to the increasing concern for environment protection and the uncertainty about oil reserves, nowadays electricity is playing a key role as an alternative energy source in the automotive sector. In this paper, non isolated bidirectional converter is used for electric vehicle application during regenerative braking process. During motoring operation, the converter supplies energy to motor through battery. In regenerative braking action, the converter supplies the available back emf to charge the battery. The recycled energy is effectively stored in the battery. The simulation is carried out in MATLAB/Simulink. The worthiness of simulation is illustrated experimentally by developing a prototype. The simulation and experimental results are presented in this paper.

Performance Evaluation of Fuel Cell based High Efficient Multi Winding Coupled Inductor DC-DC Converter

**V. Balasubramanian, Jayarama Pradeep, M. Kavitha and V. Senthil
Nayagam**

Abstract:

This paper deals about converting low voltage from fuel cell into high voltage efficiently using multi winding coupled inductor DC-DC Converter. A 60V of fuel cell output will be increased to 400V without approaching the high duty cycle of the switches hence lifetime of the switches are also improved. Moreover Capacitor based clamp circuit will recycle the leakage energy to improves the overall efficiency.

Green Energy Based Coupled Inductor Interleaved Converter with MPPT Technique for BLDC Application

V. Senthil Nayagam¹, L. Premalatha²

¹Department of Electrical and Electronics Engineering, Sathyabama Institute of Science and Technology, India

²School of Electrical Engineering, Department of Electrical and Electronics Engineering, Vellore Institute of Technology (VIT), Chennai, India

Article Info

Article history:

Received May 11, 2018

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Keyword:

MPPT

BLDC

High voltage gain

Interleaved coupled inductor

DC-DC converter

ABSTRACT

This paper presents a high step-up converter with combination of battery and solar energy source application. The proposed green energy source boosted by using coupled inductor interleaved converter. The coupled inductor and voltage double circuit can reach the high voltage gain without more stress on the converter circuit as well as much changes in duty cycle. The photo voltaic system maximum output is 12volts it can be varied by changes of irradiation level .The maximum output voltage is tracking by using MPPT and supplies to the coupled inductor interleaved boost converter. The MPPT working based on the P & O algorithm .The output level of the photo voltaic is high then the battery is charging as well as BLDC motor also being driven efficiently. Whenever the irradiation level will be low the output level of the photo voltaic is less than the battery will be charging and then the motor will running by battery power.

A Survey on Harmonic Mitigation Techniques in Power System

[P. Abirami](#)  [Dr. C.N.Ravi](#) 

[Abstract](#)

[Keywords](#)

[References](#)

[PDF](#)

Abstract

In recent years, one of the most frightening criteria in power system is the generation of harmonics, due to the advancement in power semiconductor devices. Today most of the commercial, residential and industrial loads include advanced semiconductor technology and the utility of these non-linear loads results in harmonics generation on consumer's premises. These harmonics plays a vital role in polluting the power quality of a distribution network by introducing losses which results in the failure of distribution side electrical equipment like transformer, protection, measuring devices, distribution feeders and so on. Hence to enhance the power quality, harmonic mitigation technique should be implemented in a distribution network. This paper surveys about the availability of various harmonic mitigation techniques with the analysis of its merits and demerits.

Maximum Power Tracking for PV Array System Using Fuzzy Logic Controller

[M. Pushpavalli](#)  & [N. M. Jothi Swaroopan](#)

Conference paper | [First Online: 09 September 2018](#)

209 Accesses | **3** Citations

Part of the [Advances in Intelligent Systems and Computing](#) book series (AISC, volume 846)

Abstract

This paper is to design by adapting the Perturbation and Observation (P&O) algorithm of Maximum Power Point Tracking (MPPT) and intelligent controller to vary the duty ratio of KY boost converter using Photo Voltaic (PV) array as an energy input. This PV system extracts the energy from the sun, after the power converter module energy is fed to the battery for storage. The KY boost converter is used to boost the voltage to a certain level. The switches mainly work on MPPT conditions. This converter has higher voltage conversion ratio, low ripple, and continuous current. This combination makes the integration work perfectly under any transient disturbance condition occurs in the input side and it stays connected to the battery through charge controller. In the charge controller unit, PI controller is used to regulate the battery parameters. MPPT method-based Fuzzy Logic Controller (FLC) is implemented for PV panel by change in irradiance from (600 to 1000 W/M²) with constant temperature at 25 °C.

Performance analysis of hybrid photovoltaic/wind energy system using KY boost converter

Murugan Pushpavalli, N.M Jothi Swaroopan

Abstract

Nowadays tremendous increase in renewable energy technologies available in abounding nature energy extracted from sun, wind etc. This Proposed topology gathered maximum power using multi input ky boost converters for hybrid energy. This hybrid topology operates mainly delivered the power from renewable energy sources solar/wind to dc bus. In the absence of any one source, wind or solar supplies power to the dc bus. Without any renewable energy sources battery deliver the power to dc bus. An inverter type module convert the power from dc bus to ac grid. In this paper effectiveness of hybrid renewable energy is simulated through MATLAB/SIMULINK

Adaptive Bacterial Foraging Algorithm to Green Energy Supported Non Smooth Dynamic Power Dispatch Optimization

¹B.Padmanabhan, ²L.Premalatha

¹Research Scholar, Department of Electrical and Electronics Engineering, Sathyabama Institute of Science and Technology, Chennai, India.

E-mail: padmanabhan.eee@sathyabama.ac.in

²Professor, School of Electrical Engineering, Vellore Institute of Technology, Chennai, India. E-mail: premaprak@yahoo.com

Abstract

This article focuses on the importance of green energy support in the optimization of conventional power generation by satisfying the variable consumer demand. The proposed Adaptive Bacterial Foraging Algorithm (ABFA) is approached to solve a Dynamic Economic Load Dispatch (DELD) in thermal units including non-linearity such as Rectified sinusoidal effect, Ramp rate limits and prohibited operating zones. In order to make the problem more realistic the available wind power support is taken into account for the thermal power generation in order to satisfy the demand. The steps of ABFA is observed from the the natural selection of strategies in favoring the successful foraging and eliminating the poor foraging. To validate the effectiveness of the results obtained from the pro-posed method, two case studies with 13 unit and 10 unit system data is optimized for variable power demand for 24 hours including the wind support and compared with the results from the literature

Workshop-IOT based Real Time Automation and Practice on Mini Project





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Ref: SU/EEE/Workshop/Circular/2020

Date : 25.01.2020

We have planned to organize six days workshop on Embedded system TIVA C series processor based IOT application on 29.1.2020 to 31.1.2020 (phase I).

Time : 8.30 AM to 3.00 PM

Venue : EEE(Embedded System Lab)

- The workshop is open for the students of School of Electrical and Electronics
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Interested students are asked to register their names with workshop coordinator Mrs. R. Meena Devi, Assistant Professor, Department of Electrical and Electronics Engineering on or before 28.01.2020.


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2nd July 2019

To,

The Head of the Department,
Dept. of EEE,
Sathyabama University, Chennai.

Subject: Proposal for conducting 5 days workshop on Solar Photovoltaic Technologies & Entrepreneurship development for your university students – reg.

Dear Sir,

We thank you for your interest shown towards our Institution to offer Solar PV & Entrepreneurship training for your university students. Following to our discussions on 21st June 2019, hereby sending the commercial aspects of the training for your further proceedings. The technical aspects are attached for your reference.

Venue: Sathyabama University Timings: 8.30AM-3.30PM Commitment from SBU – Min 30 Students		Name of the Training: Workshop on Solar PV & Entrepreneurship. No. of Students/Batch: 30
Sl.No	Description	Cost per candidate (INR)
1	Training cost for 5 days programme (Minimum of 60 candidates)	Rs.1,100
2	Assessment fees (optional)*	Rs.1,200
3	Total Training cost/ Student	Rs.2,300*

* Any other Taxes applicable as Extra at actuals.

Note: The cost of Travel, Food & Accommodation is not included in the above offer. The above arrangements & costs should be taken care by the Sathyabama University from the date of departure from Chennai to the date of Arrival at Chennai (if outstation).

The above training proposal was designed as per the syllabus suggested by sector skills. We request you to facilitate the proposed training programme from Monday to Friday to plan for a site visit and a training group activity on Saturday. We request you to confirm the training dates as early as possible.

The travel itinerary has to be planned well in advance according to the mutual convenience. We express our sincere gratitude for valuing our institution during scrutiny and we assure our best services at all time. We assure our full support and co-ordination in all the future steps of your training endeavors.

Thanks & Regards,

G.Rajaganesan,

Chief Technical Officer - Solar Initiatives

A statistical analysis in optimization of wind penetrated non convex dynamic power dispatch problem using different strategies of differential evolution algorithm

B. Padmanabhan¹  · L. Premalatha²

Received: 18 March 2019 / Accepted: 22 October 2019

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Abstract

Economy plays a major role in almost all areas of engineering and hence it is necessary to plan for the proper allocation of generating units for the variable power demand. It is also important to look forward to the renewable energy support for satisfying the power demand which is more economical. Here in this article proposed a statistical analysis of Dynamic power dispatch considering wind power penetration under uncertainties. In order to frame the problem to be more realistic, various non smooth constraints like valve point loading, Ramp Rate limits and Prohibited Operating Zones were included. The optimization is performed using various strategies of Differential Evolution Algorithm and the validation of results was achieved by comparing the results with other methods for 10 and 15 unit system.

GSM Entrenched Intelligent Phase Changer

[P. Sivagami](#) & [R. Harikrishnan](#) 

Conference paper | [First Online: 03 November 2018](#)

668 Accesses

Part of the [Lecture Notes in Electrical Engineering](#) book series (LNEE, volume 521)

Abstract

Generally, the power fluctuations in the distribution system and its percentage of occurrence will be higher in one or two phases compared to all the three phases. Thus, in any commercial or domestic power supply system where three phases are available, it is advisable to have an automatic changeover to the healthier phase for the single-phase critical loads. A microcontroller-based intelligent circuit is designed by using embedded system technology, to monitor and compare the voltage, frequency, and current with the predefined reference values. A single-phase critical load will be operational in any one of the phases. If the parameters monitored fall below or above the reference value in the loaded phase, then the load will automatically switch over to the next available healthier phase. A fault message will be sent to the intended recipients through SMS using GSM technology. An LCD display will show all the values including healthier also. Provision for an inverter backup is provided to give continuity of power to the critical load if in case all the three phases have fluctuations or power failures. Options are provided to control the phase changer by an authorized person through SMS also. Further, the under or overvoltage can be automatically controlled to a stable reference voltage level by means of SMS.

Power Flow Control and Voltage Profile Improvement Using HPFC with Genetic Algorithm

Publisher: **IEEE**

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A. Murugan ; V. RamaKrishnan [All Authors](#)

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Abstract

Abstract:

Power flow control is the critical factor affecting power transmission system. In power transmission line the Hybrid Power Flow Controller (HPFC) is applied for standardize the power flow control. Then the results presented using UPFC and HPFC equations. So these equations of HPFC power balance equations of network are united in to only one set of non-linear algebraic equations. The UPFC and HPFC are calculated primarily with the help of Neuton Raphson Method. Even though this kind of controller is a very expensive controller it provides about its arrangement. The performance evaluation of various FACTS controllers in a wide selection of working and blame circumstances has been completed. Then UPFC has a better quality power flow control attribute when contrasted or balanced with different FACTS controllers. The distinctive HPFC designs intended by the specialist have been executed on a MMIB framework. A power system of UPFC and HPFC are produced utilizing limitation conditions and target capacities. Here ideal situation of UPFC and HPFC are acquired by utilizing Genetic Algorithm (GA) based approach. A power system model of UPFC and

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Soft Computing Technique of Bridgeless SEPIC Converter for PMBLDC Motor Drive

Meena Devi R¹, L. Premalatha²

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ABSTRACT

A novel speed controller for the three-phase Brushless DC (BLDC) Motor Drive is proposed using a closed-loop AC-DC Bridgeless SEPIC Converter in continuous Conduction mode. This design proposes a single stage AC-DC converter with ON and OFF state equivalent circuits for 400W, 48V at 2450 rpm PMBLDC motor drive. The Fuzzy based voltage and current controlling method is proposed in this design. The voltage controlling method is used to control the speed for BLDC motor and the current controlling method is used to improve the power factor in AC supply. The speed of BLDC motor is observed with voltage disturbance and the constant motor speed is maintained. The proposed control method on SEPIC converter fed PMBLDC motor drive is modeled by Simulink/Matlab.

Efficient bridgeless SEPIC converter fed PMBLDC motor using artificial neural network

Meena Devi R., L. Premalatha

Abstract

In this paper, a new design of Bridgeless SEPIC (Single Ended Primary Inductance converter) with Artificial neural network (ANN) fed PMBLDC Motor drive is proposed to improve Power Factor. The proposed converter has single switching device of MOSFET, so the switching losses is reduced. ANN is used to achieve the higher power factor and fixed dc link voltage. Also the ANN methodology the time taken for computation is less since there is no mathematical model. The output voltage depends on the switching frequency of the MOSFET. The BLSEPIC act as a buck operation in continuous conduction mode. Detailed converter analysis, equivalent circuit and closed-loop analysis are presented for 36V, 120W, 1500rpm BLDC Motor drive. This proposed converter produces low conduction loss, low total harmonic reduction, low settling time and high power factor reaching near-unity. All the simulation work is verified with MATLAB – Simulink.

Modeling of HPFC Controller Using Multi - Machine Power System with Acting as Different Control Modes

A. Murugan, V. Ramakrishnan

Abstract— Mainly this paper is focusing about the power flow model of the HPFC created for insistent state investigations of intensity frameworks with the help of different control system model. Then numerical investigations exhibited here are completed utilizing a two-area network model. This HPFC controller is using for controlling Real Power, Voltage control, Power Changes from the system parameters. In FACTS device the HPFC controller has been multitasked to its capability control of Real and Reactive Power. Also HPFC controller modeling has been done with the help of mathematical equations for different modes of operation as per kundur 2 area 4 machine 12 bus system. With the help of 2 area power system model is shown about PVV, PQQ, shunt Susceptance and Impedance control of system model. Each and every method is showing different kind of performance including of HPFC Controller. For better performance of power system only has been used the HPFC Controllers comparing other Controllers in FACTS Device. These and all is considering about different modes of operation. With the help of MATLAB Software different modes of modeling has been simulated. Transmission frameworks are normally substantial and complex electrical circuits consisting of several age/utilization hubs and a large number of transmission lines. Controlling the flow of intensity between the hubs in such complex circuits is a testing issue. It is additionally confused by the need to control the voltage at every hub to inside a little resistance of the appraised esteem. The strategy is approved by multi-machine-9 bus system utilizing MATLAB content record.

Keywords— FACTS, UPFC, HPFC, Power Flow, Voltage Magnitude, PVV, PQQ, Modeling of HPFC.

Previously mechanical relay, contactors etc are using to control the power flow in transmission line for security of overhead transmission system. The shunt converter and series converter of UPFC is controlling of synchronizing with the help of active and Reactive Power. This control approach is uses for achieving power flow control and damping improvement of a multi machine power system. As well as the HPFC controller internal variables are characterized in this system and it allowing exact devices limit. Along with this HPFC Controller is includes the different multiple control Modes.

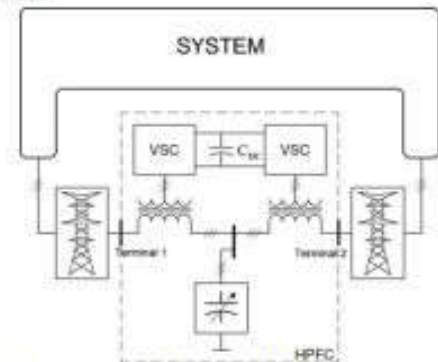


Fig.1: Structure of HPFC System

The system point of view HPFC controller circuit model has been shown. It shows that two series Voltage sources correspond to the important components of the controller because of its have a variable susceptance. Along with volt-

STUDIES ON ENHANCING THE EFFICIENCY OF ZLD PLANT FOR TANNERY EFFLUENT BY IMPLEMENTING LOW-COST AMBIENT AIR EVAPORATOR SYSTEM

R. Rajkumar¹, S. Sathish^{2,*} and P. Senthilkumar²

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² Department of Chemical Engineering, Sathyabama University, Chennai-600 117.

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ABSTRACT

The waste generated from tanning process poses a threat to the environment and has a major challenge of waste management. In India, all tannery industries are bound to achieve Zero Liquid Discharge (ZLD) with the objectives of recovery of water and prevention of environment. This study deals with the mechanical evaporation to increase the efficiency of concentrating the tannery effluent. The evaporator works on the principle of using ambient air instead of hot air for the process of evaporation. The project was undertaken to understand the process flow and design of the evaporator setup and to optimize the process parameters to increase the outlet concentration of the effluent to 85000mg/L for the single run, so that the area required for sludge drying was reduced. The outlet concentration was varying from 42000mg/l to 43306mg/l with a mass of dry air as 38570kg/h. The preheating of air improves the concentration of outlet to 55690 mg/l.

Keywords: Tannery effluent, ZLD, Ambient air evaporator, Waste management.

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INTRODUCTION

The tanning industry is one of the industries that considered as high polluting industry.¹ Tanning generates a large volume of waste water.² On the average of 28-30 m³/h of effluent is generated for 1000 kg of raw material.^{3,4} Tannery industry generates wastewater with the variable pH and high concentration of BOD, COD, suspended solids and heavy metals.⁵ It was found that 20% of chemicals absorbed by the leather, and the rest is washed away with the process water.^{6,7} The sludge settled during the physicochemical treatment as well as the wasted sludge from the oxidation ditches was taken to the sludge well and pumped to sludge drying beds.⁸ The dewatered sludge was disposed of (Hafez *et al.*, 2002). According to norms prescribed by TNPCB 222 m² of solar pan, area is required to evaporate 1 m³ of saline effluent per day.⁹ The main aim of this work is to increase the concentration of sludge leaving the evaporator and reduce the consumption of energy and area for the solar pond. The major issues faced in the multi-effect evaporator by the tannery effluent treatment plants were consuming high energy for desalination, corrosion, and scaling of the evaporators resulting in frequent interruptions and downtime that affects processing capacity.^{10,11} Compared to normal evaporators the ambient air evaporators require less area, low capital investment, low energy consumption, can handle high TDS content and no additional crystallizer is required to achieve ZLD. In this work, studies were carried out for the evaporation rate at various effluent flow rates and changes brought forth like passing a preheated air that can ease the evaporation rate so that the area required by solar evaporation was reduced and no need for the alternate effluent treatment process.

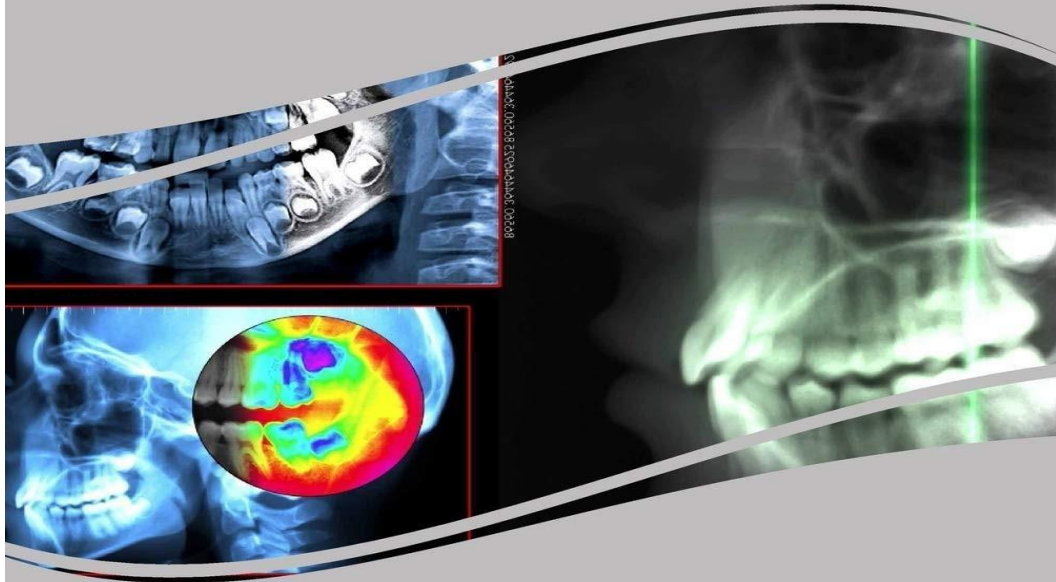
EXPERIMENTAL

Process of Evaporation

The effluent (RO reject) was collected in a sump and it is pumped to the evaporator through an atomizer operating at a speed of about 11000 rpm. The effluent is fractured mechanically into a very fine mist, of 4 to 5 micron in a chamber. A large volume of ambient air is passed through an evaporator in which the saline effluent is dispersed to a fine mist by the atomizer. The air and mist are mixed within the chamber

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K. Kamalanand, B. Thayumanavan, and P. Mannar Jawahar

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THE RISE OF TECHNICAL ENGLISH AND THE FALL OF LITERATURE

Avinash M. and Rennet Samson

This paper is an attempt to bring out the already dug classics into the modern day curriculum, Great novels, plays, poetries have already disappeared from the minds of young learners, if the situation continues, and Literature will become extinct. This paper is an attempt to make the English classrooms more lively and attractive, which would also enable the learner to have a love for English language. One wonders when will the future generation understand and enjoy the greatness of classics that go unread and uncared. Modern day learners are deprived of the pleasures rendered by Literature¹. Why Literature? Has been a question for a very long time and in this fast moving world the beauty of Literature is not much taken care of. Some Arts and Science colleges In India prescribed an English paper with the essence of literature. Even it had only the most famous scene in any one play, from the classics of Shakespeare, for many years². Earlier Language Teachers took up the challenging task of taking the learners to the mesmerizing world of poetries. Now, Most English teachers claim that most of their classes have become more and more monotonous and raw as they are executing facts and realities, Grammars and Logical reasoning questions to the already 'mechanical' mindsets. This paper vividly discusses how English Literature has been occupying a dominant position in the past era and its present day downfall.

“Teachers must train the students to present their answers using self-structured sentences. Our examination should make the learner excel in communication skills and need not be a memory tester³ Our syllabus should give focus to the proficiency of the learner instead of his writing skills. Learner should be graded based on his communication, polite behavior; his promotions should depend on his speaking ability and not by his securing 50 marks. Presenting a paper in the class can bring his confidence hence it should be encouraged⁴. Listening is always termed as the first and primary requisite for learning English but little importance is given in our syllabus towards it.

Institutions today have set up English language laboratory to make the learner listen English conversations. Most Educationists argue that including such Lab classes in the curriculum can alone bring a positive result. English for Occupational purposes has been the need of the hour and when Educational Institutions affirm the revamping of syllabus structure a drastic change is certain⁵. All the hope is not lost yet, there is a dire need for revamping our syllabus structure and provide oxygen to the already dying Literature classics.

Immortal works of Shakespeare, mesmerizing lyrics of Keats, unfathomed world of Coleridge can be included in the English Syllabus which would also pave

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इंटरनेशनल एडवांस्ड रिसर्च सेंटर फॉर पाउडर मेटलर्जी एंड न्यू मटेरियल्स
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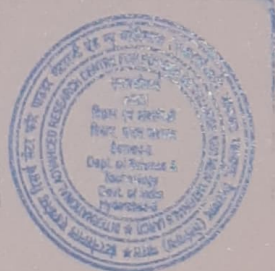
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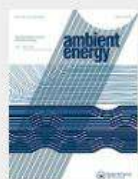
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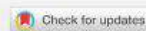
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Influence of cerium oxide additive and aloe vera biodiesel on a CI engine

S. Padmanabhan ✉, S. Ganesan, Anipeddi Masen Venkata Anvesh & Bonthu Pradeep

Pages 516-520 | Received 28 Mar 2017, Accepted 11 Apr 2017, Accepted author version posted online: 20 Apr 2017, Published online: 11 May 2017

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ABSTRACT

Diesel is the main source of world transportation due to higher combustion efficiency, compliance, consistency and cost-economy. It is also a major contributor to the world prosperity since it is used extensively. Diesel engine's emissions are the serious hazard to the world environment and it is measured to be the major causes of air pollution. The demand in biofuels for years created a scope for aloe vera into biodiesels. Aloe vera, having higher calorific value vnthan other plant sources used as biodiesels,

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Reviews

Production, properties and engine characteristics of Jatropha biodiesel – a review

A. Prabhu , M. Venkata Ramanan & J. Jayaprabakar 

Pages 1810-1814 | Received 23 Sep 2018, Accepted 15 Nov 2018, Accepted author version posted online: 10 Dec 2018, Published online: 20 Dec 2018

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ABSTRACT

Petroleum energy sources are about to diminution and polluting environment. Biodiesel is one of the sources that can assume an important energy source for future, particularly in automotive industries, as a substitute for diesel fuel. Jatropha is viewed as extraordinary compared to other choices for biodiesel generation with respect to properties of the fuel, characteristics of emissions. Equally, Jatropha biodiesel is greater environment-friendly because it gives comparatively fewer emissions. In this study. Jatropha as

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Superhydrophobic surfaces: a review on fundamentals, applications, and challenges

Jeya Jeevahan , M. Chandrasekaran, G. Britto Joseph, R. B. Durairaj & G. Mageshwaran

Journal of Coatings Technology and Research **15**, 231–250 (2018) | [Cite this article](#)
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Abstract

Superhydrophobicity is the tendency of a surface to repel water drops. A surface is qualified as a superhydrophobic surface only if the surface possesses a high apparent contact angle ($>150^\circ$), low contact angle hysteresis ($<10^\circ$), low sliding angle ($<5^\circ$) and high stability of Cassie model state. Efforts have been made to mimic the superhydrophobicity found in nature (for example, lotus leaf), so that artificial superhydrophobic surfaces could be prepared for a variety of applications. Due to their versatile use in many applications, such as water-resistant surfaces, antifogging surfaces, anti-icing surfaces, anticorrosion surfaces etc., many methods have been developed to fabricate them. In this article, the fundamental principles of superhydrophobicity, some of the recent works in the preparation of superhydrophobic surfaces, their potential applications, and the challenges confronted in their new applications are reviewed and discussed.

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16 to 19 Dec, 2018

and presented the paper(s)

***IEEM18-P-0379: Total Quality Management: A Framework for Quality Improvement in Indian
Manufacturing Small and Medium Enterprises***

R. KAJA BANTHA NAVAS¹, S. PRAKASH¹, A. John RAJAN², Subramaniam ARUNACHALAM³

¹ *Sathyabama Institute of Science and Technology, India*

² *VIT University, India*

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GPA : 3,80

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BUS809	Theories of Organisation	3	8	90	BA
BUS816	Strategic Human Resource Management	3	8	96	AA

S.CREDIT : 15 S.ECTS : 40 GPA : 3,80 W.O.G : 3,80

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Secretary of Institute

Degree of Success, Letter Grades, Numerical Grades and Other Signs

A: 100, B: 90, C: 80, D: 70, E: 60, F: 50, G: 40, H: 30, I: 20, J: 10, K: 0, L: 0, M: 0, N: 0, O: 0, P: 0, Q: 0, R: 0, S: 0, T: 0, U: 0, V: 0, W: 0, X: 0, Y: 0, Z: 0, AA: 100, AB: 95, AC: 90, AD: 85, AE: 80, AF: 75, AG: 70, AH: 65, AI: 60, AJ: 55, AK: 50, AL: 45, AM: 40, AN: 35, AO: 30, AP: 25, AQ: 20, AR: 15, AS: 10, AT: 5, AU: 0, AV: 0, AW: 0, AX: 0, AY: 0, AZ: 0, BA: 90, BB: 85, BC: 80, BD: 75, BE: 70, BF: 65, BG: 60, BH: 55, BI: 50, BJ: 45, BK: 40, BL: 35, BM: 30, BN: 25, BO: 20, BP: 15, BQ: 10, BR: 5, BS: 0, BT: 0, BU: 0, BV: 0, BW: 0, BX: 0, BY: 0, BZ: 0, CA: 80, CB: 75, CC: 70, CD: 65, CE: 60, CF: 55, CG: 50, CH: 45, CI: 40, CJ: 35, CK: 30, CL: 25, CM: 20, CN: 15, CO: 10, CP: 5, CQ: 0, CR: 0, CS: 0, CT: 0, CU: 0, CV: 0, CW: 0, CX: 0, CY: 0, CZ: 0, DA: 70, DB: 65, DC: 60, DD: 55, DE: 50, DF: 45, DG: 40, DH: 35, DI: 30, DJ: 25, DK: 20, DL: 15, DM: 10, DN: 5, DO: 0, DP: 0, DQ: 0, DR: 0, DS: 0, DT: 0, DU: 0, DV: 0, DW: 0, DX: 0, DY: 0, DZ: 0, EA: 60, EB: 55, EC: 50, ED: 45, EE: 40, EF: 35, EG: 30, EH: 25, EI: 20, EJ: 15, EK: 10, EL: 5, EM: 0, EN: 0, EO: 0, EP: 0, EQ: 0, ER: 0, ES: 0, ET: 0, EU: 0, EV: 0, EW: 0, EX: 0, EY: 0, EZ: 0, FA: 50, FB: 45, FC: 40, FD: 35, FE: 30, FF: 25, FG: 20, FH: 15, FI: 10, FJ: 5, FK: 0, FL: 0, FO: 0, FP: 0, FQ: 0, FR: 0, FS: 0, FT: 0, FU: 0, FV: 0, FW: 0, FX: 0, FY: 0, FZ: 0, GA: 40, GB: 35, GC: 30, GD: 25, GE: 20, GF: 15, GG: 10, GH: 5, GI: 0, GJ: 0, GK: 0, GL: 0, GO: 0, GP: 0, GQ: 0, GR: 0, GS: 0, GT: 0, GU: 0, GV: 0, GW: 0, GX: 0, GY: 0, GZ: 0, HA: 30, HB: 25, HC: 20, HD: 15, HE: 10, HF: 5, HG: 0, HH: 0, HI: 0, HJ: 0, HK: 0, HL: 0, HO: 0, HP: 0, HQ: 0, HR: 0, HS: 0, HT: 0, HU: 0, HV: 0, HW: 0, HX: 0, HY: 0, HZ: 0, IA: 20, IB: 15, IC: 10, ID: 5, IE: 0, IF: 0, IG: 0, IH: 0, II: 0, IJ: 0, IK: 0, IL: 0, IO: 0, IP: 0, IQ: 0, IR: 0, IS: 0, IT: 0, IU: 0, IV: 0, IW: 0, IX: 0, IY: 0, IZ: 0, JA: 10, JB: 5, JC: 0, JD: 0, JE: 0, JF: 0, JG: 0, JH: 0, JI: 0, JJ: 0, JK: 0, JL: 0, JO: 0, JP: 0, JQ: 0, JR: 0, JS: 0, JT: 0, JU: 0, JV: 0, JW: 0, JX: 0, JY: 0, JZ: 0, KA: 0, KB: 0, KC: 0, KD: 0, KE: 0, KF: 0, KG: 0, KH: 0, KI: 0, KJ: 0, KK: 0, KL: 0, KO: 0, KP: 0, KQ: 0, KR: 0, KS: 0, KT: 0, KU: 0, KV: 0, KW: 0, KX: 0, KY: 0, KZ: 0, LA: 0, LB: 0, LC: 0, LD: 0, LE: 0, LF: 0, LG: 0, LH: 0, LI: 0, LJ: 0, LK: 0, LL: 0, LO: 0, LP: 0, LQ: 0, LR: 0, LS: 0, LT: 0, LU: 0, LV: 0, LW: 0, LX: 0, LY: 0, LZ: 0, MA: 0, MB: 0, MC: 0, MD: 0, ME: 0, MF: 0, MG: 0, MH: 0, MI: 0, MJ: 0, MK: 0, ML: 0, MO: 0, MP: 0, MQ: 0, MR: 0, MS: 0, MT: 0, MU: 0, MV: 0, MW: 0, MX: 0, MY: 0, MZ: 0, NA: 0, NB: 0, NC: 0, ND: 0, NE: 0, NF: 0, NG: 0, NH: 0, NI: 0, NJ: 0, NK: 0, NL: 0, NO: 0, NP: 0, NQ: 0, NR: 0, NS: 0, NT: 0, NU: 0, NV: 0, NW: 0, NX: 0, NY: 0, NZ: 0, OA: 0, OB: 0, OC: 0, OD: 0, OE: 0, OF: 0, OG: 0, OH: 0, OI: 0, OJ: 0, OK: 0, OL: 0, OO: 0, OP: 0, OQ: 0, OR: 0, OS: 0, OT: 0, OU: 0, OV: 0, OW: 0, OX: 0, OY: 0, OZ: 0, PA: 0, PB: 0, PC: 0, PD: 0, PE: 0, PF: 0, PG: 0, PH: 0, PI: 0, PJ: 0, PK: 0, PL: 0, PO: 0, PP: 0, PQ: 0, PR: 0, PS: 0, PT: 0, PU: 0, PV: 0, PW: 0, PX: 0, PY: 0, PZ: 0, QA: 0, QB: 0, QC: 0, QD: 0, QE: 0, QF: 0, QG: 0, QH: 0, QI: 0, QJ: 0, QK: 0, QL: 0, QO: 0, QP: 0, QQ: 0, QR: 0, QS: 0, QT: 0, QU: 0, QV: 0, QW: 0, QX: 0, QY: 0, QZ: 0, RA: 0, RB: 0, RC: 0, RD: 0, RE: 0, RF: 0, RG: 0, RH: 0, RI: 0, RJ: 0, RK: 0, RL: 0, RO: 0, RP: 0, RQ: 0, RR: 0, RS: 0, RT: 0, RU: 0, RV: 0, RW: 0, RX: 0, RY: 0, RZ: 0, SA: 0, SB: 0, SC: 0, SD: 0, SE: 0, SF: 0, SG: 0, SH: 0, SI: 0, SJ: 0, SK: 0, SL: 0, SO: 0, SP: 0, SQ: 0, SR: 0, SS: 0, ST: 0, SU: 0, SV: 0, SW: 0, SX: 0, SY: 0, SZ: 0, TA: 0, TB: 0, TC: 0, TD: 0, TE: 0, TF: 0, TG: 0, TH: 0, TI: 0, TJ: 0, TK: 0, TL: 0, TO: 0, TP: 0, TQ: 0, TR: 0, TS: 0, TU: 0, TV: 0, TW: 0, TX: 0, TY: 0, TZ: 0, UA: 0, UB: 0, UC: 0, UD: 0, UE: 0, UF: 0, UG: 0, UH: 0, UI: 0, UJ: 0, UK: 0, UL: 0, UO: 0, UP: 0, UQ: 0, UR: 0, US: 0, UT: 0, UU: 0, UV: 0, UW: 0, UX: 0, UY: 0, UZ: 0, VA: 0, VB: 0, VC: 0, VD: 0, VE: 0, VF: 0, VG: 0, VH: 0, VI: 0, VJ: 0, VK: 0, VL: 0, VO: 0, VP: 0, VQ: 0, VR: 0, VS: 0, VT: 0, VU: 0, VV: 0, VW: 0, VX: 0, VY: 0, VZ: 0, WA: 0, WB: 0, WC: 0, WD: 0, WE: 0, WF: 0, WG: 0, WH: 0, WI: 0, WJ: 0, WK: 0, WL: 0, WO: 0, WP: 0, WQ: 0, WR: 0, WS: 0, WT: 0, WU: 0, WV: 0, WW: 0, WX: 0, WY: 0, WZ: 0, XA: 0, XB: 0, XC: 0, XD: 0, XE: 0, XF: 0, XG: 0, XH: 0, XI: 0, XJ: 0, XK: 0, XL: 0, XO: 0, XP: 0, XQ: 0, XR: 0, XS: 0, XT: 0, XU: 0, XV: 0, XW: 0, XX: 0, XY: 0, XZ: 0, YA: 0, YB: 0, YC: 0, YD: 0, YE: 0, YF: 0, YG: 0, YH: 0, YI: 0, YJ: 0, YK: 0, YL: 0, YO: 0, YP: 0, YQ: 0, YR: 0, YS: 0, YT: 0, YU: 0, YV: 0, YW: 0, YX: 0, YY: 0, YZ: 0, ZA: 0, ZB: 0, ZC: 0, ZD: 0, ZE: 0, ZF: 0, ZG: 0, ZH: 0, ZI: 0, ZJ: 0, ZK: 0, ZL: 0, ZO: 0, ZP: 0, ZQ: 0, ZR: 0, ZS: 0, ZT: 0, ZU: 0, ZV: 0, ZW: 0, ZX: 0, ZY: 0, ZZ: 0

REPUBLIC OF TURKEY
KARABÜK UNIVERSITY
TRANSCRIPT OF RECORDS



Ref. Number: 73548361-302.10

Identity Number / Student: 98715854059 / 1810301006

Name - Surname : Bhargava Teja SRIKANTA

Academic Unit : Safranbolu Fethi Tokar Fine Arts and Design Faculty

Programme : Architecture

Registration Date : 21.09.2018

Status : Active

Dismissal Date : 15.01.2019

Discipline Penalty : The student has not received a disciplinary penalty

Preb. Class Status : Preparation Not Read

GPA : 2,22

Course Code	Course Name	C	E	Grade	Grd.
2018-2019 Fall					
MIM1001	Basic Design and Architectural Project I	8	10	61	CC
MIM377	Computer Aided Design III	2	3	60	CC
MIM469	Vernacular Architecture Of Safranbolu and Environment - Research Studio	2	5	84	BA

S.CREDIT : 12 S.ECTS : 18 GPA : 2,22 W.O.G : 2,22

Total Credit : 12

Total ECTS : 18

GPA: 2,22 / 58,46

Mustafa CÜNÜK
Head of Student Affairs

Degrees of Success, Letter Grades, Numerical Grades nad Other Signs

A1: 4.00 (90 - 100) A2: 3.50 (80 - 89) B1: 3.00 (70 - 79) B2: 2.75 (65 - 69) C: 2.50 (60 - 65) F3: Unsuccessful F2: No Exam F1: Discontinuous M: Exempt G: Passing K: Stayed
AA: 4.00 (90 - 100) AB: 3.75 (86 - 89) BA: 3.33 (81 - 85) BB: 3.00 (76 - 80) BC: 2.75 (70 - 75) CB: 2.33 (65 - 69)
CC: 2.00 (60 - 64) CD: 1.75 (57 - 59) DC: 1.33 (54 - 56) DD: 1.00 (50 - 53) FF: 0.00 (0 - 49) Unsuccessful M: Exempt



ACCEPTANCE LETTER

The Universidad de Mendoza, Province of Mendoza, Argentine Republic, certifies that the Professor: Dr. Murugan Sankaranarayanan of India nationality, with **Passport/Document Number: S 0783300**, regular professor of the **Sathyabama Institute of Science and Technology**, has been **ACCEPTED** as **Exchange Staff for the 2018-2019 academic** year in UM - School of degree program of **Engineering**, from September 24th to October 8th of the year 2018.

The Universidad de Mendoza grants the herein mentioned teacher a scholarship of housing and meals during the time of the academic stay, under the scope of Memorandum of Understanding signed between both institutions.

During the exchange stay, the professor will work with his colleagues in the Faculty of Engineering in the Department of Computer Science.

The teacher must arrive before the 24th of September, 2018 in the city of Mendoza in order to organize his arrival to the University.

IMPORTANT:

The mobility staff should send their flight itinerary to the following email:

relacionesinternacionales@um.edu.ar

This acceptance letter is issued in the city of Mendoza, on May 17th, 2018.

Thank you, Yours sincerely.

Dra. Prof. Ruth y Postgrado

Prof. Ruth Leiton, PhD

Director

International Relations Office - Universidad de Mendoza





ACCEPTANCE LETTER

The Universidad de Mendoza, Province of Mendoza, Argentine Republic, certifies that the Professor: Mr. Sethuraman Radhakrishnan of India nationality, with **Passport/Document Number: S 0786071**, regular professor of the **Sathyabama Institute of Science and Technology**, has been **ACCEPTED** as **Exchange Staff for the 2018-2019 academic** year in UM - School of degree program of **Engineering**, from September 24th to October 8th of the year 2018.

The Universidad de Mendoza grants the herein mentioned teacher a scholarship of housing and meals during the time of the academic stay, under the scope of Memorandum of Understanding signed between both institutions.

During the exchange stay, the professor will work with his colleagues in the Faculty of Engineering in the Department of Computer Science.

The teacher must arrive before the 24th of September, 2018 in the city of Mendoza in order to organize his arrival to the University.

IMPORTANT:

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Thank you, Yours sincerely.

Dra. Prof. Ruth y Postgrado

Prof. Ruth Leiton, PhD

Director

International Relations Office - Universidad de Mendoza



ROMÂNIA
MINISTERUL EDUCAȚIEI NAȚIONALE
Universitatea din Craiova
RECTORAT
Str. Al.I.Cuza, nr.13

Tel./Phone: +40 251 414398; Fax: +40 251 411688; E-Mail: rectorat@central.ucv.ro

SISTEMUL EUROPEAN DE CREDITE TRANSFERABILE
ECTS - EUROPEAN CREDIT TRANSFER SYSTEM

SITUAȚIE ȘCOLARĂ
TRANSCRIPT OF RECORDS

Nume student
Name of student

NANDHA

Prenume student
First name

KUMAR SOMU

Data nașterii (ziua/luna/anul)
Date of birth (day/month/year)

06 | 10 | 1997

Locul nașterii
Place of birth

CHENNAI, INDIA

Numărul matricol
Student enrollment number

I/85

Anul înmatriculării
Year of enrollment

2018

Durata stagiului
Period of stay

09-11-2018 - 12-02-2019

Numele instituției partenere
Name of sending institution

SATHYABAMA UNIVERSITY OF CHENNAI

Facultate/Departament
Faculty/Department

INSTITUTE OF SCIENCE AND TECHNOLOGY-INDIA

Coordonator
ECTS departmental coordinator

E-Mail:

Numele instituției
Name of receiving institution

Universitatea din Craiova, Craiova, Romania
University of Craiova

Facultate/Departament
Faculty/Department

Facultatea de Mecanică
Faculty of Mechanics

Coordonator
ECTS departmental coordinator

CRĂCIUNOIU NICOLAE

E-Mail: ncraciunoiu@yahoo.com

DETALII ALE PROGRAMULUI DE STUDIU ȘI NOTELE OBTINUTE
DETAILS OF THE STUDY PROGRAMME ABROAD AND GRADES

Nr. crt.	Denumirea disciplinei Subject	Sem Sem	1) Total ore/sem Hours/Sem				2) Nota Grade	ECTS
			C	S	LP	P		
1	Optimizare constructiv-funcțională a motoarelor de automobile Functional design optimization of automobiles engines	1	28	-	14	-	10	4
2	Robotică avansată Advanced Robotics	1	28	-	14	14	9	6
3	Automatică și robotică în ingineria de automobile Automation and Robotics in Automotive Engineering	1	28	-	14	-	9	5
Total credite Total ECTS								15

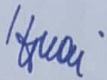
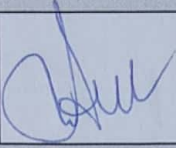
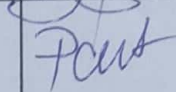
LEGALITATEA DOCUMENTULUI
CERTIFICATION OF THE DOCUMENT

C.N.P. titular: 06101997

Document generat de programul EvStud, Centrul de Informatică și Statistică, Universitatea din Craiova - www.ucv.ro

L.S.

pagina 1 din 2

Funcția Position	Semnătura Signature	Funcția Position	Semnătura Signature
RECTOR RECTOR		Secretar șef universitate University Registrar	
Prof. univ.dr. Cezar-Ionuț SPÎNU		Conf.univ.dr. Mircea ZĂVĂLEANU	
DECAN DEAN		Secretar șef facultate Faculty Registrar	
Prof. univ. dr. ing. Nicolae DUMITRU		Florentina ȚĂPURIN	
³⁾ Nr. și data eliberării No., dated.		Ștampila sau sigilul original Official stamp or seal	
Series F, N° 34, March 4 th 2019 Acest document conține un număr de 2 pagini This document contains a number of 2 pages		L.S.	

¹⁾Se va menționa numărul total de ore din care: numărul total de ore curs (C); numărul total de ore seminar (S); numărul total de ore lucrări practice (LP); numărul total de ore proiect (P); etc.
To mention total number of hours, of which: total number of courses (C), total number of seminars (S), total number of work courses (LP), total number of projects (P) etc.

²⁾Notarea unei discipline se face pe o scală de la 1 la 10, notele acordate fiind numere întregi; nota minimă de promovare este 5, iar nota maximă este 10. Disciplinele notate cu calificative pot lua valorile: Adm (Admis), Rsp (Respins), Exc (Exceptional), FB (Foarte Bine), B (Bine), Satisfăcător (S), Nesatisfăcător (NS), Scutit (Sc)
Grades are integer numbers given on a scale from 1 (the lowest grade) to 10 (the highest grade). The lowest passing grade is 5. Subjects marked with qualifiers can take values: Adm (Admitted), Rsp (Rejected), Exc (Exceptional), FB (Very Good), B (Good), S (Satisfactory), NS (Unsatisfactory), Sc (Exemption)

³⁾Se va completa de către instituția care a asigurat școlarizarea titularului, care va menționa în continuare numărul de pagini pe care le conține documentul.
To be filled out by the institution which provided enrollment of the holder and will further mention the number of pages of the present document.





INTERIM TRANSCRIPT

NAME: VASU ARJUN
STUDENT ID: TP053344
COURSE OF STUDY: Semester Abroad

Year 3, 1st Semester

Module Code	Module	Credit Hours	Result	Grade Point
CT024-3-3-DCOMS	Distributed Computer Systems	3.0	B+	3.30
CT027-3-3-EPDA	Enterprise Programming for Distributed Application	3.0	C-	2.00
CT097-3-3-CSVC	Cloud Infrastructure and Services	3.0	B	3.00
CT101-3-3-IOT	Internet of Things: Concepts and Applications	3.0	C-	2.00R
Total Credit Hours				12
Overall Attendance				79.35%
GPA				2.58
CGPA				2.58

Marks And Grade Points

80 - 100	A+	4.00	Distinction	50 - 54	C-	2.00	Pass
75 - 79	A	3.70	Distinction	40 - 49	D	1.70	Fail (Marginal)
70 - 74	B+	3.30	Credit	30 - 39	F+	1.30	Fail
65 - 69	B	3.00	Credit	20 - 29	F	1.00	Fail
60 - 64	C+	2.70	Pass	1 - 19	F-	0.00	Fail
55 - 59	C	2.30	Pass		CT	2.00E	Credit Transfer

R = Awarding of module credit by passing module referral assessments.

C = Awarding of module credit through compensation at the discretion of the Examination Board, based on the student's overall academic performance. No referral assessment is required for module.

Matapelajaran Umum (MPU) modules, Co-Curricular and Industrial Experience will not be included in the GPA and CGPA calculation

Overall Grade Classification

Minimum CGPA = 3.70 First Class

Minimum CGPA = 3.50 Second Class *

Minimum CGPA = 3.00 Third Class

Determination of degree Classification will be on the basis of the overall GPA for Academic Year 3 weighted 70% and added to 30% of the overall GPA for Academic Year 2
Ref: UC3F1810SABD

Date: 19-Jul-2019

The above are Internal Moderated Results and subject to External Moderation and confirmation by Examination Board.

THIS IS A COMPUTER GENERATED REPORT AND NOT A FINAL TRANSCRIPT. NO SIGNATURE IS REQUIRED.



INTERIM TRANSCRIPT

NAME: GAJJARAPU SATYA SRAVANTH
STUDENT ID: TP053343
COURSE OF STUDY: Semester Abroad

Year 3, 1st Semester

Module Code	Module	Credit Hours	Result	Grade Point
CT024-3-3-DCOMS	Distributed Computer Systems	3.0	A	3.70
CT027-3-3-EPDA	Enterprise Programming for Distributed Application	3.0	C	2.30
CT097-3-3-CSVC	Cloud Infrastructure and Services	3.0	C-	2.00R
CT101-3-3-IOT	Internet of Things: Concepts and Applications	3.0	B+	3.30
Total Credit Hours				12
Overall Attendance				78.26%
GPA				2.83
CGPA				2.83

Marks And Grade Points

80 - 100	A+	4.00	Distinction	50 - 54	C-	2.00	Pass
75 - 79	A	3.70	Distinction	40 - 49	D	1.70	Fail (Marginal)
70 - 74	B+	3.30	Credit	30 - 39	F+	1.30	Fail
65 - 69	B	3.00	Credit	20 - 29	F	1.00	Fail
60 - 64	C+	2.70	Pass	1 - 19	F-	0.00	Fail
55 - 59	C	2.30	Pass		CT	2.00E	Credit Transfer

R = Awarding of module credit by passing module referral assessments.

C = Awarding of module credit through compensation at the discretion of the Examination Board, based on the student's overall academic performance. No referral assessment is required for module.

Matapelajaran Umum (MPU) modules, Co-Curricular and Industrial Experience will not be included in the GPA and CGPA calculation

Overall Grade Classification

Minimum CGPA = 3.70 First Class

Minimum CGPA = 3.50 Second Class *

Minimum CGPA = 3.00 Third Class

Determination of degree Classification will be on the basis of the overall GPA for Academic Year 3 weighted 70% and added to 30% of the overall GPA for Academic Year 2

Ref: UC3F1810SABD

Date: 01-Aug-2019

The above are Internal Moderated Results and subject to External Moderation and confirmation by Examination Board.

THIS IS A COMPUTER GENERATED REPORT AND NOT A FINAL TRANSCRIPT. NO SIGNATURE IS REQUIRED.



INTERIM TRANSCRIPT

NAME: GOLCONDA SUNIL
STUDENT ID: TP053342
COURSE OF STUDY: Semester Abroad

Year 3, 1st Semester

Module Code	Module	Credit Hours	Result	Grade Point
CT024-3-3-DCOMS	Distributed Computer Systems	3.0	B+	3.30
CT027-3-3-EPDA	Enterprise Programming for Distributed Application	3.0	C-	2.00R
CT097-3-3-CSVC	Cloud Infrastructure and Services	3.0	C+	2.70
CT101-3-3-IOT	Internet of Things: Concepts and Applications	3.0	C-	2.00
			Total Credit Hours	12
			Overall Attendance	80.43%
			GPA	2.50
			CGPA	2.50

Marks And Grade Points

80 - 100	A+	4.00	Distinction	50 - 54	C-	2.00	Pass
75 - 79	A	3.70	Distinction	40 - 49	D	1.70	Fail (Marginal)
70 - 74	B+	3.30	Credit	30 - 39	F+	1.30	Fail
65 - 69	B	3.00	Credit	20 - 29	F	1.00	Fail
60 - 64	C+	2.70	Pass	1 - 19	F-	0.00	Fail
55 - 59	C	2.30	Pass		CT	2.00E	Credit Transfer

R = Awarding of module credit by passing module referral assessments.

C = Awarding of module credit through compensation at the discretion of the Examination Board, based on the student's overall academic performance. No referral assessment is required for module.

Matapelajaran Umum (MPU) modules, Co-Curricular and Industrial Experience will not be included in the GPA and CGPA calculation

Overall Grade Classification

Minimum CGPA = 3.70 First Class

Minimum CGPA = 3.50 Second Class *

Minimum CGPA = 3.00 Third Class

Determination of degree Classification will be on the basis of the overall GPA for Academic Year 3 weighted 70% and added to 30% of the overall GPA for Academic Year 2

Ref: UC3F1810SABD

Date: 18-Jul-2019

The above are Internal Moderated Results and subject to External Moderation and confirmation by Examination Board.

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Universiti Malaysia Pahang (UMP)

SEMESTER SEMESTER 1 SESSION 2018/2019

ID / NAME AA18272 SOLOMON ERSKINE PAUL INDRA MOHAN

PROGRAMME BAA SARJANA MUDA (KEPUJIAN) KEJURUTERAAN AWAM

FACULTY FTKA1000 FAKULTI KEJURUTERAAN AWAM & SUMBER ALAM

TOTAL SEMESTER 1

	COURSE CODE	COURSE NAME	CREDIT	GRADE	GRADE POINT	STATUS
1	BAA4222	ENGINEERS IN SOCIETY	2	A-	3.67	PASS
2	BAA3513	GEOTECHNICAL ENGINEERING	3	C-	1.67	PASS
3	BAA2413	HIGHWAY & TRAFFIC ENGINEERING	3	C	2.00	PASS
4	BAA3012	LAW OF CONTRACT & ESTIMATION	2	B-	2.67	PASS
5	UHF1161	MALAY FOR BEGINNERS	1	A	4.00	PASS
6	BAA3213	REINFORCED CONCRETE DESIGN II	3	B-	2.67	PASS

GPA 2.55 GRADE POINT 35.70

CPA 2.55 GRADE POINT TOTAL 35.70

Previous Semester Current Semester Total

Counted Credit 14 14

Earned Credit 14 14

Taken Credit 14 14

Exempted Credit

Status KB

Class

Reference: KC = Excellent Standing
KB = Good StandingP1 = Probation 1
P2 = Probation 2

KG = Fail Standing

Certified True Copy



INTAN AZWANI BINTI AZMI
EXECUTIVE
ACADEMIC MANAGEMENT DIVISION
CANSELERI TUN ABDUL RAZAK
UNIVERSITI MALAYSIA PAHANG
26600 PEKAN, PAHANG



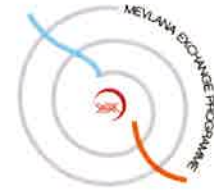
KARABÜK UNIVERSITY LETTER OF INVITATION

To Whom It May Concern,

*We hereby confirm that **Dr. Mohanadasan Maya**, from **Sathyabama Institute of Science and Technology, India**, is invited to teach in **Business Administration Department, Karabük University, Turkey** from **1st of October 2018 till 14th of October 2018** under Mevlana Teaching Mobility to give courses in the subject of **Organizational Behaviour, Entrepreneurship and Principle of Marketing**. The accommodation is **Karabük University Guest House** and the address is **Baba Sultan Mah. Naip Tarlası Sok. Safranbolu/Karabük**.*

Oya ÖNALAN

International Relations Coordinator



KARABUK UNIVERSITY LETTER OF INVITATION

To Whom It May Concern,

*We hereby confirm that **Dr. Shanmugam PACKIALAKSHMI**, from **Sathyabama Institute of Science and Technology, India**, is invited to teach in **Civil Engineering Department, Karabük University, Turkey** from **1st of October 2018 till 14th of October 2018** under **Mevlana Teaching Mobility** to give courses in the subject of **Water Resources and Hydrology**. The accommodation is **Karabuk University Guest House** and the address is **Baba Sultan Mah. Naip Tarlası Sok. Safranbolu/Karabük**.*

Oya ONALAN

International Relations Coordinator

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Nume student
Name of student

RAVICHANDRAN

Prenume student
First name

DEVANATHAN

Data nașterii (ziua/luna/anul)
Date of birth (day/month/year)

11 11 1998

Locul nașterii
Place of birth

CHIDAMBARAM, INDIA

Numărul matricol
Student enrollment number

1/89

Anul înmatriculării
Year of enrollment

2018

Durata stagiului
Period of stay

29-03-2019 - 19-06-2019

Numele instituției partenere
Name of sending institution

SATHYABAMA UNIVERSITY OF CHENNAI

Facultate/Departament
Faculty/Department

SATHYABAMA UNIVERSITY OF CHENNAI

Coordonator
ECTS departmental coordinator

E-Mail:

Numele instituției
Name of receiving institution

Universitatea din Craiova, Craiova, Romania
University of Craiova

Facultate/Departament
Faculty/Department

Facultatea de Mecanică
Faculty of Mechanics

Coordonator
ECTS departmental coordinator

CRĂCIUNOIU NICOLAE

E-Mail: ncraciunoiu@yahoo.com

DETALII ALE PROGRAMULUI DE STUDIU ȘI NOTELE OBTINUTE
DETAILS OF THE STUDY PROGRAMME ABROAD AND GRADES

Nr. crt.	Denumirea disciplinei Subject	Sem Sem	Total ore/sem Hours/Sem				Nota Grade	ECTS
			C	S	LP	P		
1	Elemente de prototipare virtuală în ingineria automobilelor Elements of Virtual Prototyping in Automotive Engineering	2	14	-	28	-	10	4
2	Tehnologii inovative de fabricația automobilelor Innovative technologies in automoves manufacturing	2	14	-	14	-	10	4
3	Sisteme avansate de producție în ingineria automobilelor Advanced Production Systems in Automotive Engineering	2	14	-	14	-	10	5
4	Proiectare pentru fabricare Design for manufacture	2	28	-	14	14	10	18
			Total credite Total ECTS					18



LEGALITATEA DOCUMENTULUI
CERTIFICATION OF THE DOCUMENT

Funcția Position	Semnătura Signature
RECTOR RECTOR	
Prof. univ.dr. Cezar-Ionuț SPÎNU	

DECAN DEAN	
Prof. univ. dr. ing. Nicolae DUMITRU	

³⁾ Nr. și data eliberării
No., dated.

Series F, N° 40, June 14th, 2019
Acest document conține un număr de 2 pagini
This document contains a number of 2 pages

Funcția Position	Semnătura Signature
Secretar șef universitate University Registrar	
Conf.univ.dr. Mircea ZĂVĂLEANU	
Secretar șef facultate Faculty Registrar	
Florentina ȚĂPURIN	

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L.S. 

¹⁾ Se va menționa numărul total de ore din care: numărul total de ore curs (C); numărul total de ore seminar (S); numărul total de ore lucrări practice (LP); numărul total de ore proiect (P); etc.
To mention total number of hours, of which: total number of courses (C), total number of seminars (S), total number of work courses (LP), total number of projects (P) etc.

²⁾ Notarea unei discipline se face pe o scală de la 1 la 10, notele acordate fiind numere întregi; nota minimă de promovare este 5, iar nota maximă este 10. Disciplinele notate cu calificative pot lua valorile: Adm (Admis), Rsp (Respins), Exc (Exceptional), FB (Foarte Bine), B (Bine), Satisfăcător (S), Nesatisfăcător (NS), Scutit (Sc)
Grades are integer numbers given on a scale from 1 (the lowest grade) to 10 (the highest grade). The lowest passing grade is 5. Subjects marked with qualifiers can take values: Adm (Admitted), Rsp (Rejected), Exc (Exceptional), FB (Very Good), B (Good), S (Satisfactory), NS (Unsatisfactory), Sc (Exemption)

³⁾ Se va completa de către instituția care a asigurat școlarizarea titularului, care va menționa în continuare numărul de pagini pe care le conține documentul.
To be filled out by the institution which provided enrollment of the holder and will further mention the number of pages of the present document.





SATHYABAMA

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Website : www.sathyabama.ac.in

Letter of Invitation

Ref. No: SU/CAPIR/2019/0008

Date: 06.02.2019

Dr. Habil István Kunos
Associate Professor & Head of Department of Management
Faculty of Economics
Institute of Management Science,
University of Miskolc, Hungary

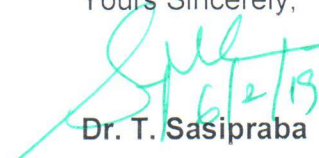
Dear Dr. Habil István Kunos,

Sub: Invitation - Visiting International Professor-reg.

We are pleased to invite you to our University to work as Visiting International Professor in the School of Management Studies **from 13.03.2019 – 31.03.2019**. The accommodation and Local hospitality will be taken care by the University. Kindly let us know your acceptance and you are requested to send us an acceptance letter for the same.

We will be delighted to welcome you to our University.

Yours Sincerely,


Dr. T. Sasipraba

Pro Vice Chancellor



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

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Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119, Tamil Nadu, India.

Phone : 044 - 2450 3150 / 3151 / 3152 / 3154 / 3155 Fax : 044 - 2450 2344

Website : www.sathyabama.ac.in

Letter of Invitation

Ref. No: SU/CAPIR/2019/0007

Date: 06.02.2019

Dr. Viktor Molnar
Associate Professor,
Faculty of Economics
Institute of Management Science,
University of Miskolc, Hungary

Dear Dr. Viktor Molnar,

Sub: Invitation - Visiting International Professor-reg.

We are pleased to invite you to our University to work as Visiting International Professor in the School of Management Studies **from 13.03.2019 – 29.03.2019**. The accommodation and Local hospitality will be taken care by the University. Kindly let us know your acceptance and you are requested to send us an acceptance letter for the same.

We will be delighted to welcome you to our University.

Yours Sincerely,

Dr. T. Sasipraba

Pro Vice Chancellor

**SATHYABAMA**INSTITUTE OF SCIENCE AND TECHNOLOGY
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28th February 2019Early Bird Registration
15th March 2019Intimation of Acceptance
4th March 2019Last Date of Registration
22nd March 2019**Patrons**Dr. Mariazeena Johnson B.E.M.B.A.M.Phil., Ph.D.
ChancellorDr. Marie Johnson B. E., M.B.A.M.Phil., Ph. D.,
PresidentDr. S. Sundar Manoharan, Ph. D.,
Vice Chancellor**Organizing Secretary**Dr. T. Sasipraba, Pro Vice Chancellor
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Professor,
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Indian Statistical Institute, Kolkata.Dr. V.S. PRAKASH ATTILL
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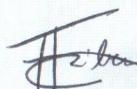
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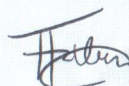
Assistente de Extensão

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ministrou a palestra **“WSN Based iot applications”**,
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Grupo Educacional UNIS, no dia 02 de julho de 2019.

Varginha, 09 de julho de 2019.



Felipe Fávaro Ribeiro
Coordenador do Núcleo de Extensão

Certificado de
Extensão



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Assistente de Extensão



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e-mail: rektorat@psw.kwidzyn.edu.pl
www.psw.kwidzyn.edu.pl

Kwidzyn, 25.02.2019

Letter of Invitation

We hereby declare that **Dr. Venkata Jayakrishna Kishor Sonti** from Sathyabama Institute of Science and Technology in India is invited as teaching staff for exchange of experience, way of teaching, debating international issues, involve students with different point of views to Powislanski University in Kwidzyn from 20/05/2019 till 27/05/2019.

Rector

Prof.dr hab. Stefan Angielski

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NIP 581-17-22-066; REGON 191871175
e-mail: rektorat@psw.kwidzyn.edu.pl
www.psw.kwidzyn.edu.pl

Kwidzyn, 25.02.2019

Letter of Invitation

We hereby declare that **Dr. Jayabalan Karthikeyan** from Sathyabama Institute of Science and Technology, India is invited as a teaching staff for an exchange of experience, ways of teaching, debating international issues, involve students with different point of views to Powislanski University in Kwidzyn from 20/05/2019 till 27/05/2019.

Rector

Koordynator Programu Erasmus
Katarzyna Strzala-Osuch
dr Katarzyna Strzala-Osuch

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82-500 KWIDZYN
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國立清華大學工學院

NATIONAL TSING HUA UNIVERSITY
COLLEGE OF ENGINEERING

TEL : +886-3-571-0521

FAX : +886-3-571-2670

E-mail : coeia@my.nthu.edu.tw

March 5th, 2019

Dear KAJA BANTHA NAVAS R,

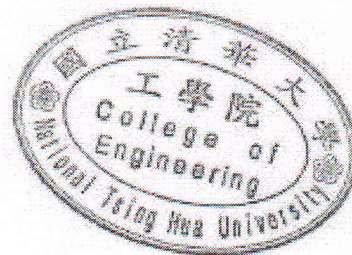
Congratulation! It is our pleasure to offer you admission to 2019 Summer Research Program at National Tsing Hua University, College of Engineering. You will be awarded *Global Engineer Leadership Scholarship*, which includes subsidized round trip airline tickets up to NTD 15,000 and free nine-week accommodation at university residence hall.

You have been accepted to Session I from May 10th to July 11th. You will be conducting short-term academic research under the supervision of Professor Song, Whey-Ming at Department of Industrial Engineering and Engineering Management. For academic related questions, Prof. Song can be reached at wheyming_song@yahoo.com.

If you accept admission for the program, please complete the information form sending along.

We suggest you to start your visa application early in order to get it before your travel. We look forward to welcoming you to National Tsing Hua University as a member of 2019 Summer Research Program.

Sincerely,



Hsin-Lung Chen
Professor, Dept. of Chemical Engineering
Associate Dean & Director of International Affairs, College of Engineering
National Tsing Hua University, Taiwan



國立東華大學材料科學與工程學系

National Dong Hwa University
Department of Materials Science and Engineering
Hualien, Taiwan, R.O.C

TEL : 886-3-8662500
ext:22302.22303
FAX : 886-3-8662302

June 11, 2018

Dear Mr. Ajith Kumar,

I am very pleased to invite you as internship to conduct research work in my group at Department of Materials Science and Engineering, National Dong Hwa University. The TEEP@India program will support you financial aid NT 15000/month for four months. Your research work will be related to solid oxide fuel cells or photocatalyst materials. Welcome to join our group, hopefully you will improve significantly in knowledge during your intern period. If you have any questions, don't hesitate to contact me directly.

Sincerely Yours,

Prof. Yen-Pei Fu
Department of Materials Science and Engineering
National Dong Hwa University

Tel: +886 3 8903209
Fax: +886 3 8900172
E-mail: ypfu@gms.ndhu.edu.tw





**CONFIRMATION OF ENROLLMENT FOR SHORT-TERM RESEARCH
INTERNSHIP (STRI) PROGRAM AT KAOHSIUNG MEDICAL UNIVERSITY**

The purpose of this form is to confirm student's enrollment to Short-Term Research Internship (STRI) Program at Department of Medicinal and Applied Chemistry in Kaohsiung Medical University, Taiwan. Please complete this form and submit it to department staff Miss Peggie Lo in Department of Medicinal and Applied Chemistry before August 20, 2018. (Send it via email: peggielo@kmu.edu.tw or call +886-7-312-1101 ext.2215 or fax: +886-7-3215842). Student's who fail to submit this form on time will have their recognized internship status cancelled.

Confirmation of Enrollment	
Full Name	English : Durai Govindarajan Chinese :
Nationality	Indian
Date of Birth	12/05/1989
Applied Program	Short-Term Research Internship (STRI) Program at Department of Medicinal and Applied Chemistry in Kaohsiung Medical University
Preferred Internship Duration : (Between 2018/07/01 to 2019/03/30) (Minimum 4 months and maximum 6 months)	Start on : 27/08/2018 End on : 27/02/2019
Declaration : ☒ Yes, I will enroll in the STRI Program at Department of Medicinal and Applied Chemistry in Kaohsiung Medical University and I am informed to submit all the documents on time at arrival. ☐ I will not enroll in STRI Program at Department of Medicinal and Applied Chemistry in Kaohsiung Medical University due the following reasons ☐ Studying at a local university/college. ☐ Attending another university/college in Taiwan. ☐ Failing to be granted any other scholarships/financial support: _ ☐ Other reasons:..	

@ Herein I certify that I have completed this form by myself, and that all the information I have given is correct.



高雄醫學大學

醫藥暨應用化學系

Kaohsiung Medical University

Department of Medical and Applied Chemistry



Signature: Dr. P. Kuppusami

Date: 10/08/2018

Dr. P. Kuppusami

(Dr. P. KUPPUSAMI)

Dr. P. Kuppusami

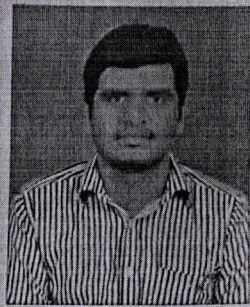
Senior Scientist / Guide

Centre for Nanoscience and Nanotechnology

Sathyabama Institute of Sci. & Tech.

Chennai-600119

**Application Form for Short-Term Research Internship
(STRI) Program - TEEP@AsiaPlus in
Department of Medicinal and Applied Chemistry, Kaohsiung
Medical University, Taiwan**

Personal Information					
Full Name	Durai Govindarajan				
Sex	Male				
Date of Birth	05/12/1989				
Nationality	Indian				
Passport No.	P0492194				
E-mail	durainayak@gmail.com				
Mobile Number	+91 8190832132 and +91 7667890575				
Skype ID/No.	durainayak				
Current Position	Student: PhD				
Contact Address	Centre for Nanoscience and Nanotechnology Sathayabama Institute of Science and Technology OMR Road, Sholinganallur, Chennai-600119 Tamilnadu India.				
Educational Profile					
	Name of College/Institute/ University/Company	City/Country	Major/Specialization	Duration	Degree
Bachelor degree	Sacred Heart College (Thiruvalluvar University-Vellore)	Tiruppattur, Vellore, India.	Physics	From : 06/2006 (month/year) To : 06/2009	B.Sc- Physics
Master Degree	Kongunadu Arts and Science College (Bharathiar University-Coimbatore)	Coimbatore, India.	Physics	From : 06/2011 To : 06/2013	M.Sc- Physics
Doctoral Degree	PhD Pursuing Sathyabama institute of Science and Technology, Chennai.	Chennai, India.	Physics with Materials science	From : 2015 To : 2019	Pursuing
Other	M.Phil (Physics) @ PSG College of Arts and Science, Coimbatore, India, (Completed-2015)				

work/research Experiences	Research Experience- 3 years (Ph.D.) and 1 year (M.Phil)				
Interested field of chemistry in this STRI (Specify) :			Energy storage/conversion		
Which professor would you like to apply for (Specify):			Dr. Vinoth Kumar		
Willing to apply STRI for			months (4 ~ 6 months)		
Emergency Contact Person in your country or in Taiwan					
Name	Dr. J. Theerthagiri	Phone	+919626453229	Relationship	Friend and Research Collaborator
Address of Contact	Scientist-C Centre of Excellence for Energy Research (IRC Building) Sathyabama Institute of Science and Technology Chennai-600119 Tamilnadu India.		Email	j.theerthagiri@gmail.com	

References:

Referee 1

Name: Dr. P. Kuppusami

Relation to applicant: Ph.D. Supervisor

Title/Position: Senior Scientist

Address: Centre for Nanoscience and Nanotechnology,

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

Email and Phone number: pkigcar@gmail.com (Contact No.: +919444425291).

Referee 2

Name: Dr. T. Maiyalagan

Relation to applicant: Research Collaborator

Title/Position: Associate Professor

Address: Department of Chemistry, SRM Research Institute,

SRM University, SRM Nagar, Kattankulathur - 603 203

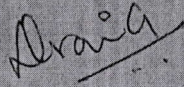
Tamilnadu, India.

Email and Phone number: maiyalagan@gmail.com (Contact No.: +918220322594).

Declaration

I authorize this University to verify all of the above information provided. After being admitted into this STRI@KMU provided, if any of the information provided are found and proved to be false, I have no objections in accepting the consequence of having my grant status revoked.

Applicant's Signature:



Date:

08.06.2018.

Additional Documents Required:

1. Detailed Resume/CV
2. Highest-level qualification degree certificate or diploma
3. Highest-level qualification degree Transcripts (Consolidated grade sheet)
4. 1 ~ 2 Recommendation letters - At least one recommendation letter from your current or previous college or company.
5. Passport Copy
6. Research plan and proposal

***Scanned electronic copy of filled application form along with required documents should be submitted through email as a zipped file to Miss Peggie Lo, peggielo@kmu.edu.tw**

SB/S9/Z-03/2017-XXV (2018-19)

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ORDER

Subject: - First Edition of *SERB Purdue University Overseas Visiting Doctoral Fellowship 2018-19* Supported by Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Government of India and Purdue University, West Lafayette, Indiana, USA –Grant to Mr. Arjun Pitchai, Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119.

Approval of the Science and Engineering Research Board (SERB) is hereby accorded for the award of **SERB Purdue University Overseas Visiting Doctoral Fellowship 2018-19** to **Mr. Arjun Pitchai**, Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119., at a total cost of **Rs.19,40,000/- (Rupees nineteen lakh forty thousand only)** to undertake doctoral research at Purdue University, West Lafayette, Indiana, USA under the guidance of Dr. Jennifer L. Freeman for a duration of twelve months from the date of joining Purdue University, USA. The approval includes:-

- i. Monthly Fellowship equivalent to USD 2000 per month.
 - ii. Return Airfare in Air India by economy class and shortest route from student's place of work in India to Purdue University, West Lafayette and back.
 - iii. Preparatory Allowance/Contingency grant up to Rs. 60,000/- to cover visa fee, airport transfer charges, medical insurance etc.
2. Sanction of the grant is subject to the availability of funds, terms and conditions as specified by SERB from time to time and Memorandum of Understanding between Purdue University, USA and SERB, India.
3. The sanction has been issued with the approval of the competent authority in SERB vide Secretary Dy. No./4831/S.E.R.B dated 21.12.2018.
4. The expenditure involved is debitable to
Grants-in-aid for the year 2018-2019 (**Plan Expenditure - General**)
This release is being made under **Overseas Visiting Doctoral Fellowship Scheme**.
5. The selected fellow while taking up the SERB-Purdue University Visiting Doctoral Fellowship should not draw his/her regular research fellowship in India.
6. Mr. Arjun Pitchai will furnish to SERB a statement of account pertaining to the utilization of onetime contingency grant /preparatory allowance up to a maximum of Rs.60,000/- and send onward fare details supported by Boarding Pass and other documents on reaching Purdue University, USA. Mr. Arjun Pitchai will also furnish joining report duly endorsed by the Faculty/Competent authority of Purdue University.

Cont..2/-

7. The awardee shall submit the final account details and technical report as per format to SERB immediately after the fellowship duration is over.
8. The Indian Institute will maintain separate audited accounts for the fellowship. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to SERB.
9. As per rule 211 of GFR the accounts of Grantee Institution shall be open to inspection by the sanctioning authority / audit whenever the institute is called upon to do so.
10. The Institute will furnish to the SERB, Utilization Certificate and Statement of Expenditure pertaining to the grant as per SERB format within two months of receiving the grant in Institute Account.
11. After completion of the fellowship unspent balance if any should be returned as Demand Draft drawn in favor of "Fund for Science and Engineering Research" payable at New Delhi.



(Dr. Praveenkumar S)
Scientist 'E'

Copy forwarded for information and necessary action to:

1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi – 110 002.
2. Under Secretary, SERB (2 copies)
3. **Mr. Arjun Pitchai**
Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119
Email: arjunbiotech@gmail.com; arjunneuro89@gmail.com
4. **Dr. Rajesh Kannan Rajaretinam**
Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119
Email: rajeshkannan.mnru@sathyabama.ac.in, rajeshnbt12@gmail.com
5. **The Principal**
Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119
6. **Ms. Heidi Arola**
Managing Director for Global Partnerships
India Engagement Coordinator,
Office of Corporate and Global Partnerships
Purdue University, West Lafayette, USA
Email: harola@purdue.edu
7. Sanction folder SERB
8. SERB Secretariat



(Dr. Praveenkumar S)
Scientist 'E'

SB/S9/Z-03/2017-XXV (2018-19)
Science and Engineering Research Board
(A Statutory Body under Department of Science and Technology)

5 & 5A, Lower Ground Floor,
Vasant Square Mall, Plot No. A,
Community Centre, Sector-B, Pocket-5
Vasant Kunj, New Delhi-110070

Dated **22.12.2018**

ORDER

Subject: - First edition of *SERB Purdue University Overseas Visiting Doctoral Fellowship 2018-19* Supported by Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Government of India and Purdue University, West Lafayette, USA – Release of grant to Mr. Arjun Pitchai, Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119.

In continuation to SERB's sanction order of even number dated 21.12.2018 sanction of the **Science & Engineering Research Board (SERB)** is here by accorded for the payment of a sum of **Rs.5,93,159/- (Rupees five lakh ninety three thousand one hundred fifty nine only)** to Mr. Arjun Pitchai, Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119, to undertake Doctoral research at Purdue University, West Lafayette, Indiana, USA under the guidance of Dr. Jennifer L. Freeman for a duration of twelve months with effect from the date of joining Purdue University, USA. This includes one time contingency grant of Rs.60,000/- and onward journey fare of Rs.1,13,159/- and three month fellowship of Rs.4,20,000/-.

2. Sanction of the grant is subject to the availability of funds and terms and conditions as specified by SERB from time to time and Memorandum of Understanding between Purdue University, USA and SERB, India.
3. The sanction has been issued with the approval of the competent authority in SERB vide Dy. No. SERB/F/10233/2018-19 dated 22.12.2018.
4. The expenditure involved is debitable to
Grants-in-aid for the year 2018-2019 (**Plan Expenditure - General**)
This release is being made under **Overseas Visiting Doctoral Fellowship Scheme**.
5. The amount of **Rs.5,93,159/- (Rupees five lakh ninety three thousand one hundred fifty nine only)** will be drawn by the Under Secretary of the Board; out of which
 - i) **Rs.4,20,000/-** will be disbursed to Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119 by means of RTGS transaction as per Institute account details given below:

Bank Name	Indian Bank
Branch Name	Sathyabama Institute of Science and Technology branch
Account Name	Sathyabama Institute of Science and Technology - RESEARCH
Account Number	6089858032
IFSC Code	IDIB000S201
Email	provc@sathyabama.ac.in

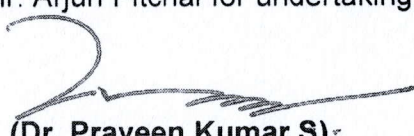
Cont..2/-

and

- ii) **Rs.1,73,159/-** will be disbursed to Mr. Arjun Pitchai, by means of RTGS transaction as per his account details given below:

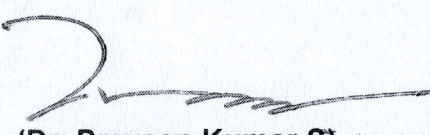
Bank Name	Indian Bank
Branch Name	Sathyabama Institute of Science and Technology branch
Account Name	P Arjun
Account Number	6146864610
IFSC Code	IDIB000S201
Email of the Grantee	arjunbiotech@gmail.com; arjunneuro89@gmail.com

6. Sathyabama Institute of Science and Technology, Chennai should ensure the timely transfer of the grant received under this programme to Mr. Arjun Pitchai for undertaking the fellowship.


(Dr. Praveen Kumar S)
Scientist 'E'

Copy forwarded for information and necessary action to:

1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi – 110002.
2. Under Secretary, SERB (2 copies)
3. **Mr. Arjun Pitchai**
Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119
Email: arjunbiotech@gmail.com; arjunneuro89@gmail.com
4. **Dr. Rajesh Kannan Rajaretinam**
Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119
Email: rajeshkannan.mnru@sathyabama.ac.in, rajeshnbt12@gmail.com
5. **The Registrar**
Sathyabama Institute of Science and Technology, Rajiv Gandhi Salai, Chennai, Tamilnadu - 600119
6. **Ms. Heidi Arola**
Managing Director of Global Partnerships
India Engagement Coordinator,
Office of Corporate and Global Partnerships
Purdue University, West Lafayette, USA
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(Dr. Praveen Kumar S)
Scientist 'E'