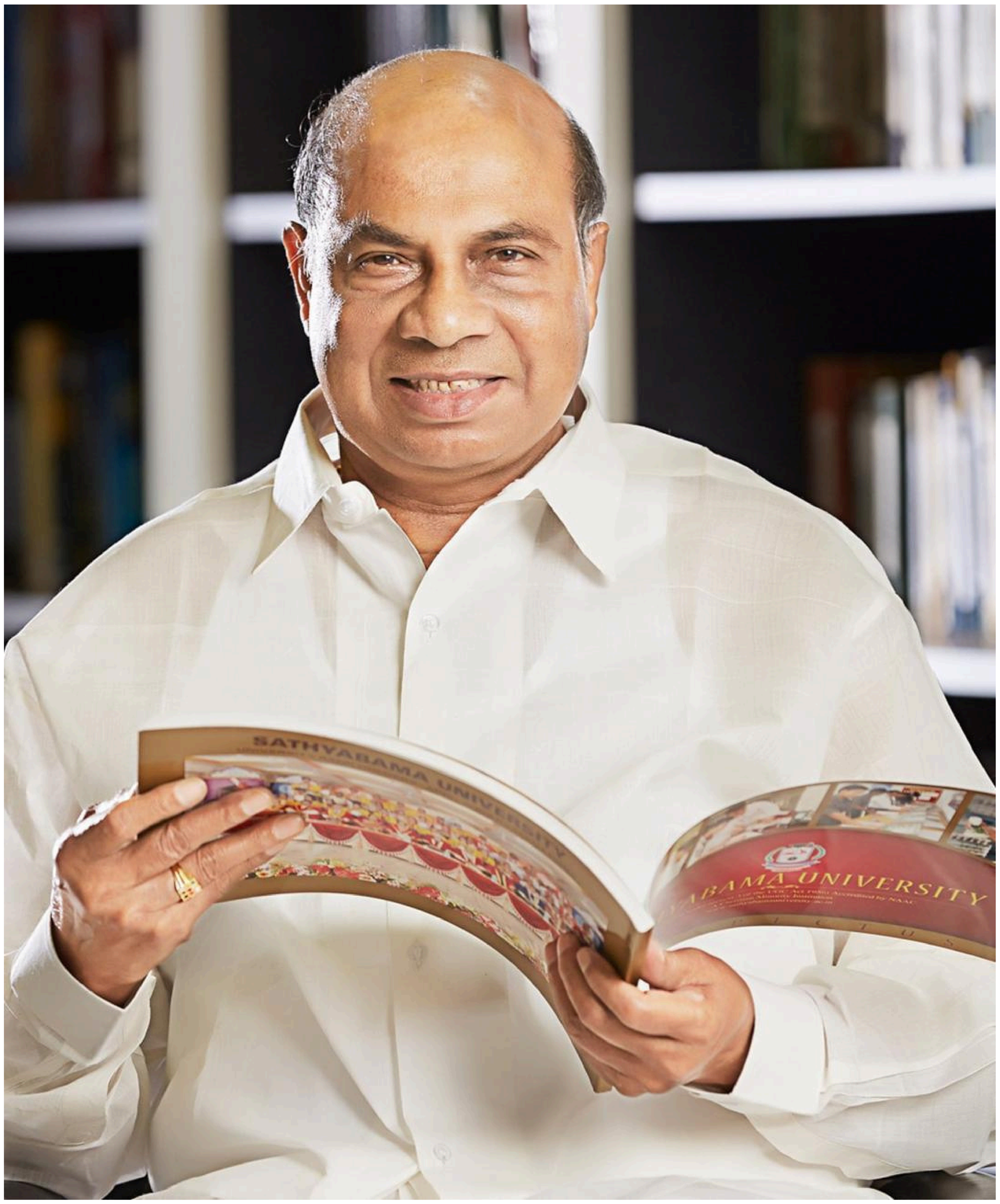
Sathyabama Institute of Science and Technology

SUSTAINABILITY REPORT 2023-2024



With the Blessings of



Col. Dr. JEPPIAAR, M.A., B.L., Ph.D.
Founder Chancellor

Preamble

Sathyabama Institute of Science and Technology (SIST) is committed to advancing sustainable development through education, research, innovation, and community outreach programmes. As a leading higher education institution, SIST integrates sustainability principles into its academic programmes, campus operations, research initiatives in alignment with the United Nations Sustainable Development Goals (SDGs).

SIST's research, publications, outreach programmes, and community involvement directly contribute to multiple SDGs. Faculty and students actively engage in field projects, innovation challenges, rural development programmes, healthcare outreach, environmental restoration efforts, and societal empowerment initiatives, ensuring measurable outcomes that reflect the standards of the THE Impact Rankings. The university also actively partners with government agencies, health centres, NGOs, industries, and international organisations to strengthen its contribution to the SDGs at local, national and global levels.

This report highlights Sathyabama Institute of Science and Technology's systematic initiatives and practices that advance sustainable development during the year 2023–2024.

Message



We are very pleased to present the Institution's Sustainability Report, which highlights our key initiatives and accomplishments for the academic year 2023–2024.

Sustainable development has gained significant prominence among administrators, educators, and global leaders with the evolution of the Sustainable Development Goals (SDGs) and the earlier Millennium Development Goals (MDGs). At Sathyabama Institute of Science and Technology, we have launched numerous initiatives aligned with the SDGs, reaffirming our dedication to addressing societal challenges and promoting sustainability through education, innovation, and impactful research.

Our Institution has consistently developed a culture of research that is both progressive and proactive. Numerous active projects funded by national and international organizations, publications in reputed journals, patents for innovations, and the development of new products and technologies are a testament to the strength of our research ecosystem. Beyond academics and research, Sathyabama nurtures an innovation ecosystem that supports budding entrepreneurs and facilitates the establishment of successful startups.

Our strategic plan emphasizes multidisciplinary research that delivers practical solutions to societal issues and contributes meaningfully to sustainable development. Through academic excellence, research aligned with national priorities, and effective implementation of sustainability initiatives, Sathyabama has secured a place among the Top Universities in the National Institutional Ranking Framework (NIRF), Government of India.

We take great pride in the fact that our faculty and students clearly understand their role in building a sustainable future. Their active participation in various initiatives strengthens our collective contribution to the Sustainable Development Goals. Sathyabama continues to provide education grounded in values, nurturing responsible and conscientious citizens for the nation. As we continue to strive for excellence, we are proud of the significant progress we are making toward the Sustainable Development Goals proposed under the UN Agenda 2030, an agenda that aims to protect both people and the planet.

Dr. Mariazeena Johnson
Chancellor

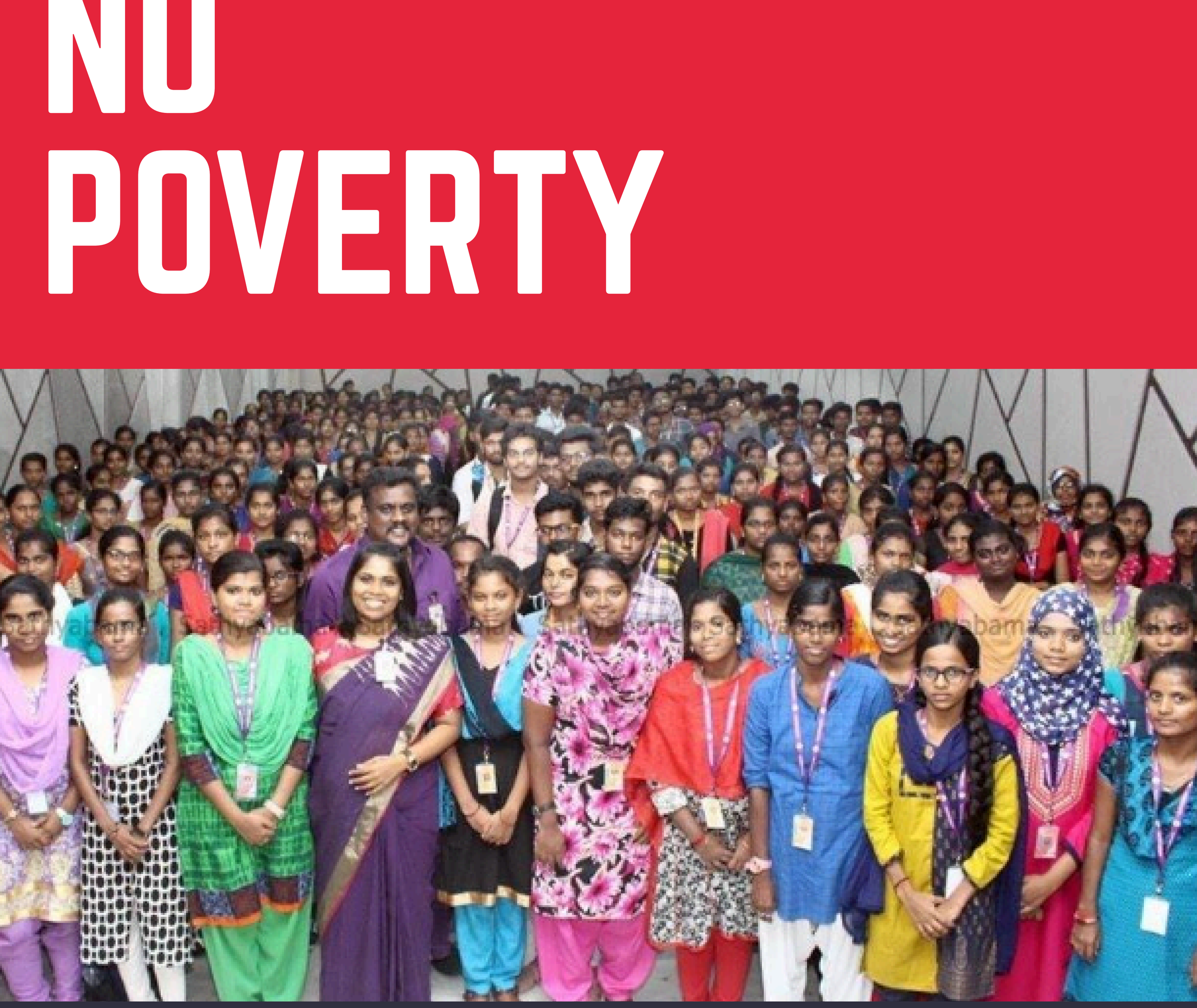
FOREWORD

At Sathyabama Institute of Science and Technology, sustainability is central to our mission of delivering quality education, fostering innovation, and empowering communities. This Sustainability Report reflects our journey of integrating academic excellence with social responsibility and environmental stewardship. We embed sustainability into teaching, research, and outreach, and our accreditations—NAAC A++ grade, NBA and ABET program accreditations, and recognition in NIRF and global rankings—demonstrate our holistic approach where sustainability and equity are integral to institutional excellence. Sathyabama aligns its strategies with the United Nations Sustainable Development Goals, ensuring that every initiative contributes to measurable outcomes. Our inclusive admissions policies, scholarships, and outreach programs strengthen access to education, while scholarships for women, safe campus infrastructure, and empowerment initiatives promote gender equality. Governance structures emphasize accountability and inclusivity, and research on renewable energy, waste management, and sustainable technologies reflects our commitment to climate action. To further its sustainability purpose, Sathyabama Institute of Science and Technology has built long-lasting relationships with top government agencie such as Department of Ocean Development (DoD), the National Institute of Ocean Technology (NIOT), and the IIT Madras Bay of Bengal Project Indian Council of Agricultural Research (ICAR) and the Central Institute of Brackishwater Aquaculture (CIBA). Through the Ministry of Education's Center of Excellence for Energy Research, Sathyabama has led the way in solar and bioenergy technology advancements. Through collaborations with ISRO, the Department of Science & Technology (DST), and the Ministry of Earth Sciences (MoES), space applications, waste-to-energy, and renewable technologies. Faculty and students engage in projects on clean energy, water conservation, sustainable agriculture, and health equity, guided by the principle that technology must serve humanity. Outreach programs such as nutrition education, blood donation rallies, and school awareness campaigns empower communities with knowledge on health, equity, and sustainability. Our campus itself is a living laboratory for sustainability, with green buildings, energy-efficient systems, waste segregation, renewable energy installations, and accessibility features that ensure inclusivity for differently abled students.. Looking ahead, we aim to expand SDG mapping, strengthen partnerships, enhance interdisciplinary research, and foster a culture of sustainability among students. This report captures our ethos: quality education inseparable from social responsibility. At Sathyabama, sustainability is not a choice—it is our responsibility. Through this report, we reaffirm our commitment to empowering communities, advancing knowledge, and protecting the planet.

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 1

NO POVERTY



WWW.SATHYABAMA.AC.IN

SDG 1 - NO POVERTY

A.University anti-poverty programmes

Bottom financial quintile admission target and success:

Sathyabama Institute of Science and Technology annually admits around 500 students with 100% scholarships. Sathyabama is an inclusive Institution and works with the motto "Education for all". Through the Scholarship Scheme, it allows deserving students to pursue higher education on a full scholarship and the number of students benefitted through Anbu, Government and Tata Scholarship for the academic year 2023-2024 is 1863 as given below:

Sl.No.	Name of the Scheme	Number of students benefited
1	Government Scheme	328
2	Non-Government Agency	31
3	Institution Scholarship	1504
	Total	1863

By providing full scholarships, Sathyabama supports students from lower income including high achievers, children of Indian Defence Personnel students from marginalised communities, economically weaker sections, differently abled students, children of destitute women and war-widows, and children of prison inmates, acid attack victims, talented sportspersons and those without parental support— to ensure equitable access to education and reduce poverty in alignment with SDG 1.This scholarship is also extended to the meritorious wards of the non-teaching staff of the institution. More than 90% of the students who are given scholarships fall into the bottom 20% of household lower income group.

Sathyabama Institute of Science and Technology is associated with numerous NGO's such as Agaram, Maatram and the Ability Foundation to identify genuinely deserving students from underserved communities. The Institution not only offers full fee waivers to these students but also provides free food and on-campus accommodation, ensuring their physical and mental well-being throughout their academic journey. The performance of scholarship recipients is closely monitored, and those requiring additional guidance receive targeted support. The Institution equips them with all the necessary resources and training to help them graduate as skilled, employable professionals. Many of these students successfully complete their degrees and secure placements in reputable organizations, uplifting their families and contributing positively to their communities.

SDG 1 - NO POVERTY

https://agaram.in/partners

Import favorites | Gmail | YouTube | Maps | Netflix | Yahoo | Revision_8th.docx.pdf

AGARAM FOUNDATION

Home | Our Mission | Our Journey | Financials | Partners | Be a Part of Us Join | Contact | Donate | Alumni Corner

All | Engineering | Hospital & Nursing | Arts & Science | Polytechnic | University | Group Of Institutions

University Partners

Dr.MGR Educational and Research Institute Chennai, Tamil Nadu	Sathyabama Institute of Science and Technology Chennai, Tamil Nadu	Sathyabama Institute of Science and Technology - Chennai (Sakthidevi Charitable Trust) Chennai, Tamil Nadu	SRM Institute of Science and Technology Chennai, Tamil Nadu
Current Students: 0	Current Students: 149	Current Students: 41	Current Students: 88
Total Students: 42	Total Students: 741	Total Students: 190	Total Students: 317

MAATRAM FOUNDATION

Home | Admissions | What we do | News & Events | Gallery | Contact Us

Institution Partners

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY (DEEMED TO BE UNIVERSITY) | Sairam INSTITUTIONS | Dr. MGR-JANAKI College of Arts and Science for Women | CHENNAI INSTITUTE OF TECHNOLOGY Transforming Lives | KARPAGAM UNIVERSITY

SRI KRISHNA INSTITUTIONS COIMBATORE | rit RAJALAKSHMI INSTITUTE OF TECHNOLOGY BELIEVE IN THE POSSIBILITIES | VELAMMAL ENGINEERING COLLEGE The Wheel of Knowledge rolls on! | SRM INSTITUTE OF SCIENCE & TECHNOLOGY | KCLAS KUMARAGURU COLLEGE OF LIBERAL ARTS AND SCIENCE

HINDUSTAN GROUP OF INSTITUTIONS CHENNAI | JEPPIAAR ENGINEERING COLLEGE | KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION (DEEMED TO BE UNIVERSITY) | RATHINAM GROUP OF INSTITUTIONS | KCG COLLEGE OF TECHNOLOGY (A Unit of Hindustan Group of Institutions)



SDG 1 - NO POVERTY



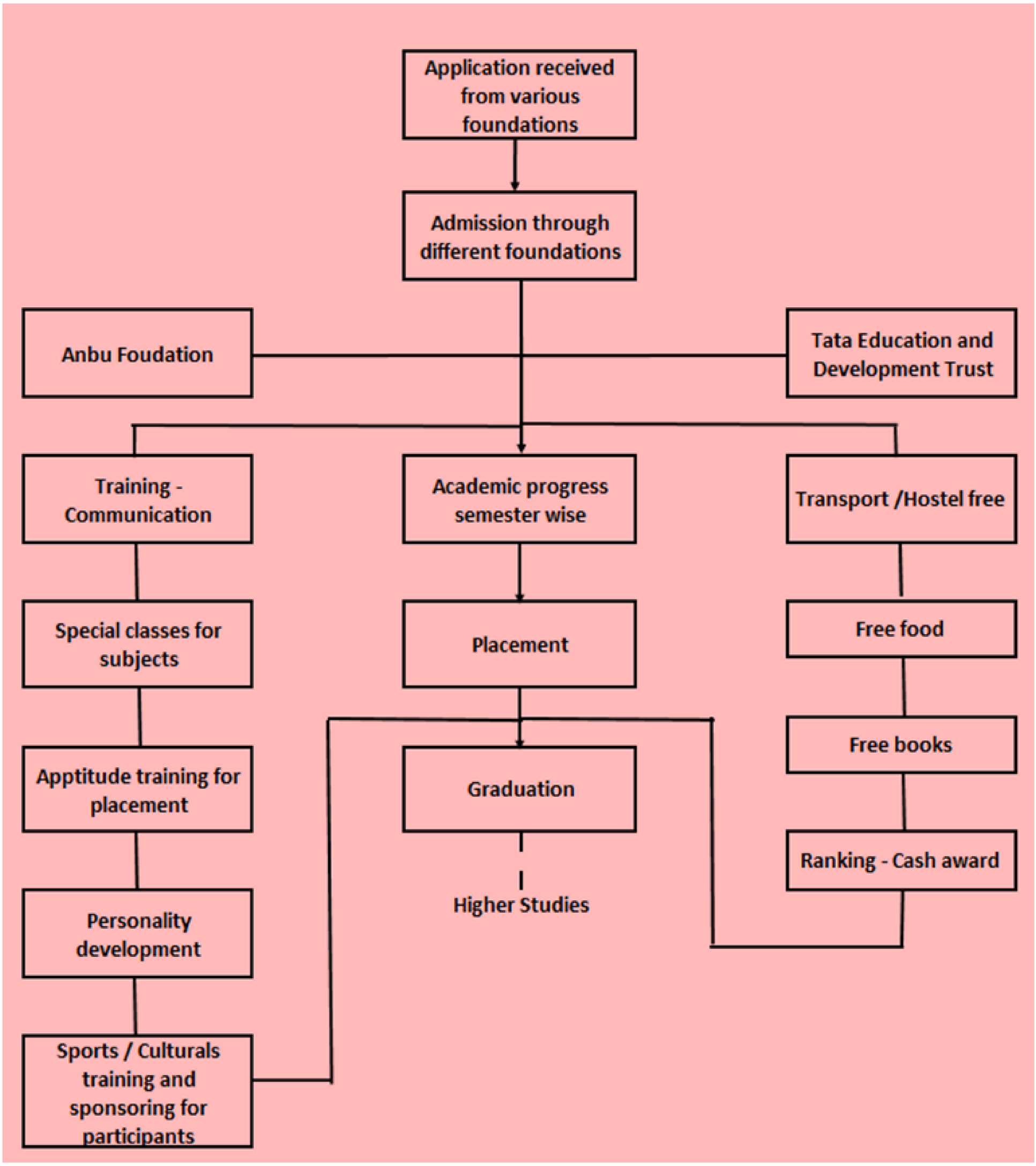
ANBU SCHOLARSHIP



Anbu Scholarship students

SDG 1 - NO POVERTY

The following admission procedure reflects the institution's commitment to SDG 1 – No Poverty



SDG 1 - NO POVERTY

The graduation completion target for students who fall into the bottom 20% of the household income group is 95%. In order to ensure that these students graduate with better employment opportunities, their academic progress is regularly tracked, and they receive extra attention through counselling, mentorship, skill development sessions, learning resources, classes for clearing up doubts, evening classes for hostel students, student support forums, placement training and ongoing assessments. Thus, Sathyabama Institute of Science and Technology (SIST) provides better employment opportunities and lifts the families out of poverty in alignment with SDG 1.

Evidence URL:
https://www.sathyabama.ac.in/student/scholarships_cheme
https://agaram.in/partners
https://maatramfoundation.com/maatram-partners-institute-partners/

Low-income and bottom financial quintile student support

Students from low income families are also offered free food, accommodation and transportation to minimize financial burdens for their educational journey. These initiatives open doors to higher learning opportunities that may have otherwise been out of reach. This culture of encouragement and assistance empowers students, helping them build stronger skills and pursue quality education in line with SDG 1.

The university has dedicated programmes and initiatives to support students from the bottom 20% of household income groups to ensure they successfully complete their studies. Financial assistance is provided through scholarships, fee waivers, and need-based grants that significantly reduce the economic burden on disadvantaged students. In addition, the university offers free food and accommodation to eligible students, creating a supportive environment where financial constraints do not hinder academic progress.

Beyond financial support, the university also implements mentoring, academic counselling, and skill-development workshops to help students overcome barriers and stay engaged in their studies. Also, Sathyabama IAS Academy provides career guidance and coaching for civil service examinations, creating opportunities for students from lower income backgrounds to pursue stable and impactful careers. Placement training is provided to the students who fall into the bottom 20% of household income group to enable them to land up in the core MNCs, IT sectors, and hospitals. By enabling access to quality preparation and reducing financial barriers, this initiative supports SDG 1 by empowering individuals to secure sustainable livelihoods.

SDG 1 - NO POVERTY

Low or lower middle income countries student support

Sathyabama Institute of Science and Technology actively contributes to SDG 1 by supporting students from lower- and middle-income countries through full scholarships that completely waive tuition fees and provide free accommodation and food. International scholars are admitted to pursue their research with zero financial burden, and a monthly stipend is also offered to ensure their well-being during their study period. The university has signed a MoU with the Ministry of Education and the Ministry of Innovation & Technology, Ethiopia, enabling equitable access to higher education for economically disadvantaged students and directly supporting global poverty-reduction efforts.

B. Community anti-poverty programmes

Local start-up assistance:

The university actively supports local community members in establishing financially and socially sustainable businesses. Faculty and alumni serve as volunteer mentors, offering guidance on business planning, growth strategies, and sustainable practices, helping entrepreneurs build strong and resilient ventures. Through Sathyabama's RISE , a multifaceted initiative by Sathyabama Institute of Science and Technology to empower underprivileged communities and students through various programs. These include supporting tribal communities with organic farming and an e-commerce platform, providing educational scholarships, training fisherwomen in sustainable fish breeding and income generation, and training women to become auto drivers. The program aims to foster independence, financial stability, and a greater sense of purpose among its beneficiaries.

Evidence URL:

Sathyabama's RISE - Building a Stronger Future - India Today
https://www.youtube.com/watch?v=lyELbgjR0kE
https://www.instagram.com/reel/DCl55ikvz2A/

SDG 1 - NO POVERTY

Local start-up financial assistance

Our university actively support local community members in starting financially and socially sustainable businesses. Our faculty and alumni volunteer as mentors to provide guidance on business planning, growth strategies, and sustainability practices. We conduct free workshops in areas like entrepreneurship, financial literacy, social impact, and sustainable business practices to help local entrepreneurs develop essential skills for starting and maintaining their businesses. SIST actively supports the local community assisting the start-up financially and socially sustainable businesses through Startup India Seed Fund Scheme which is officially announced in the government website. Through this scheme a grants of Rs.1.33 Crore were awarded to start-ups organised by Sathyabama TBI emphasizing the institution's dedication and contribution towards the achievement of SDG 1.





SDG 1 - NO POVERTY

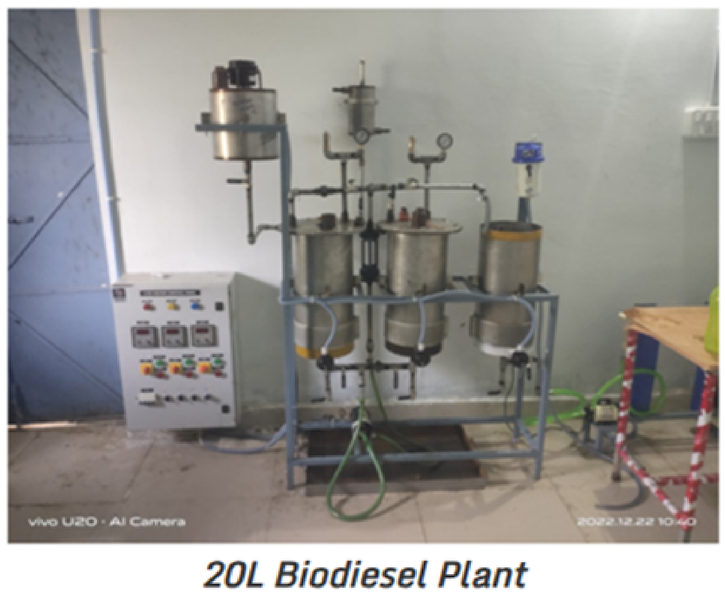




Sathyabama has adopted five villages nearby under UBA scheme to transfer and implement the technology for the transformational change and development of the villages. Sathyabama extends its support towards health, education, basic amenities and employment opportunities in the villages. Knowledge transfer and technological guidance to empower villages with effective solutions for their day to day problems has been the aim of sathyabama, and the students of sathyabama have effectively carried it out. Sathyabama focuses on the vision of Unnat Bharat Abhiyan "To bring a change in villages by leveraging knowledge institutions to build an inclusive India" and works towards achieving it. Sathyabama has adopted Kumizhi, Venkatapuram, Aapur, Oteri, Thenmelpakkam and kalaiampoondi for overall development under UBA.

SDG 1 - NO POVERTY

The academicians and researchers of the institution have trained the SC community members of Aadhanur, Eachampoondi, and Periakottagam villages in biodiesel production, biochar production from agricultural waste, accelerated biocompost production using vegetable market waste, fly ash brick making, and hydroponics as an alternative farming technology. These capacity-building programmes were conducted through the newly established STI Hub in Cuddalore, Kattumannarkoil Taluk.



20L Biodiesel Plant



Bio-Composting Unit



Furnace for Bio-char production

People belonging to ST community from Peenjamandhai, pallambattu and Jarthamkollai Panchayats of Jawadhu Hills are provided training on millet cultivation, medicinal plant cultivation, and bee farming through the Agri Innovation Hub. The villagers are trained on making value added products from the millets. They are also provided technological assistance for digital marketing. Skill development programmes on baking, tailoring, electrical work, laptop repair are conducted for the village youth. Computer literacy programmes are organised for the school children of these villages.

Start-ups Established

- **BiGlySo Pvt. Ltd" has been launched for the production of waste cooking oil derived biodiesel, Agro-waste derived enriched biochar, vegetable market waste based accelerated bio compost, industrial grade bio glycerine, waste cooking oil based detergent soaps, and bioglycerine based liquid soaps.**
- **POOBAS Pvt. Ltd has been established for sales of hydroponics based horticultural cultivation and consultation**
- **Penteum Enterprises Pvt. Ltd functions with the objective to utilize fly ash for brick making.**

SDG 1 - NO POVERTY

SIST is actively involved in skill development programmes such Oyster and milky mushroom cultivation, seaweed cultivation, ornamental fish culture ,solar lamp making, commercial baking through their Women Empowerment Bureau and help them earn their livelihood. It is also actively involved with net-making as community initiatives through its Centre for Ocean Research providing alternative livelihood opportunities.

Evidence URL:
https://www.centreforwastemanagement.com/sti-hub/about-project.html
https://www.indiatoday.in/impact-feature/story/sathyabamas-rise-building-a-stronger-future-2625146-2024-10-29
https://www.facebook.com/share/p/1GTtUmWTCD/

Programmes for services access

The Institute conducts a range of programmes to promote health and well-being among students, faculty, and the surrounding community. Awareness sessions address various physiological and psychological health concerns, including hypertension, diabetes, anxiety, stress, and depression, as well as lifestyle-related diseases. Special awareness programmes on cancer—particularly breast and cervical cancer—are organised for women.
Medical and dental camps are regularly held to support neighbouring communities. Students and faculty from Sathyabama Dental College and Hospital provide dental check-ups in adopted villages and peripheral centres, along with public awareness activities on oral hygiene. The Sathyabama Anbu health card is an initiative by Sathyabama Institute of Science and Technology to provide free medical screenings for women, including female staff, students, and notable women in public life. The program, launched in collaboration with the Anbu Foundation and Sathyabama Hospitals, offers screenings for conditions like diabetes, eye and dental issues, mammograms, and abdominal scans. Additionally, health education programmes on sexual and reproductive health are conducted for school students to foster early awareness and encourage healthy practices.

SDG 1 - NO POVERTY





Sathyabama IIC have adopted four schools from the nearby community under Atal Tinkering Lab (ATL) program, a Government of India initiative under the Atal Innovation Mission (AIM) to provide the students with a workspace to learn and experiment with tools for STEM.

https://iic.mic.gov.in/institute/selected-schools

IIC ID
IC201811324

Sathyabama Institute of Science & Technology (U-0474)

IIC Regional Meet 2025.

Selected ATL Schools | Prescribed Activities | Nominate Mentor

List of ATL Schools - Accepted Invitation

S.No.	School Code	School Name	Address	Email
1	290317396	CHOLAN MATRICULATION HIGHER SECONDARY SCHOOL KANCHIPURAM	NO 9C EKAMBARAPURAM STREET KANCHIPURAM - 631502 KANCHIPURAM KANCHIPURAM KANCHIPURAM	cholanmhss@gmail.com
2	560811651	GOVERNMENT HIGH SCHOOL KARAPAKKAM	KANCHIPURAM KANCHIPURAM	ghs00170karapakkam@gmail.com
3	284811089	GOVERNMENT HIGHER SECONDARY SCHOOL PERUNGUDI KANCHIPURAM	KANCHIPURAM KANCHIPURAM	rmsaperungudi@gmail.com
4	49551137	SRI SATHYA SAI INSTITUTE OF EDUCARE KANCHIPURAM	KANCHIPURAM KANCHIPURAM	sssieducare@gmail.com

SDG 1 - NO POVERTY







These initiatives empower local communities with essential knowledge and improve their access to basic services.

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 2 ZERO HUNGER

Every Plate Counts. Every Voice Matters

Over 800 million people suffer from hunger your support can make a difference.

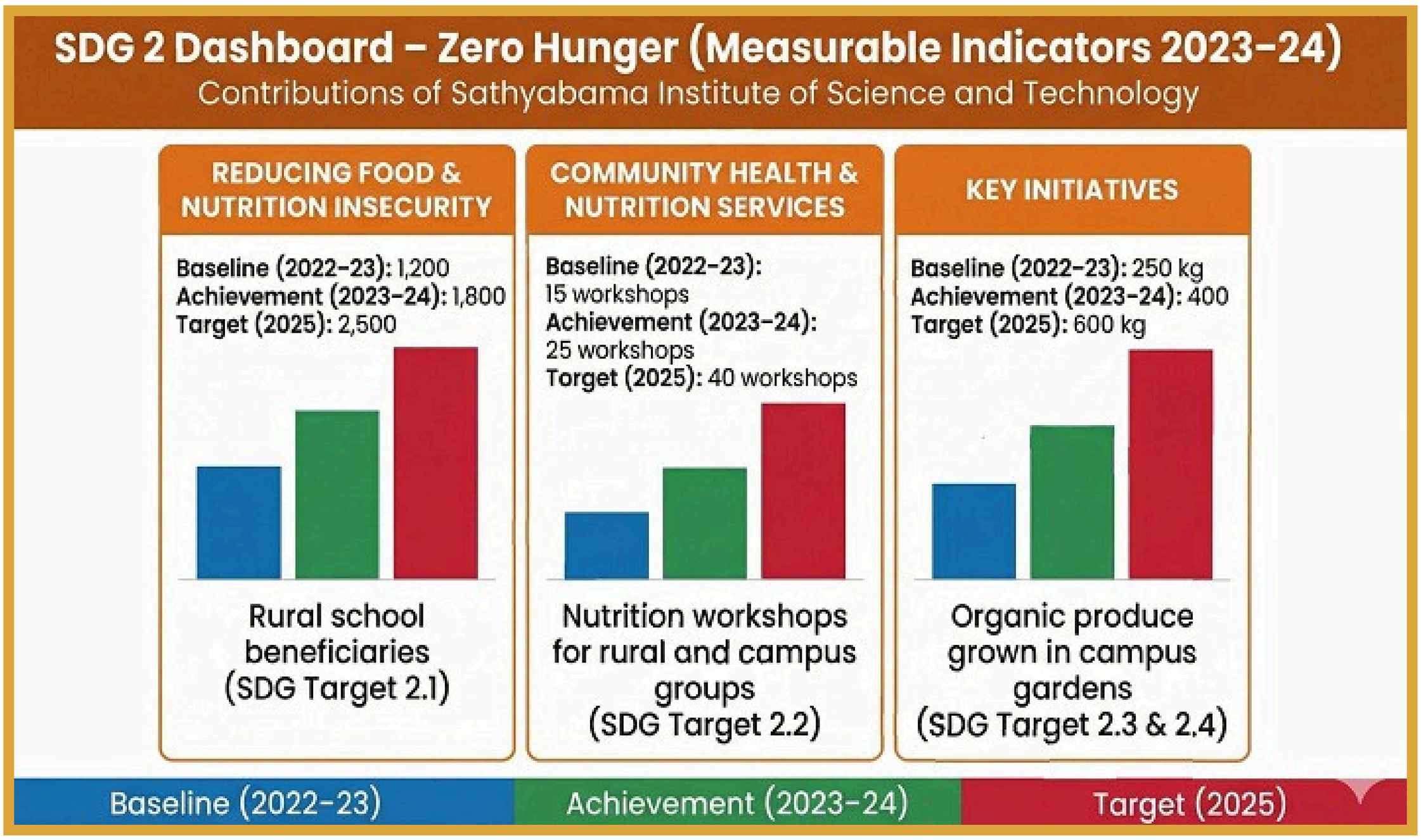


www.sathyabama.ac.in

SDG 2 - ZERO HUNGER

Sathyabama Institute of Science and Technology Annual Summary 2023–24

The urgent need to eradicate hunger, attain food security, enhance nutrition, and advance sustainable agriculture is highlighted in Sustainable Development Goal 2. Sathyabama Institute of Science and Technology reaffirmed its dedication to this worldwide goal for the academic year 2023–2024 by combining outreach, research, and campus-based sustainability initiatives. The organization created programs that directly address these requirements while also promoting sustainable agricultural methods after realizing that hunger and malnutrition continue to be major problems for vulnerable populations, especially women and children living in rural regions. This all-encompassing strategy made sure that Sathyabama's efforts were globally linked, ecologically conscious, and socially significant.



Sathyabama focuses on ending hunger and ensuring access to safe, nutritious food, which was directly addressed by community nutrition programs, such as midday meal support to old age home, pilgrimage people and nutritional support to rural schools; which addresses malnutrition in vulnerable groups and emphasizes doubling agricultural productivity and incomes of small-scale producers to promote sustainable food production systems.

SDG 2 - ZERO HUNGER

In order to maintain accountability and transparency, Sathyabama used quantifiable indicators to track progress: the number of rural school beneficiaries increased from 1,200 in 2022–2023 to 1,800 in 2023–2024; the number of nutrition workshops increased from 15 to 25 sessions, bolstering efforts on the amount of organic produce harvested from campus gardens increased from 250 kg to 400 kg, reflecting improvements in sustainable agriculture by reducing losses in the food system.

- **Reducing food and nutrition insecurity among students from low-income backgrounds**
- **Extending health & nutrition services to surrounding communities, particularly underserved women and families in adopted villages**

Initiatives

1.Scholarships, freeships and financial support for students

- **1,863 students benefitted from scholarships, freeships and other financial support schemes in 2023–24, reducing the burden of tuition and indirectly supporting food and living needs for students from disadvantaged backgrounds**

2.Unnat Bharat Abhiyan (UBA) – Village Outreach

- **Sathyabama has adopted nearby villages under Unnat Bharat Abhiyan, where the institution supports basic amenities and welfare measures (including sanitation, water and health awareness)**
- **Health and hygiene activities in these villages indirectly support food safety, child nutrition and overall well-being**

3. Outcomes & Evidence

- **Scale of student support: 1,832 students receiving scholarships/freeships is a strong quantitative indicator that financial barriers (including food and housing insecurity) are being addressed**
- **Community health & nutrition: Sathyabama Health camps and UBA health outreach demonstrate action on nutrition-related SDG 2 targets for vulnerable women and rural households**

2.1 Research Contribution

At Sathyabama, research on effective agricultural practices, organic farming and pest control are undertaken. The Centre for climate change studies is involved in research addressing the issues like maintenance of ecosystems and avoiding degradation of eco-systems, adaptation to climate change, water scarcity, ground water resources and irrigation. Centre for Remote Sensing and Geoinformatics is also involved in research that addresses the change in rainfall pattern, anthropogenic disaster monitoring and so on.

SDG 2 - ZERO HUNGER

- **Formal “Sathyabama Food Policy” exists campus food & aquatic food systems research / sustainability of food supply**
- **Campus food-waste valorization (biogas + compost) feeding back to kitchens and gardens — documented in the Energy & Environment Audit and campus reports. This reduces waste and supports campus food production/use**

https://sist.sathyabama.ac.in/download/GreeenEnergy.pdf
https://sist.sathyabama.ac.in/download/EnvironmentFriendly.pdf

- **Community outreach / village adoption under Institutional Social Responsibility (UBA) and active NSS outreach programmes — shows direct community support (health, basic amenities, livelihood activities that relate to food security)**

Sathyabama’s Support and Mobility Opportunities for International Learners:

Sathyabama welcomes students from abroad, allowing “students from other countries” to apply for undergraduate, master’s, and doctoral programmes. Its dedicated Centre for Academic Partnership & International Relations (CAP-IR) coordinates international admissions and supports “inbound student mobility,” enabling foreign students (from partner universities abroad) to study for a semester at Sathyabama with credit transfer.
https://www.sathyabama.ac.in/International_Student_Admissions



SDG 2 - ZERO HUNGER

Through these mechanisms, international students — potentially including those from South Africa — are given access to Sathyabama's academic and research environment, with support for admission, enrollment, and accommodation and a path to job which keep them away from hunger.

https://www.sathyabama.ac.in/international-transfer programs/inbound-mobility



2.2 Training Programmes

The Institution conduct

- Training programmes to students and outsiders in order to develop awareness on these issues and encourage responsible behavior to combat human caused climate change and promote sustainable way of life
- Training programmes to farmers on sustainable and resilient agricultural practices
- Awareness programmes on food wastage and ways to avoid food wastage

SDG 2 - ZERO HUNGER



2.3 Outreach Programmes

Name of the activity	National Inauguration camp
Organizing unit	NSS - Sathyabama Institute of Science and Technology
Name of the scheme	NSS - Extension Activity
Year of the activity	27.09.2023
The number of students participated	1000

SDG 2 - ZERO HUNGER

About 40 % of the food produced in India is wasted. Despite adequate food production, the UN has reported that about 190 million Indians remain undernourished. It is further estimated that the value of food wastage in India is around ₹92,000 crores per annum. These are some bleak statistics, but they should help us realize the magnitude of the problem of food waste, as much as inequity, in India. The world recognizes that no truly sustainable and developed country can exist without tackling the issue of food waste, and while the challenge in front of us may be monumental, some steps need to be taken sooner than others.so NSS has taken the initiative to create awareness of food wastage and organized an event.



SDG 2 - ZERO HUNGER

World Food Day is an international awareness event focused on finding solutions to end world hunger and food insecurity. Nano fertilizers and bio fertilizers recent innovation ideas were inculcating to the Government school students on October 16, 2023 by Eco club mentors and students. The activity provided a platform for the students to discuss and exchange insights on key objectives on sustainable farming and sustainable agriculture. The event covered a wide range of themes, including innovative methodologies, educational technology,and team participation. Participants actively engaged in interactive sessions with students, gaining valuableknowledge and networking opportunities.



2.4 Food Distribution during Natural Disasters

Other than giving food to orphanages and Homes, Sathyabama has never failed to rise to any occasion, during natural calamities in Chennai. The huge kitchen in Sathyabama that feeds more than 5000 people every day, three times a day, effortlessly starts cooking for the masses during any natural calamity. The students also volunteer and their active participation has always been Sathyabama's strength. The food that is cooked and packed by the efficient kitchen gets distributed effortlessly by the students.

SDG 2 - ZERO HUNGER





SDG 2 - ZERO HUNGER

2.5 Women Empowerment and Eradication of Hunger

Empowering women will alleviate poverty and eradicate hunger. The women in the rural areas have been trained in various job oriented activities such as solar lights ,Agri and fish farming to motivate the SHGs.







SDG 2 - ZERO HUNGER











Training on Tailoring

Training on Beauty and wellness

Training on seaweed cultivatio

SDG 2 - ZERO HUNGER

Initiatives on campus to avoid food waste



A team of faculty members from the Centre for Drug Discovery and Development and the Centre of Modern Organic Agriculture (C-MOAR), Sathyabama Institute of Science and Technology, Chennai, visited leading institutions in Thailand including RIMOA-KMITL, AATSEA, NC Organic Coconut Farm, Kings Former Fertilizer Company, Mahidol University, Mahidol Hospital & Research Centre, and Superior ART Bangkok from April 3–6, 2024. The visit aimed to expand collaborative research through joint projects, student and faculty exchanges, and facility sharing between Sathyabama and Thai institutions. It also fostered meaningful dialogue among universities and industry leaders to strengthen higher education, advance scientific research and technology, and enhance workforce development across both nations. This initiative marks a significant step toward building sustainable academic and industrial partnerships in the region.

SDG 2 - ZERO HUNGER





https://www.facebook.com/SathyabamaOfficial/posts/pfbid0LydQbtNTibQNdmypFxfA8zkD7zUpNXYC1dkViddyXHvsSubD1BezbT8JatPY6YjQl

On August 3rd 2024, the Sathyabama Institute of Science and Technology hosted a memorable reunion for the class of 1999-2003, drawing over 140 alumni back to their alma mater in a heartfelt celebration. This event offered a poignant opportunity for former students to reconnect with their past and relive the cherished experiences of their college years. As they wandered through their old classrooms, many alumni were struck by the sense of nostalgia and the transformation of the campus since their graduation. The day was filled with lively group photos, conversations with former classmates, and touching reunions with beloved professors who had played a significant role in their academic journeys.

In a generous gesture of gratitude and to honor the institution that significantly shaped their lives, the alumni collectively donated Rs. 1,00,000 to support the social upliftment initiatives that the University is doing.

The reunion underscored the lasting bonds formed during their time at Sathyabama and highlighted the significant role the institution played in shaping their personal and professional lives.

SDG 2 - ZERO HUNGER



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 3

GOOD HEALTH AND WELL-BEING



WWW.SATHYABAMA.AC.IN

SDG 3 - GOOD HEALTH AND WELL-BEING

Ensuring healthy lives and promoting well-being at all ages is important to build prosperous societies .There is an urgent need to fully eradicate the wide range of diseases for sustainable development and to address many different persistent and emerging health issues.

Sathyabama Institute of Science and Technology contributes to the nation and the global for good health and well – being by introducing health related new academic programmes year on year, strengthening collaborations with hospitals and healthcare institutions, and conducting a wide range of community health initiatives for the development of healthier society.

The sanctioned project by The Director General of the Council, Indian Council of Medical Research on "Exploring temperature and salinity tolerant mosquitoes and their influence on mosquito-borne disease dynamics" directly supports SDG 3 by contributing towards surveillance, and prevention of vector-borne diseases. This research strengthens public health preparedness and aids in reducing the spread of communicable diseases.

A.Current collaborations with health institutions

Sathyabama Institute of Science and Technology maintains collaborations with health institutions and health research organisations that directly aim to improve health & well-being outcomes. SIST has MoUs ranging from primary health centres, District health centres and several private hospitals for joint research, internships and collaborative projects.

The university is running health sciences programmes such as Dental Sciences, Nursing, Physiotherapy, Pharmacy, Psychology, Clinical Nutrition and Dietetics, Medical Lab Technology focussed towards health and well-being. Sathyabama Dental College and Hospitals run community outreach in collaboration with local NGOs.

The university research centres such as Centre for Drug Discovery and Development (CDDD) works towards discovering new chemical entities from natural resources to fight against life threatening infectious diseases like TB and HIV and non-infectious diseases like cancer, diabetes, etc. Also the Centre for Molecular & Nanomedical Sciences (nano medicine, drug discovery, cancer/regenerative biology) — collaborate with government research organizations and support health advanced research in the area of nano medicine and drug discovery.

The following table presents the formal collaborations established by the institution signed between 2023 and 2024, with various industry partners, corporate houses, medical universities, hospitals, and research organizations.

SDG 3 - GOOD HEALTH AND WELL-BEING

Sl.No	Name of the institution/ industry/ corporate house
1.	Incare Lab and Cannarma private limited
2.	Gulf Medical University
3.	Medway Hospital, Chennai
4.	Biopol Bioscience pvt. Ltd., Bengaluru, India
5.	Ramakrishna Medical Centre LLP, Trichy, Tamil Nadu
6.	AVN Ayurveda Formulations, Madurai, Tamil Nadu
7.	AAARNA Therapeutics and Vaxigen International Research Centre private Limited

B. Health outreach programmes

The Department of Public Health Dentistry at Sathyabama Dental College and Hospital conducted a series of dental Screening Camp for the school children, senior citizens, non-teaching staff including bus drivers focussing on oral health education, early diagnosis, and the prevention of dental diseases. The following table presents the outreach activities conducted during the academic year 2023-2024, highlighting the dates, venues, nature of programs, and participant details.

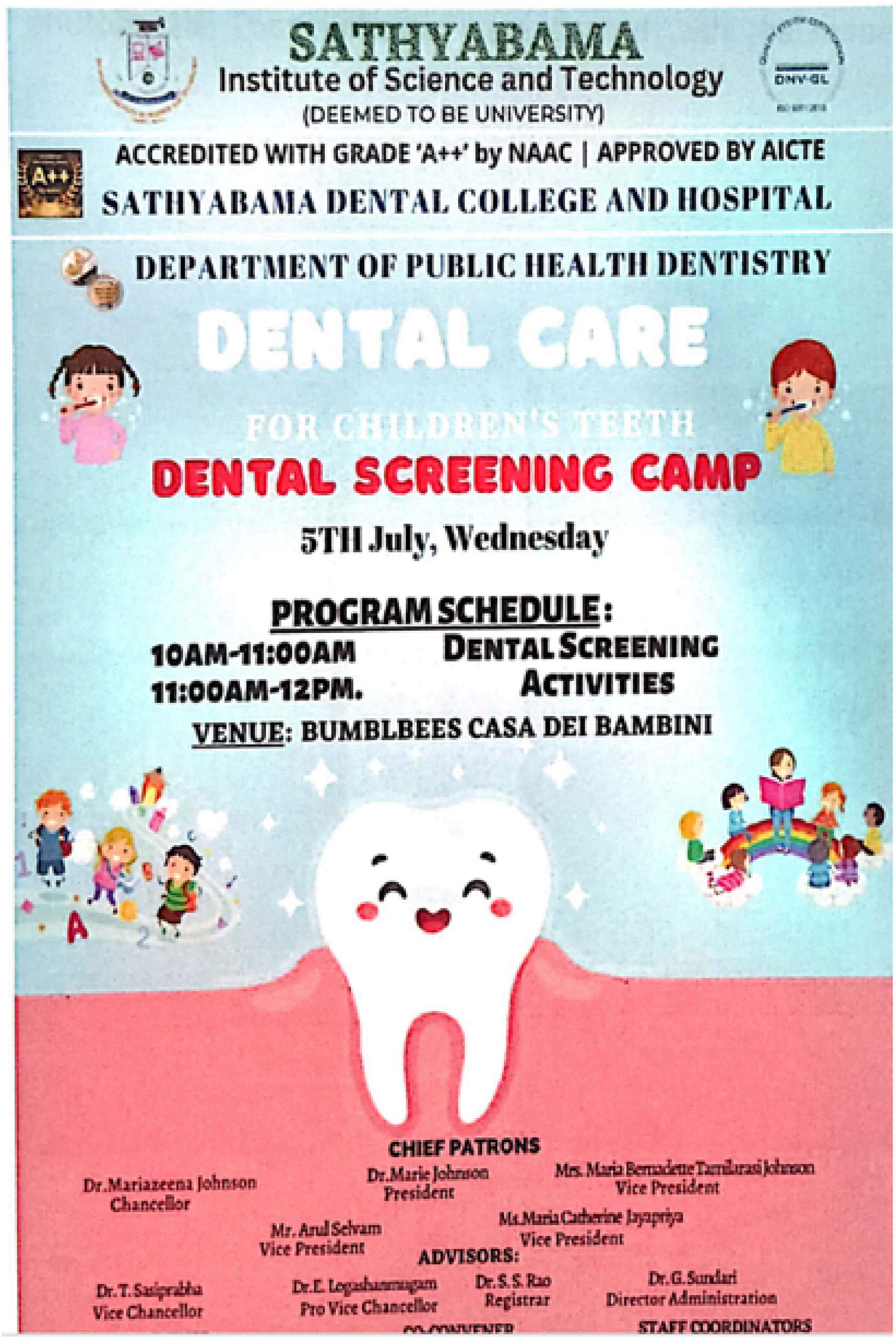
Sl.No	DATE	Name of the Activities	VENUE	No .of Participants
1	05.07.2023	Dental Screening Camp	Bumblebees Casa Dei Bambini , Navalur	35
2	07.07.2023	Special Program - Dental Awareness Day	Aalfa Matriculation Higher Secondary School	235
3	05.09.2023	Dental Screening Camp	Little Elly Pre School, Sholinganallur	27
4	07.09.2023 - 08.09.2023	Dental Screening Camp (Voice against tobacco)	Sathyabama Dental College and Hospital	50
5	08.09.2023	Dental Awareness program on saving tooth post trauma for school Students and teachers	Govt Primary & Middle School, Navallur	114
6	27.11.2023	Oral screening program	Kirubai Oldage home, Medavakkam, Chennai	20
7	22.12.2023	Dental Screening Camp	Kidzee Preschool, Sithalapakkam	20
8	19.01.2024	Screening camp for school students	Government Elementary and Higher Secondary School, Kaliyampoondi	126
9	15.02.2024	Awareness on cool lip cessation among young adults	Anna Centenary Library , Adyar Cancer Institute	21
10	05.03.2024	Dental Screening Camp	Akshaya Trust , Pallikaranai	25
11	12.03.2024	Dental Screening Camp	Kidzee Preschool, Block 13, Villa 15, Bollineni Hillside, Perumbakkam	115
12	20.03.2024	Dental Screening Camp	ISKCON Temple, Injambakkam	46
13	23.04.2024	Dental Screening Camp	Believable Senior Citizen Home ,37a,1st Avenue, 2cross street, Injambakkam, Chennai.	10
14	26.04.2024	Dental Screening Camp	Anbu Karangal Boys Orphanage, Thiruvanmiyur,	23
15	16.05.2024	Dental Screening Camp	Dhakshina Chitra Heritage Museum	30
16	17.05.2024	Dental Screening Camp	Sri Prathyangira Devi Temple, Sholinganallur	35
17	03/04/2024	Outreach-Psychology	Vishranthi Home for Aged Destitute Women , Chennai	15

SDG 3 - GOOD HEALTH AND WELL-BEING

Free Dental Screening Camp

1. The Dental Screening Camp conducted at Bumblebees Casa dei Bambini aligns with Sustainable Development Goal (SDG) 3, which aims to ensure healthy lives and promote well-being for all, especially through preventive measures. The camp organized by the Department of Public Health Dentistry focused on oral health education, early diagnosis, and the prevention of dental diseases in children, which directly contributes to these objectives.

A total of 35 children (15 male and 20 female) were screened for dental health. The initiative targeted a critical early age, as early childhood is a crucial period for establishing lifelong health habits. Preventing oral diseases such as cavities and gum disease in children plays a direct role in reducing the overall health burden, which is a core aspect of SDG 3.



SDG 3 - GOOD HEALTH AND WELL-BEING

The camp featured several educational activities aimed at raising awareness about oral hygiene practices among children. A puppet show was used to engage the children in a fun and memorable way, promoting the importance of brushing teeth regularly and maintaining good oral hygiene. The camp also included an interactive photo booth activity, encouraging children to engage in health awareness in a playful and creative manner.

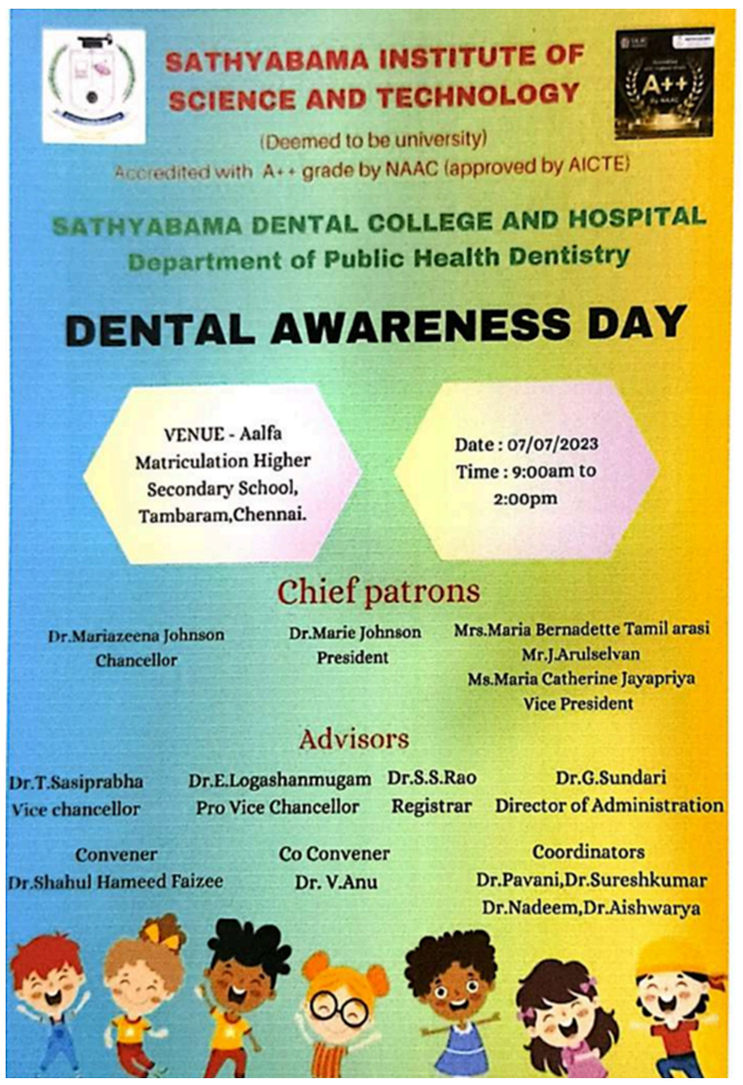




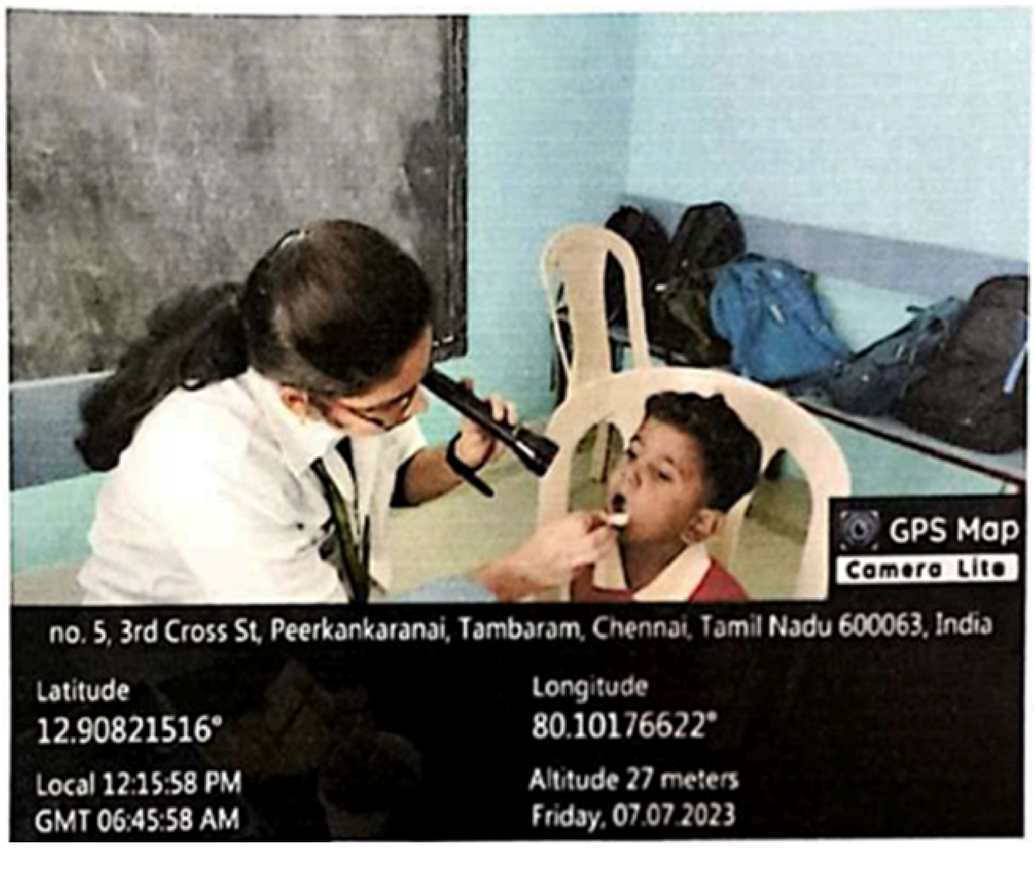


SDG 3 - GOOD HEALTH AND WELL-BEING

2.A Special program for Dental awareness day was conducted at Aalfa matriculation higher secondary school, New Perungalathur, Chennai on 07.07.2023 .





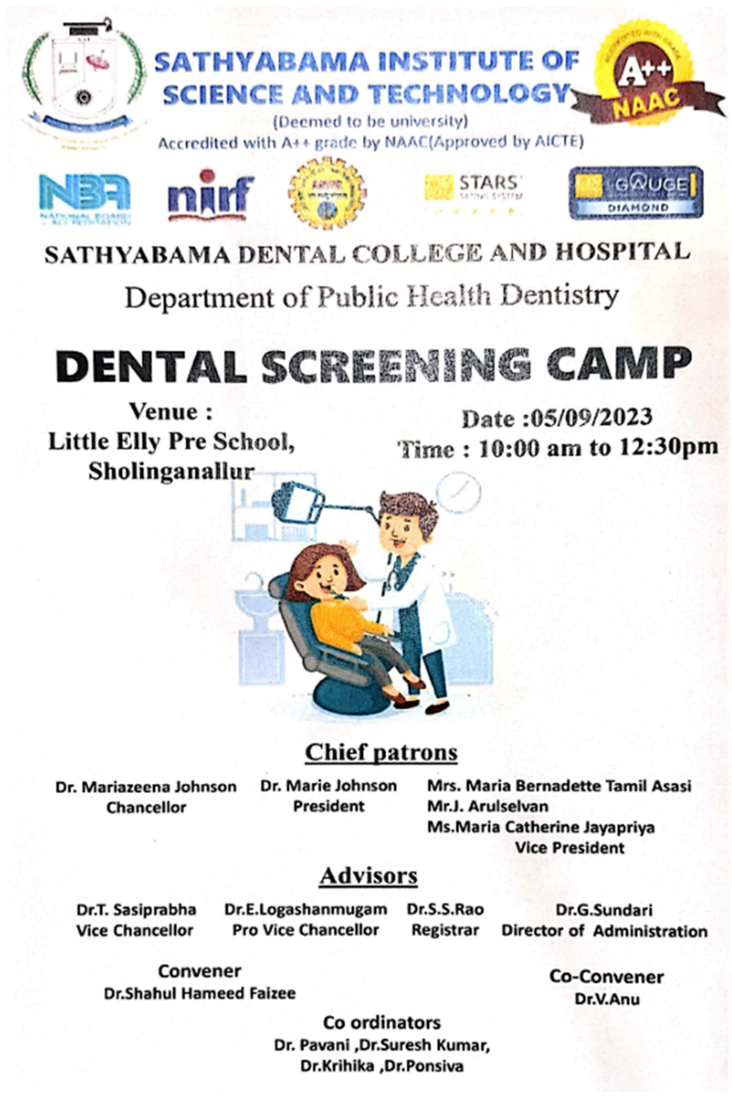






SDG 3 - GOOD HEALTH AND WELL-BEING

3. The dental screening camp was organised on 05/09/2023 at Little Elly Pre School aimed at promoting the oral health among young children. The camp successfully screened a batch of 27 kids, Oral examination was done for all the children. To make the experience engaging and educational, children were taught brushing techniques on the models and the children were made to do so.


SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
(Deemed to be university)
Accredited with A++ grade by NAAC(Approved by AICTE)

SATHYABAMA DENTAL COLLEGE AND HOSPITAL
Department of Public Health Dentistry

DENTAL SCREENING CAMP

Venue :
Little Elly Pre School,
Sholinganallur

Date :05/09/2023
Time : 10:00 am to 12:30pm

Chief patrons

Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President
Mrs. Maria Bernadette Tamil Asasi, Mr.J. Arulselvan, Ms.Maria Catherine Jayapriya, Vice President

Advisors

Dr.T. Sasiprabha, Vice Chancellor
Dr.E.Logashanmugam, Pro Vice Chancellor
Dr.S.S.Rao, Registrar
Dr.G.Sundari, Director of Administration

Convener
Dr.Shahul Hameed Faizee

Co-Convener
Dr.V.Anu

Co ordinators
Dr. Pavani ,Dr.Suresh Kumar,
Dr.Krihika ,Dr.Ponsiva



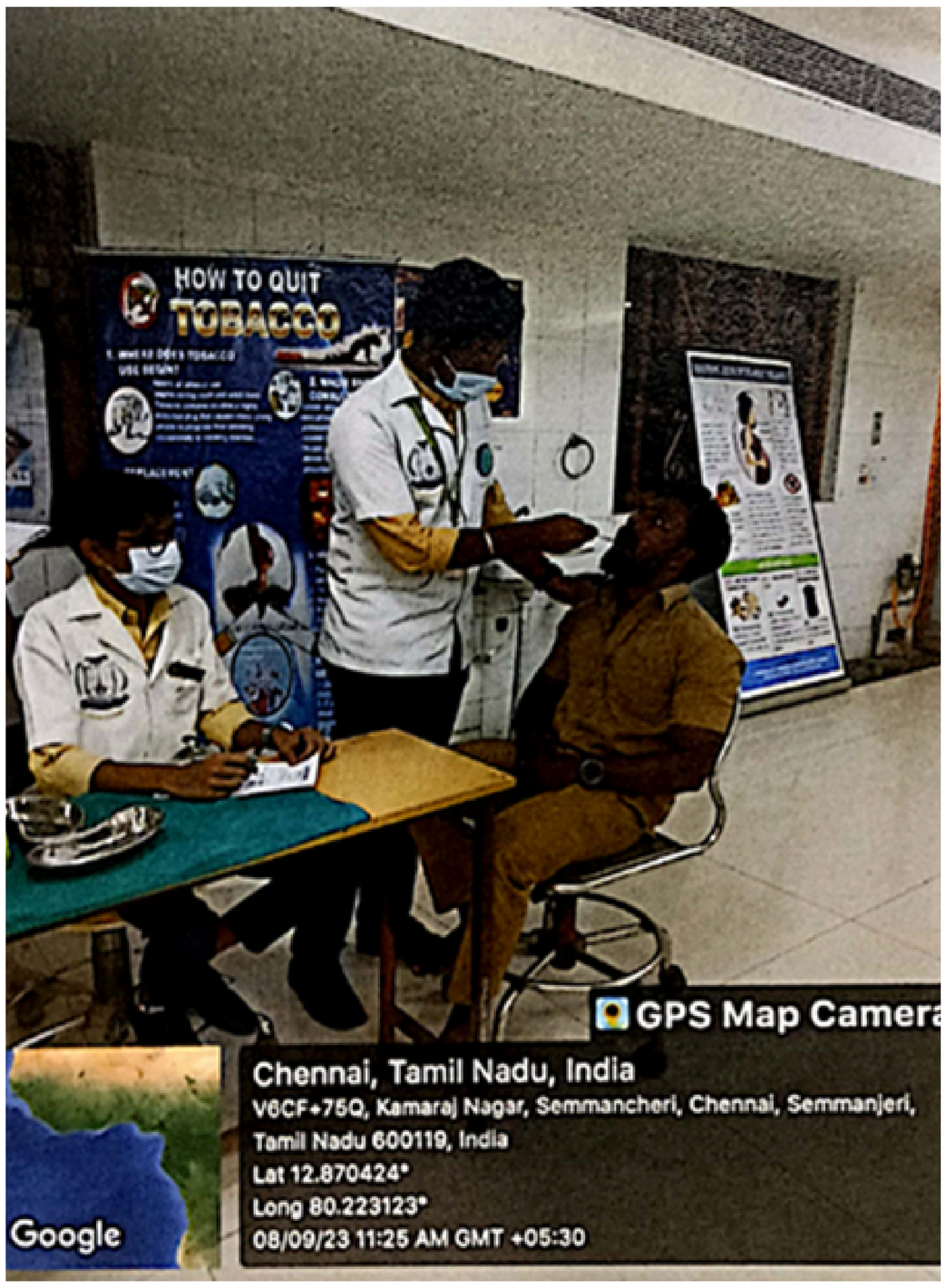




4.The dental screening camp conducted on 07/09/2023 and 08/09/2023 for 50 non-teaching staff, including bus drivers, contributed directly to Sustainable Development Goal 3 (Good Health and Well-Being) by promoting preventive oral healthcare and supporting reduction of lifestyle-related risks.The camp provided comprehensive dental examinations that identified conditions such as dental caries, gingivitis, periodontitis, root stumps, and grossly decayed teeth, underscoring the importance of early diagnosis in preventing complications. The tobacco cessation counselling was offered using the Fagerstrom Test for Nicotine Dependence, leading many participants to express readiness to quit.

SDG 3 - GOOD HEALTH AND WELL-BEING





5. Awareness program on saving tooth post trauma for school students and teachers was conducted on 08/09/2023 at Government Primary & Middle School, Navalur by the department of public health dentistry. The program includes a guest lecture given by Dr. ARAVINTHAN, Senior lecturer of department of conservative dentistry and endodontics. Short film was projected in order to create an awareness and to educate them on saving the tooth post trauma. Apart from this, the students were also educated about brushing technique and importance of good dental hygiene. Number of students benefited from this were 108 & the number of teachers benefited were 6.



SDG 3 - GOOD HEALTH AND WELL-BEING

6.The Department of Public Health Dentistry at Sathyabama Dental College and Hospital conducted an oral screening camp on 27/11/23 at Kirubai Old Age Home in Medavakkam, Chennai. A comprehensive dental examination was done for the elderly individuals and necessary treatment plan was discussed. The elderly senior citizens received education on proper brushing techniques (fones technique) and they were enlightened on maintaining proper oral maintenance.







7. Dental Screening Camp has been conducted on 22/12/2023 for preschool children at Kidzee preschool, Sithalapakkam by the Department of Public Health Dentistry. Totally 20 kids were screened in which 7 were diagnosed with dental caries and advised for restoration and 13 children were given oral hygiene instructions.



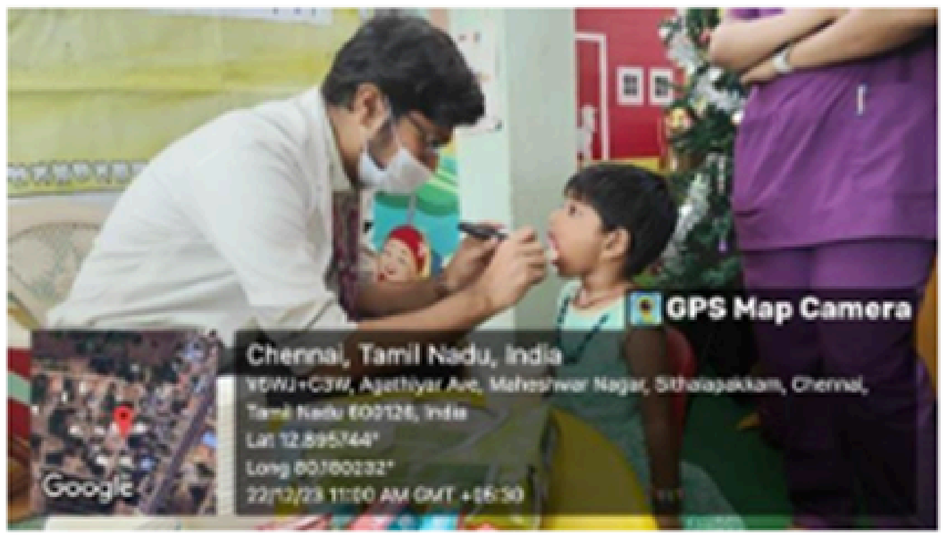
SDG 3 - GOOD HEALTH AND WELL-BEING

DENTAL SCREENING CAMP PHOTOS













SDG 3 - GOOD HEALTH AND WELL-BEING

8. Dental Screening Camp has been conducted on 19/01/2024 for the school students of standards 6th, 7th and 8th at Government Elementary and Higher Secondary School, Kaliyampoondi by the Department of Public Health Dentistry. Totally 126 school children were screened in which 52 were diagnosed with dental caries and advised for restorations,45 were diagnosed with gingivitis and advised for oral prophylaxis , 18 were diagnosed with maligned teeth and advised for correction of malocclusion , 7 were diagnosed with fractured teeth and advised for restoration , 4 were diagnosed with fluorosis, 2 were diagnosed with grossly decayed and advised for extraction, 1 was diagnosed with bruxism and advised for splint and 7 were diagnosed with good oral hygiene. The students were issued with the camp sheet and pamphlet for maintaining oral hygiene.





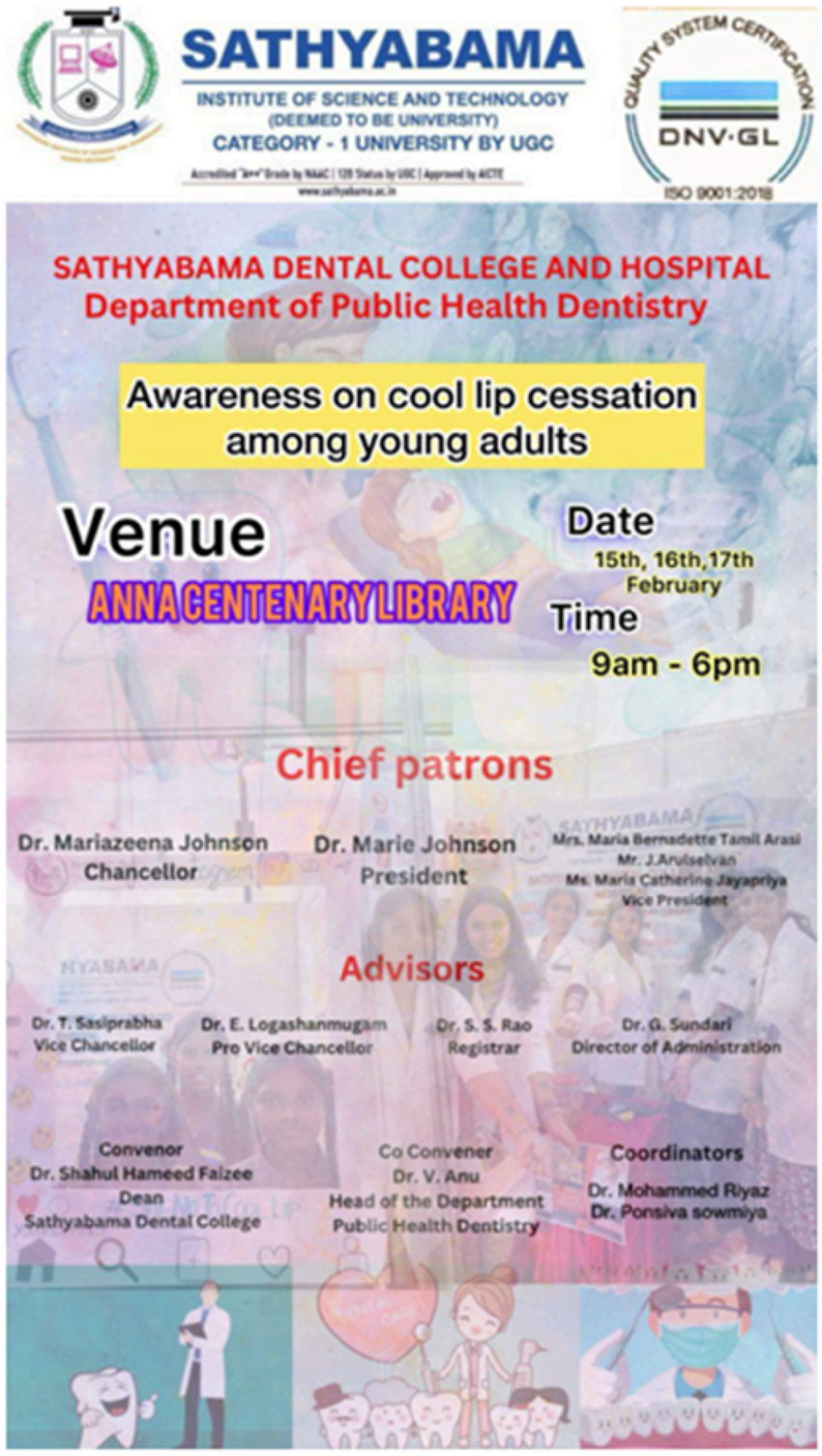


SDG 3 - GOOD HEALTH AND WELL-BEING

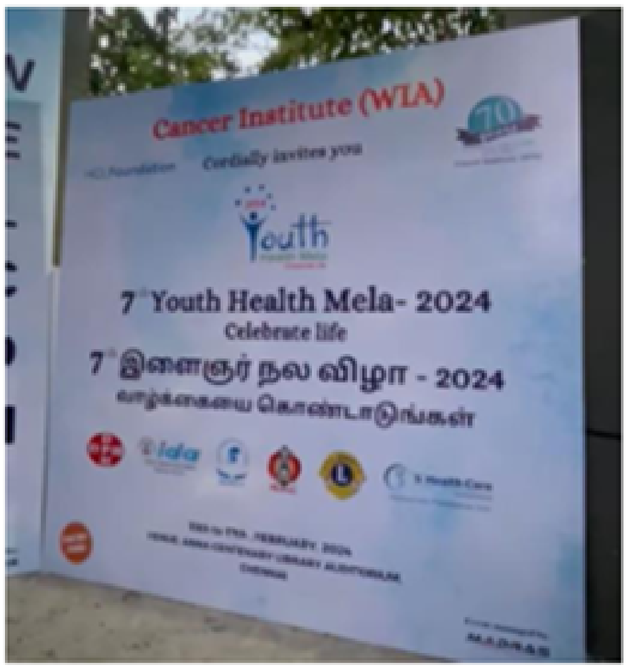




9.The Department of Public Health Dentistry, Sathyabama Dental College, participated in the Youth Health Mela 2024 held from 15–17 February 2024 at Anna Centenary Library, Kotturpuram, where interns created impactful awareness on Cool Lip cessation among young adults. Two interactive stalls were set up—one featuring a creative tea-stall model depicting the circulation of Cool Lip among students, and another offering oral screening for identifying precancerous lesions. This outreach program significantly supported SDG 3 (Good Health and Well-Being) by promoting oral health, discouraging harmful substance use, and encouraging healthier lifestyle choices among the youth.



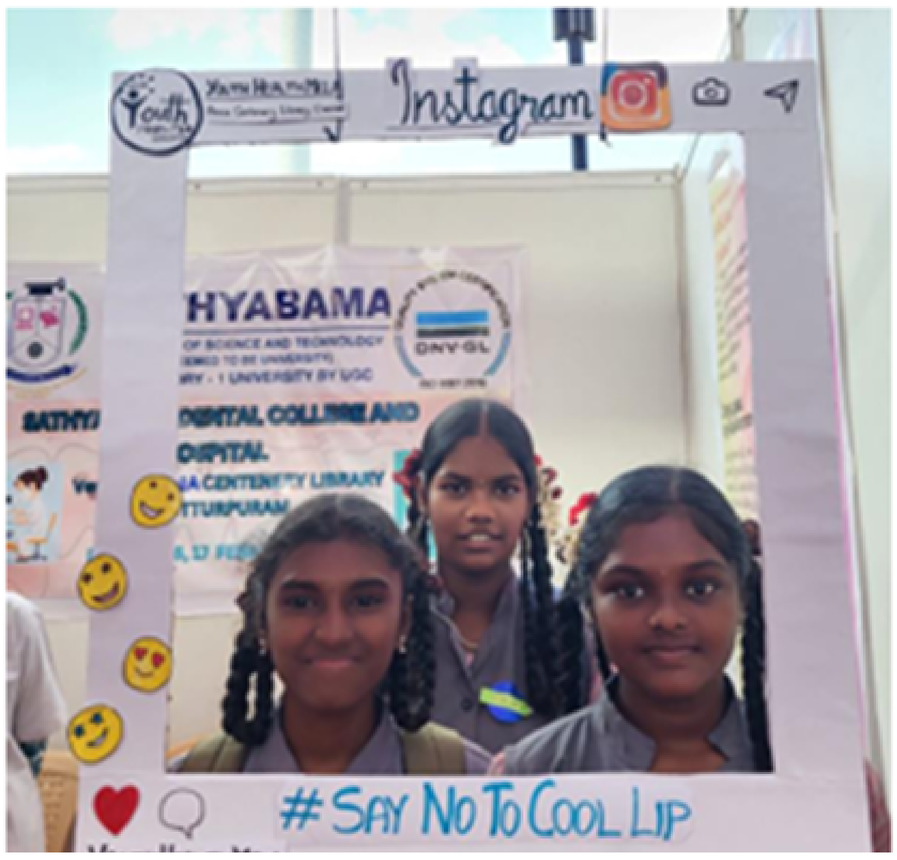
SDG 3 - GOOD HEALTH AND WELL-BEING









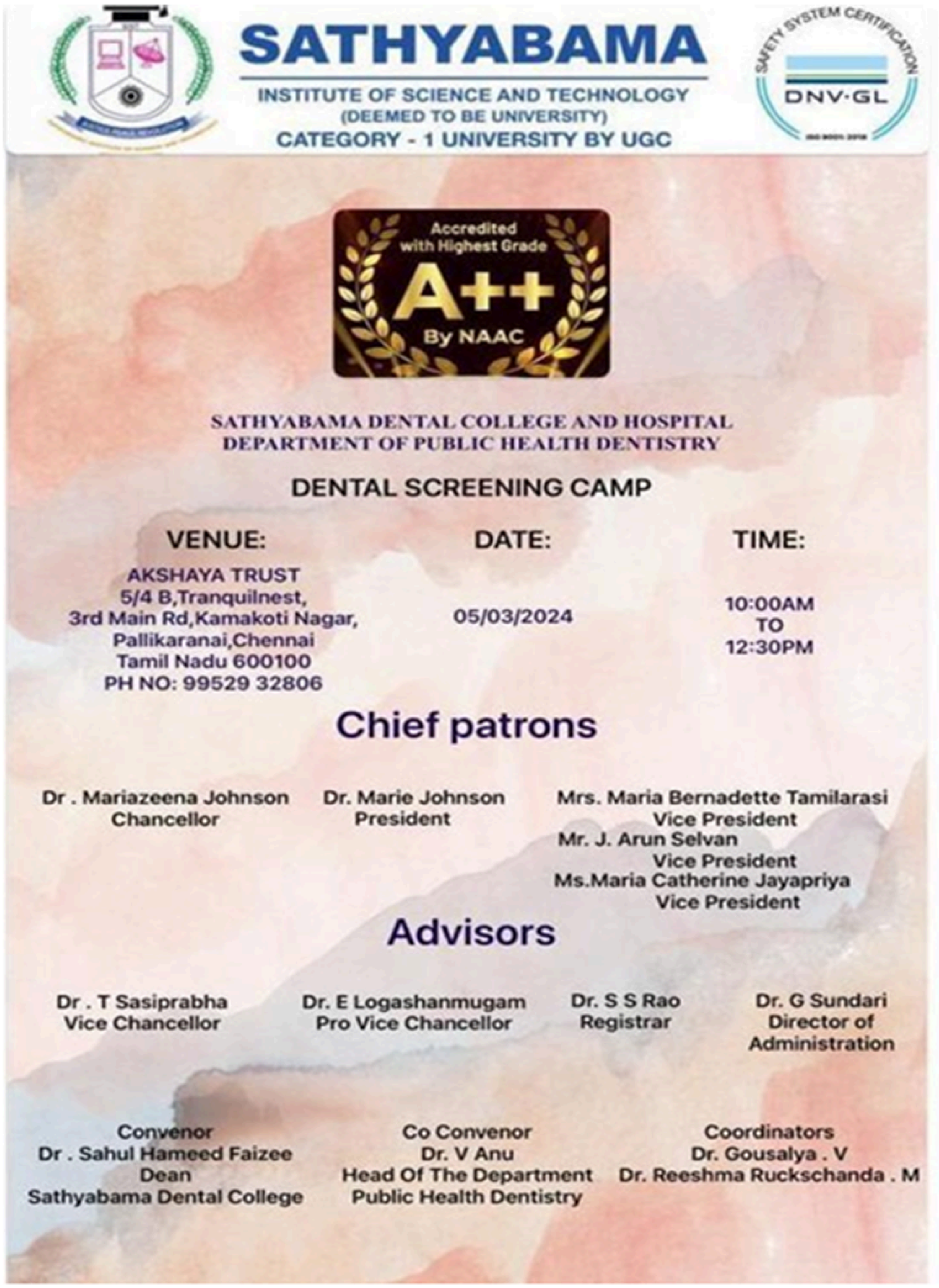






SDG 3 - GOOD HEALTH AND WELL-BEING

10. Dental screening camp was organized at Akshaya Trust Pallikaranai on 05/03/2024 by the Department of Public Health Dentistry with the aim to promote oral health for senior citizens. Total 25 people were screened, and are diagnosed with missing teeth, periodontitis, and dental caries and advised for restorations and replacing of missing tooth. After screening all the participants were educated about the oral hygiene maintenance, denture care and brushing techniques. Tooth paste was distributed to all the participants who were actively engaged in the screening camp.



SDG 3 - GOOD HEALTH AND WELL-BEING







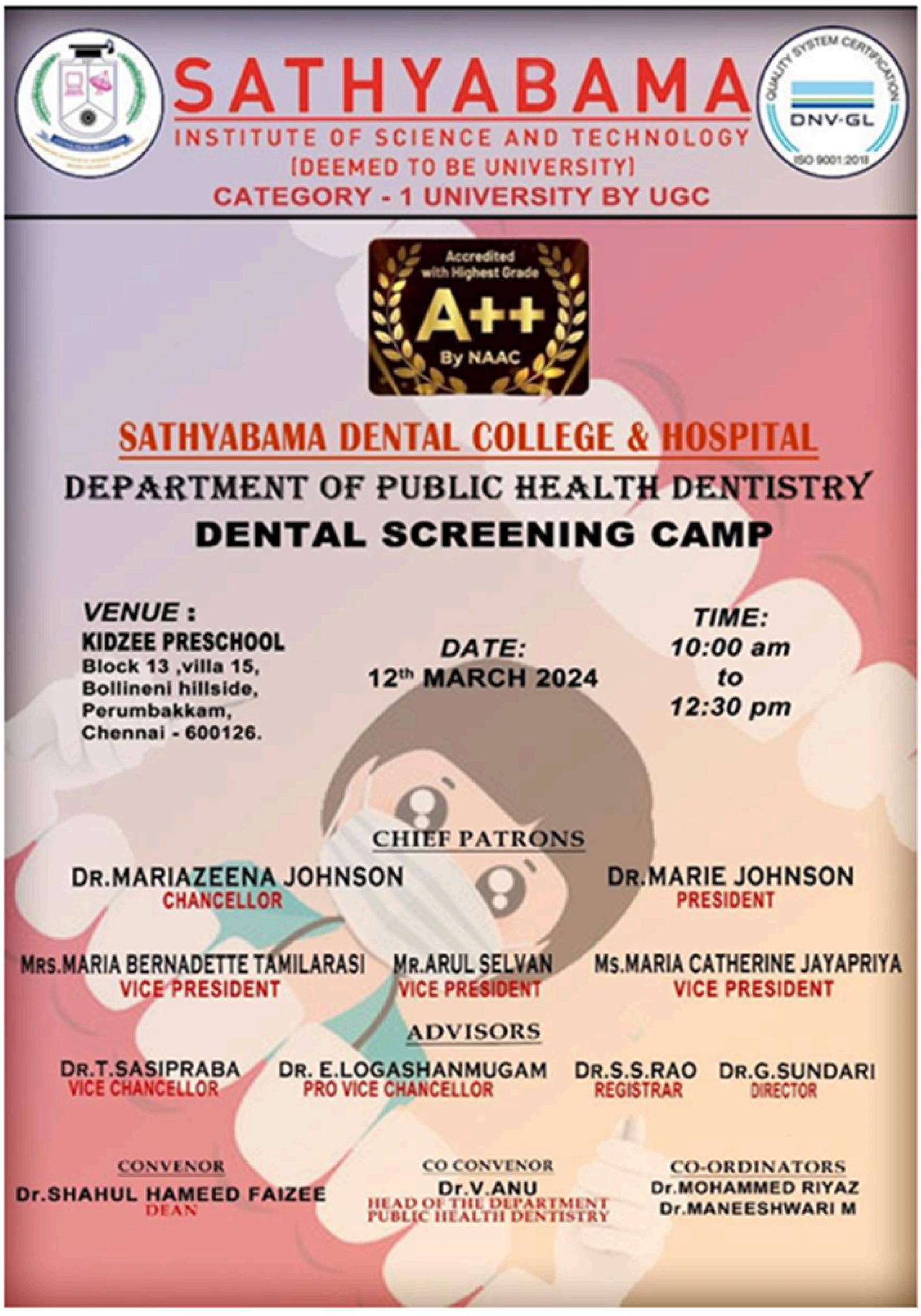








11.The dental screening camp organized by the Department of Public Health Dentistry at KIDZEE Pre-School, Perumbakkam aimed to promote oral health among children. A total of 115 kids were successfully screened in this camp. Interns provided engaging and educational oral hygiene instructions to the children comprising demonstration of proper brushing technique and ideal dietary measures. These efforts captivated the children's attention while emphasizing theimportance of good oral hygiene.



SDG 3 - GOOD HEALTH AND WELL-BEING







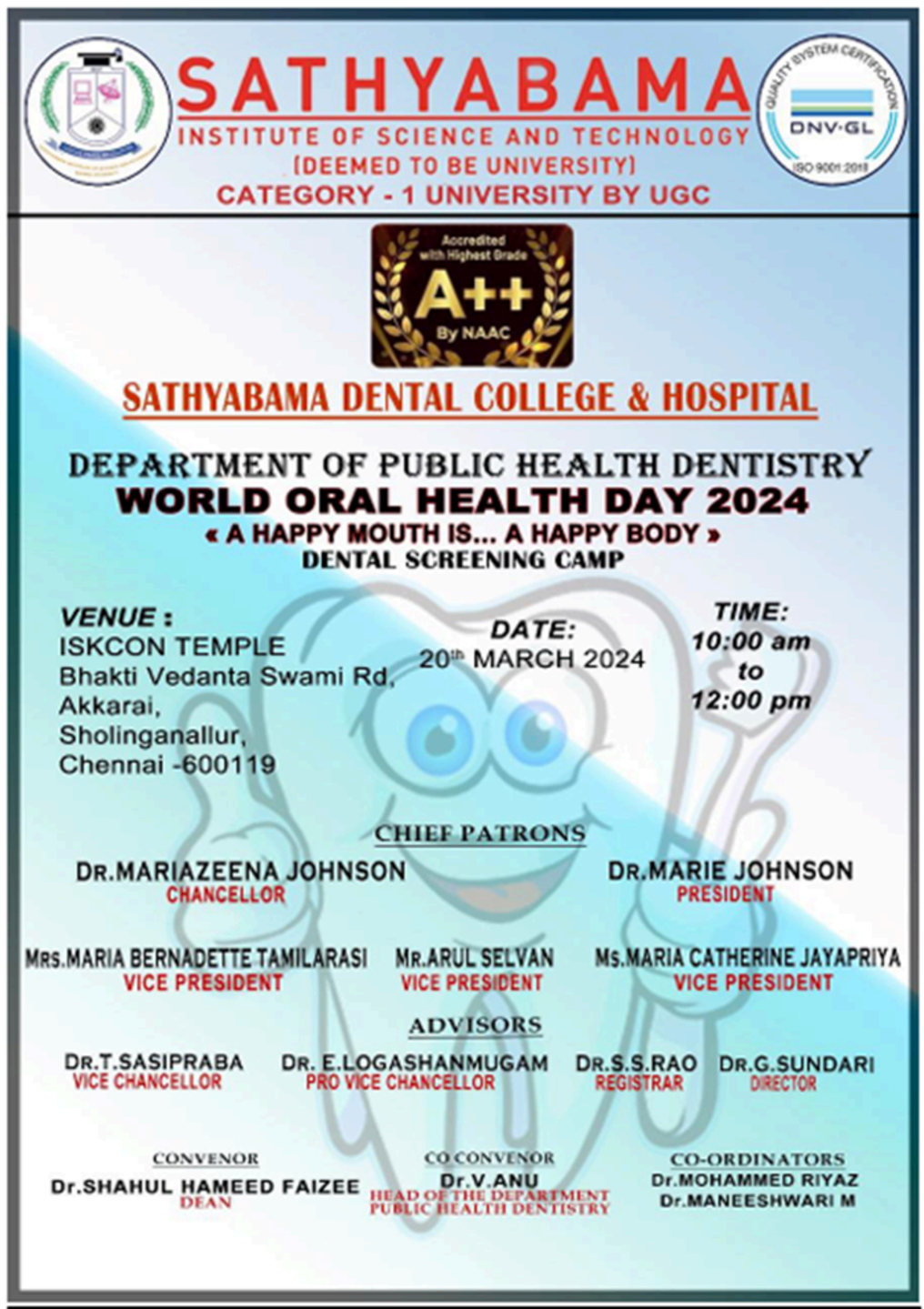




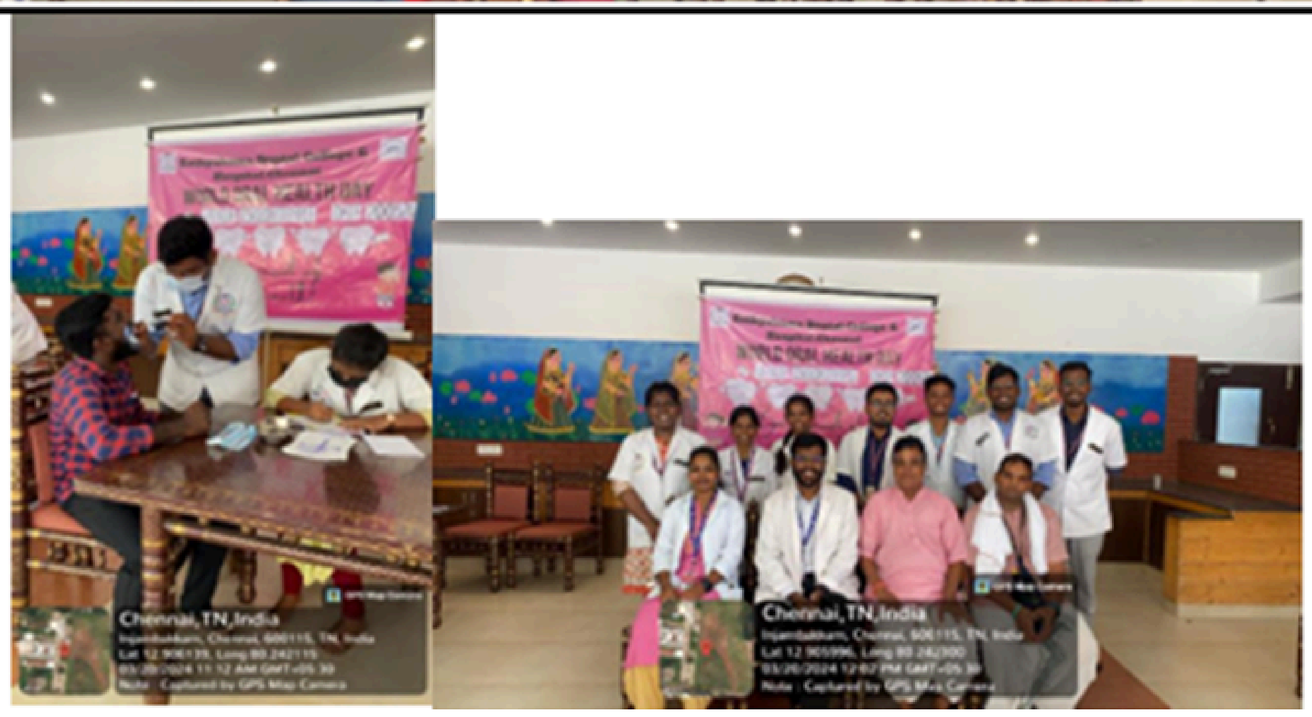


12.A dental screening camp was held at the ISKCON Temple to commemorate "World Oral Health Day - 2024". Attendees included devotees, employees, and residents of the temple. Emphasizing the theme of this year's World Oral Health Day, "A Happy Mouth is Happy Body" participants were educated on the significance of maintaining good oral hygiene for overall well-being. They were encouraged to ask questions and seek clarification on proper brushing techniques and dietary habits. Interns also conducted demonstrations on proper brushing techniques to enhance oral health awareness.

SDG 3 - GOOD HEALTH AND WELL-BEING



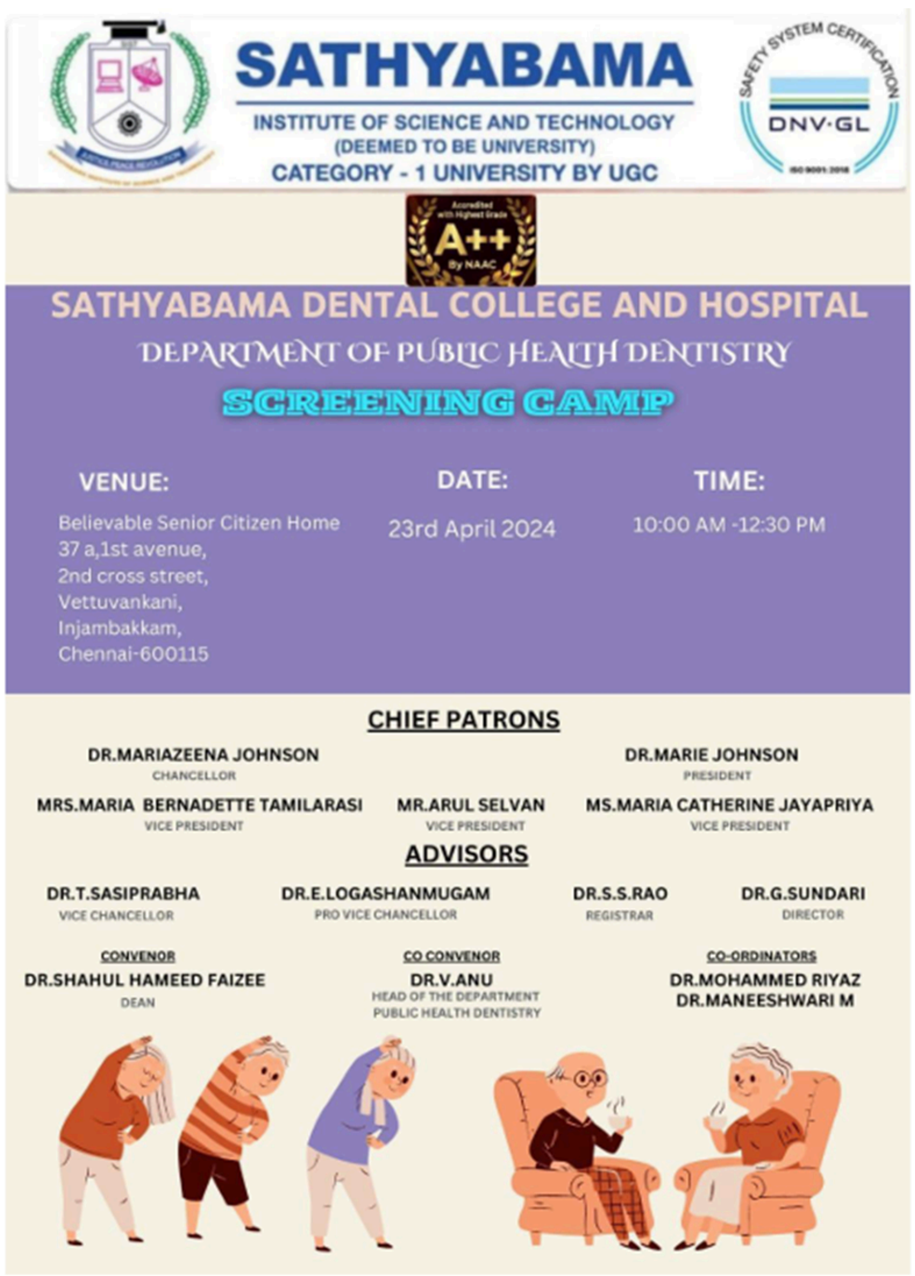




SDG 3 - GOOD HEALTH AND WELL-BEING



13. Dental screening Camp was organized at Believable Senior Citizen Home, Injambakkam aiming to enhance oral health among institutionalized elderly individuals. The event commenced with a welcome speech by the interns followed by live demonstration of appropriate brushing technique for geriatric population. Further, all the inmates were subjected to complete oral diagnosis to identify their oral health problems. All the inmates actively participated in this event. Their queries regarding oral hygiene maintenance were clarified by the staff and students.



SDG 3 - GOOD HEALTH AND WELL-BEING

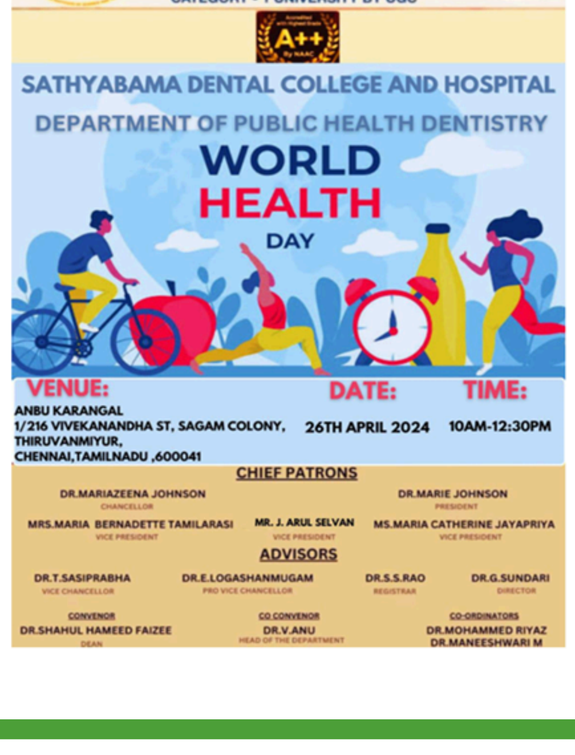








14.The Department of Public Health Dentistry at Sathyabama Dental College and Hospital organized a special program for "World Health Day" at the Anbu Karangal Orphanage Home. The instructions on basic yoga poses were given to promote overall health and help kids to refine balance, focus, concentration, and coordination. The oral health screening have been done for all the participants, during which their oral health problems were identified, and proper consultations were given. Additionally, the children were educated on essential oral hygiene practices and maintaining a healthy diet. This was done to enhance oral health awareness and help the kids understand the significance of the relationship between oral health and general health.



SDG 3 - GOOD HEALTH AND WELL-BEING





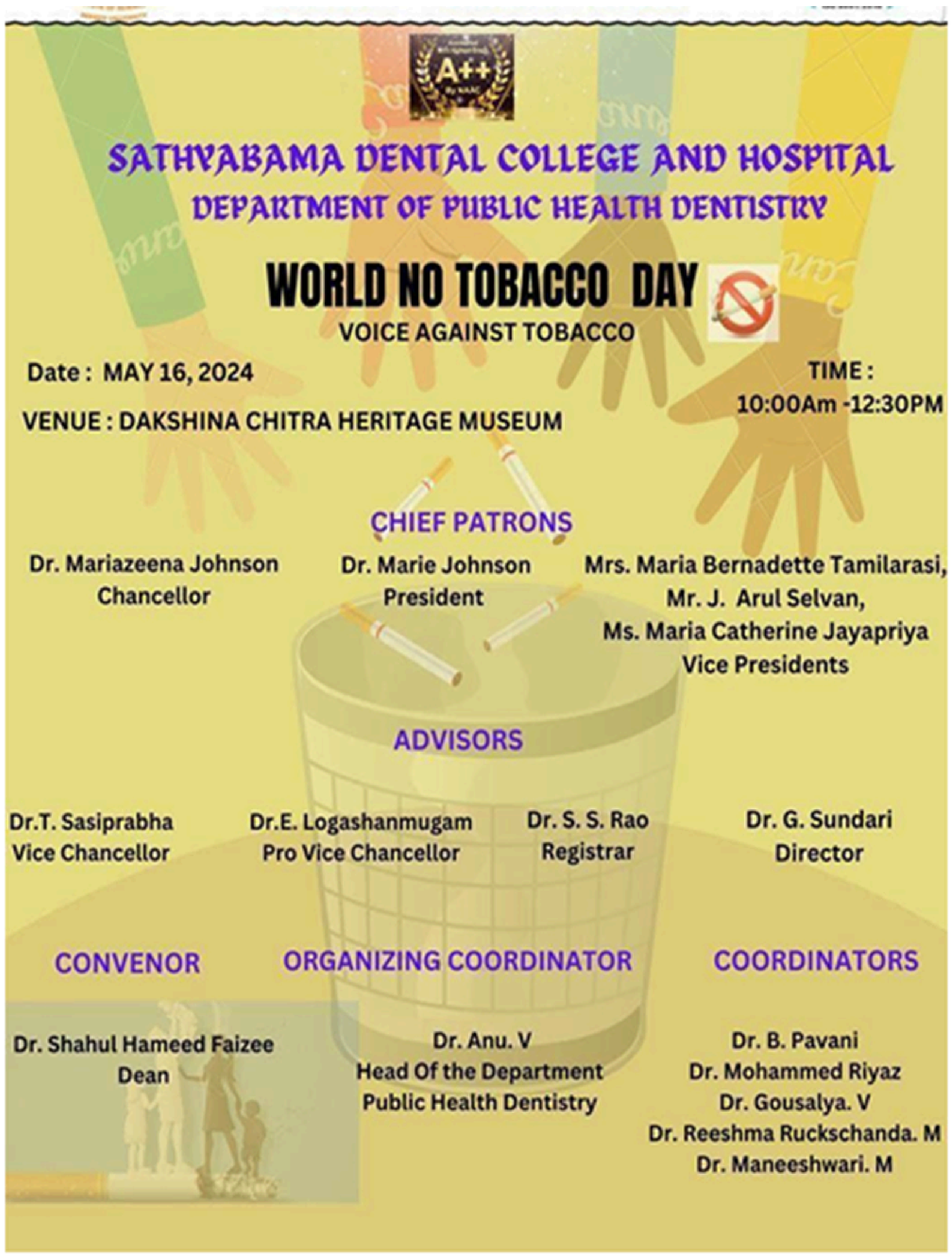






15.Department of Public Health Dentistry Sathyabama Dental College conducted an impactful awareness program on May 16th held at Dakshina chitra heritage museum on the occassion of "WORLD NO TOBACCO DAY" aimed to spread awareness about the harmful effects of using tobacco to the general public. An arousing skit was enacted to spread awareness about the harmful effects of tobacco following which a short film was played depicting the baneful after effects of tobacco usage and ways to quit tobacco. Additionally small cards with awareness slogans were given to the public .During the awareness programme public and the workers had the opportunity to interact and were provided with personalised advice and answered questions regarding tobacco usage. Throughout the programme we emphasised the harmful effects of tobacco usage and its role as bane to a healthy life. By raising awareness and promoting preventive measures, we succeeded to empower individuals to voice against tobacco.

SDG 3 - GOOD HEALTH AND WELL-BEING



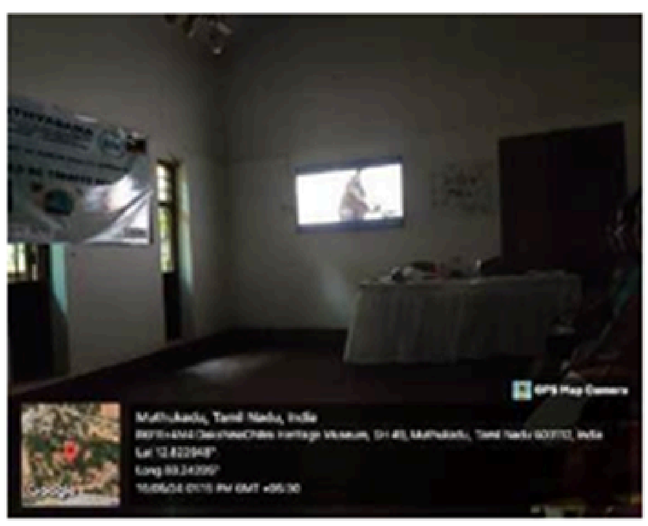


SDG 3 - GOOD HEALTH AND WELL-BEING













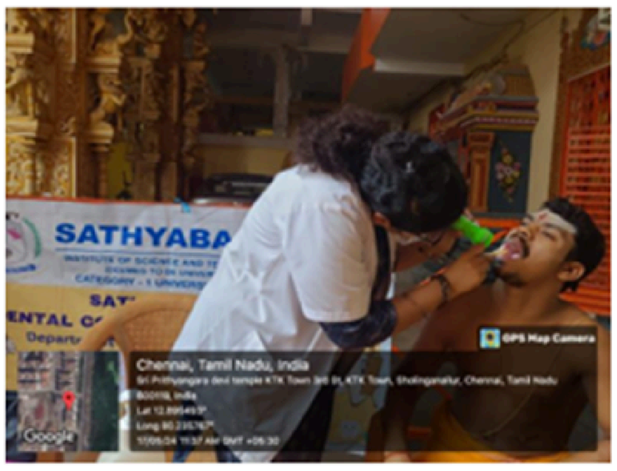


16.A Dental screening camp was organized by The Department of Public Health Dentistry at the Sri Prathyangira Devi Temple, Sholinganallur for promoting oral health among workers and public. A total 35 participants were screened and educated on the significance of maintaining good oral hygiene. They were encouraged to ask their doubts and clarification on same was done. Interns demonstrated on proper brushing techniques using tooth model to the participants.

SDG 3 - GOOD HEALTH AND WELL-BEING

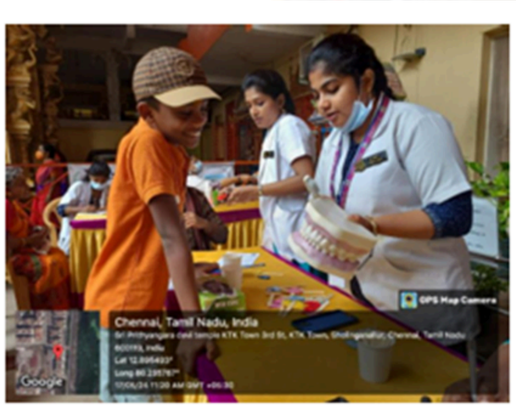




















SDG 3 - GOOD HEALTH AND WELL-BEING

17.The Psychology Department organized an outreach program on April 3, 2024, at the Vishranthi Home for Aged Destitute Women in Chennai, aiming to provide emotional support and companionship to the elderly residents. Activities included one-on-one conversations, a lively dance and music session, and group therapy focusing on coping mechanisms. The event was a testament to the department's commitment to community well-being.



Around 947 people were benefited by theses outreach programmes promoting health and well-being.

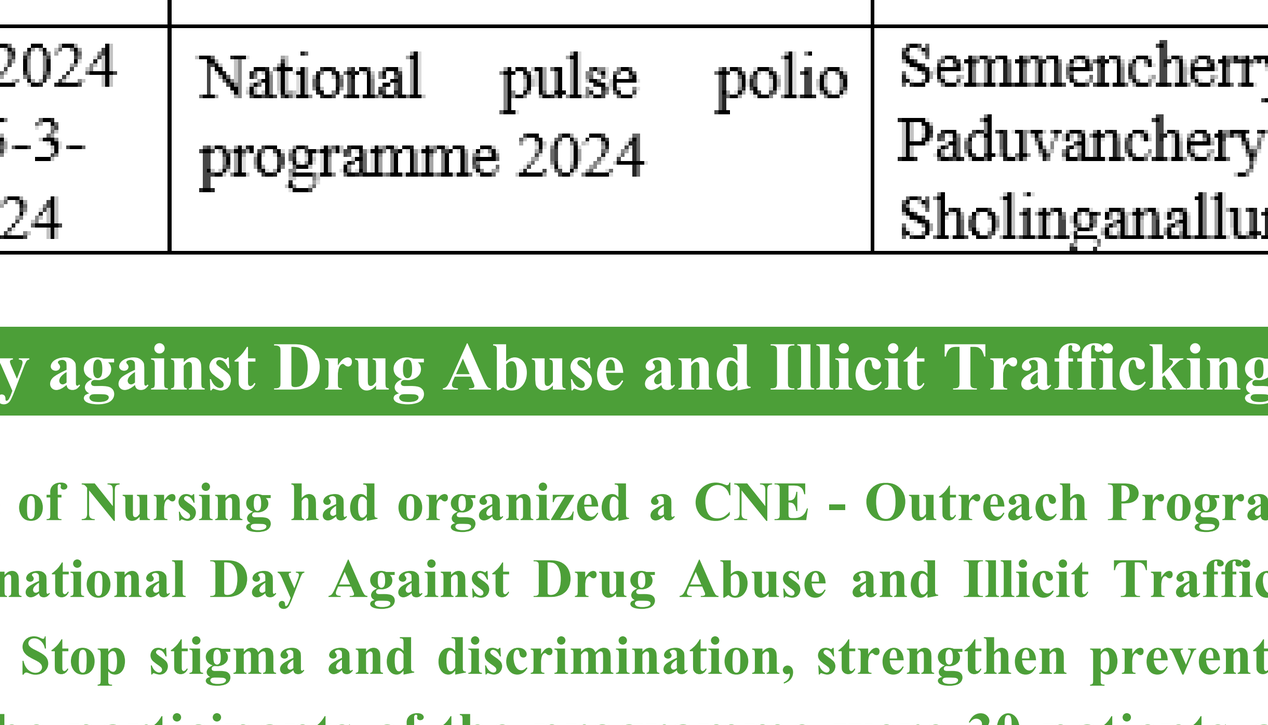
To advance SDG 3 – Good Health and Well-Being, our institution actively commemorates global health observance days by organizing community-focused programmes that promote disease prevention, health awareness, and improved healthcare practices thereby contributing to enhanced well-being at both individual and community levels.

SDG 3 - GOOD HEALTH AND WELL-BEING

Sl.No	Date	Name of the Activities	Venue
1	26-6-2023	International Day Against Drug Abuse and Illicit Trafficking - 2023	Thiruporur, General Hospital
2	10-7-2023	World Suicide Prevention Day 2023	Olcott Memorial School, Besant Nagar,Chennai.
3	11-7-2023	World Population Day 2023	Pallavakkam ,Public Health Center
4	28-7-2023	World Hepatitis Day	Sathyabama Institute of Science and Technology,Chennai
5	7-4-2024	World Health Day 2024	Semmencherry , Public Health Center
6	3-3-2024 to 5-3-2024	National pulse polio programme 2024	Semmencherry PHC, Paduvanchery PHC and Sholinganallur PHC

International Day against Drug Abuse and Illicit Trafficking - 2023

Sathyabama College of Nursing had organized a CNE - Outreach Programme - Role Play to commemorate International Day Against Drug Abuse and Illicit Trafficking - 2023 on the theme "People first: Stop stigma and discrimination, strengthen prevention" at Thiruporur General Hospital. The participants of the programme were 30 patients attending outpatient department at Thiruporur General Hospital. The patients enjoyed the role play and gained knowledge and developed awareness regarding drug abuse and illicit trafficking. Patient's doubts were cleared.



SDG 3 - GOOD HEALTH AND WELL-BEING

World Suicide Prevention Day 2023

Sathyabama College of Nursing participated in the Walkathon organized by Sneha Suicide Prevention Centre to commemorate World Suicide Prevention Day - 2023 on the theme "Creating hope through action" at Olcott Memorial School, Besant Nagar,Chennai. The day is on highlighting the importance of suicide prevention. The students started walking at 6:30 AM from Olcott Memorial School for 3 Km. It ended by 7:15AM. They created awareness about suicide prevention among people. At the end, the chief guest, Dr Radhakrishnan gave a brief talk about suicide prevention. He emphasized on the significance of World Suicide Prevention Day. A total of 600 participants from different colleges participated in the event. The students gained knowledge on stress management to overcome stress. The program was successful. The overall feedback from the participants was excellent and useful.



SDG 3 - GOOD HEALTH AND WELL-BEING









World population day 2023

Sathyabama College of Nursing organized a nutrition demonstration on pregnancy diet and a health talk on antenatal exercise, antenatal care, and anaemia to commemorate World Population Day 2023, based on the theme "Unleashing the Power of Gender Equality." The programme was conducted at the Pallavakkam ,Public Health Center. A total of 45 outpatients participated in the session. The patients gained knowledge and developed awareness regarding anaemia, personal hygiene, and a healthy pregnancy diet.





SDG 3 - GOOD HEALTH AND WELL-BEING





World Hepatitis Day 2023

On account of World Hepatitis Day, a series of events were conducted on 28th July, 2023 by the department of Clinical Nutrition & Dietetics along with department of Biotechnology and department of Medical Laboratory Technology. The program started with an awareness rally on hepatitis and healthy liver, followed by a technical talk and skit, and finally concluded with the plantation of sapling.









SDG 3 - GOOD HEALTH AND WELL-BEING

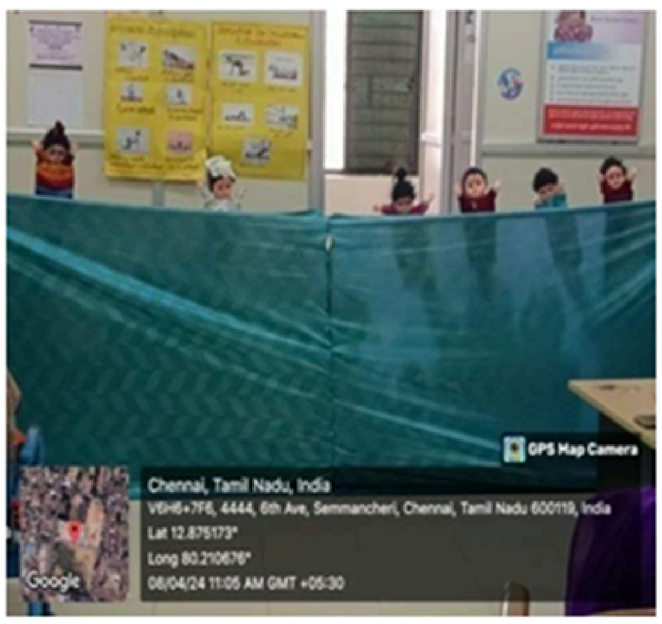
World Health Day 2024

In commemoration of World Health Day, The Department of Community Health Nursing had conducted a Puppet show on the theme "My health my rights" on 7th April 2024 at Semmencherry , Public Health Center. The participants of the programme was 45 patients attending Outpatient department at semmencherry Public Health Center, the patients gained knowledge and developed awareness regarding care of child and hygiene.









National pulse polio programme 2024

In Commemoration of National pulse polio programme, Department of community Health Nursing coordinated and participated in the pulse polio program which was organized by our state government. Our students were actively participated at Semmencherry PHC, Paduvanchery PHC and Sholinganallur PHC from 3rd March 2024 to 5th March 2024. Pulse polio was started by 8am, on 3rd March Students actively participated in Booth activities allotted for them, following on 4th and 5th March 2024, house to house visit was done for drop outs and polio immunization were done. Totally 57 students participated and around 1000 under five children were immunized and benefited.

SDG 3 - GOOD HEALTH AND WELL-BEING









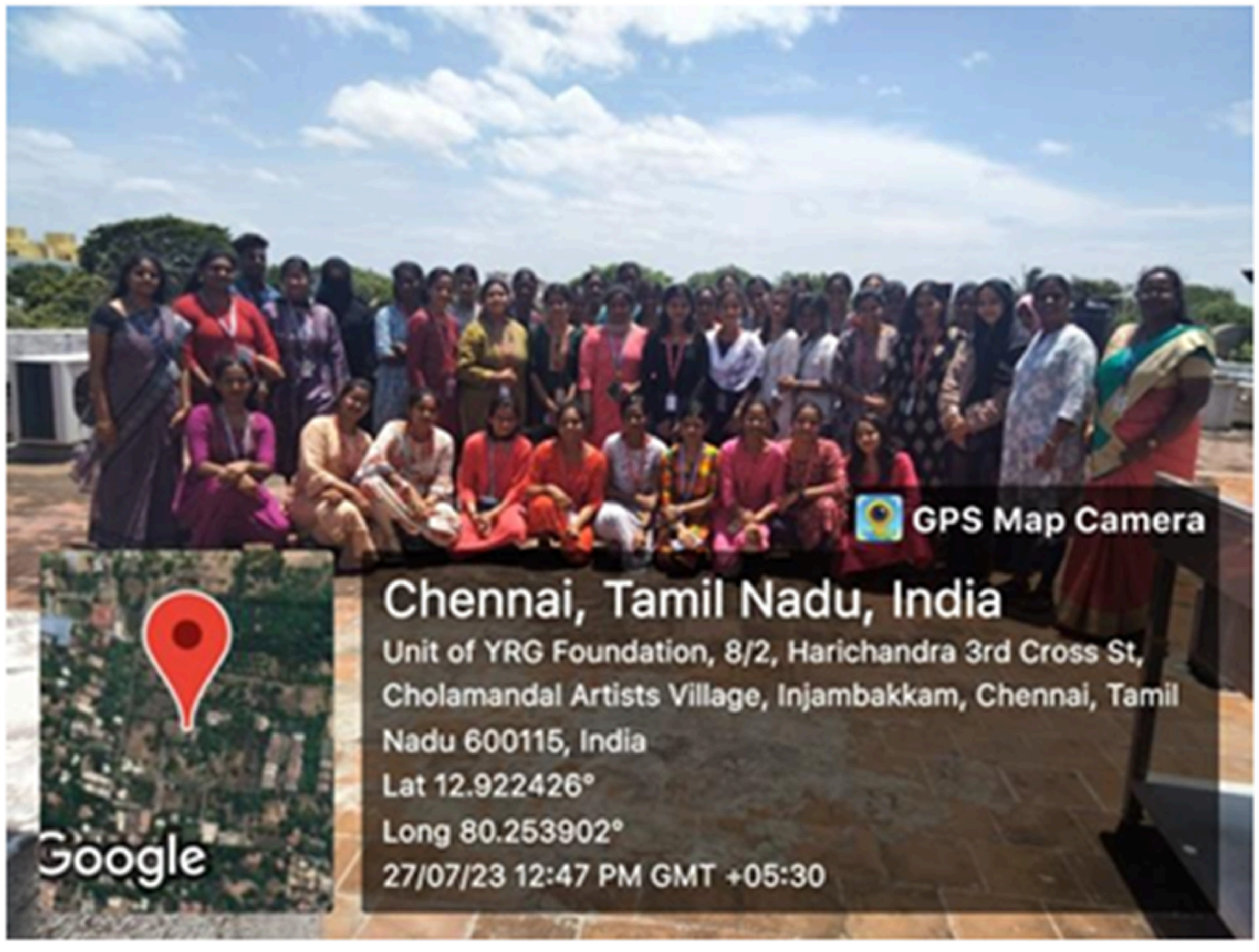
SDG 3 – Good Health and Well-Being: Industrial Visit to Eco-Kitchen

An industrial visit to Eco-Kitchen, Injambakkam, was organized for II & III year CND students on 27.07.2023. A total of 42 students participated in the visit, which provided valuable exposure to large-scale, hygienic, and nutrition-focused food production systems. Guided by Mrs. Kavitha Balaji, students observed scientific cooking processes, including the use of steam-based boilers, energy-efficient stoves, double-jacket kettles, and separate hygienic zones for vegetarian and non-vegetarian food preparation.

The visit highlighted the kitchen's strict food safety protocols such as sample preservation, cold storage, sanitation measures, and personal hygiene practices like the mandatory use of head caps. Students also learned about sustainable fuel practices and clean cooking methods that contribute to healthier environments.

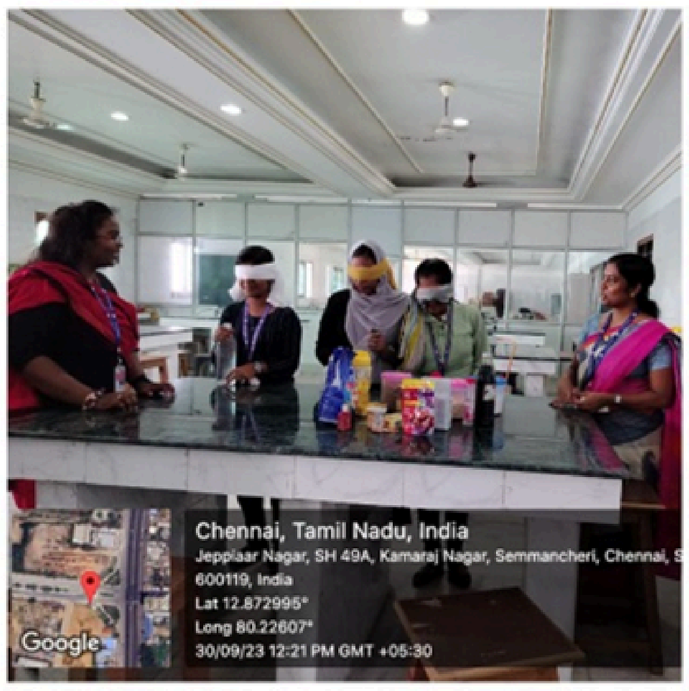
This experience enhanced the students' understanding of safe food handling, nutrition quality, and community health—directly supporting SDG 3 by promoting awareness on hygienic food production and its role in ensuring healthier lives.

SDG 3 - GOOD HEALTH AND WELL-BEING



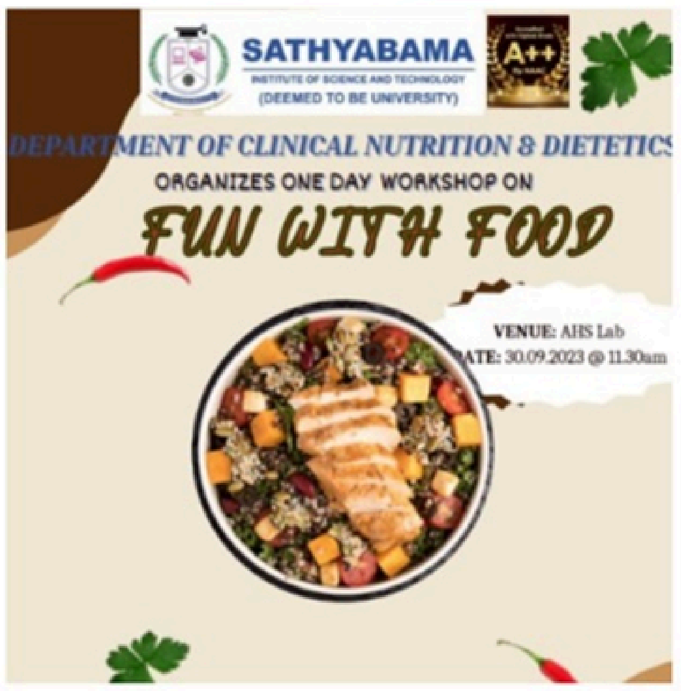
Fun with Food: Promoting Healthy Eating Habits

A one-day ice breaking workshop, "FUN with FOOD" was conducted for the students of I year Clinical Nutrition & Dietetics on 30th September, 2023, to explore variety of food groups and to understand the art of science behind each ingredient used in cooking. Numerous games and quiz were conducted to apply the chemistry of using the foods to formulate healthy meal for an individual.







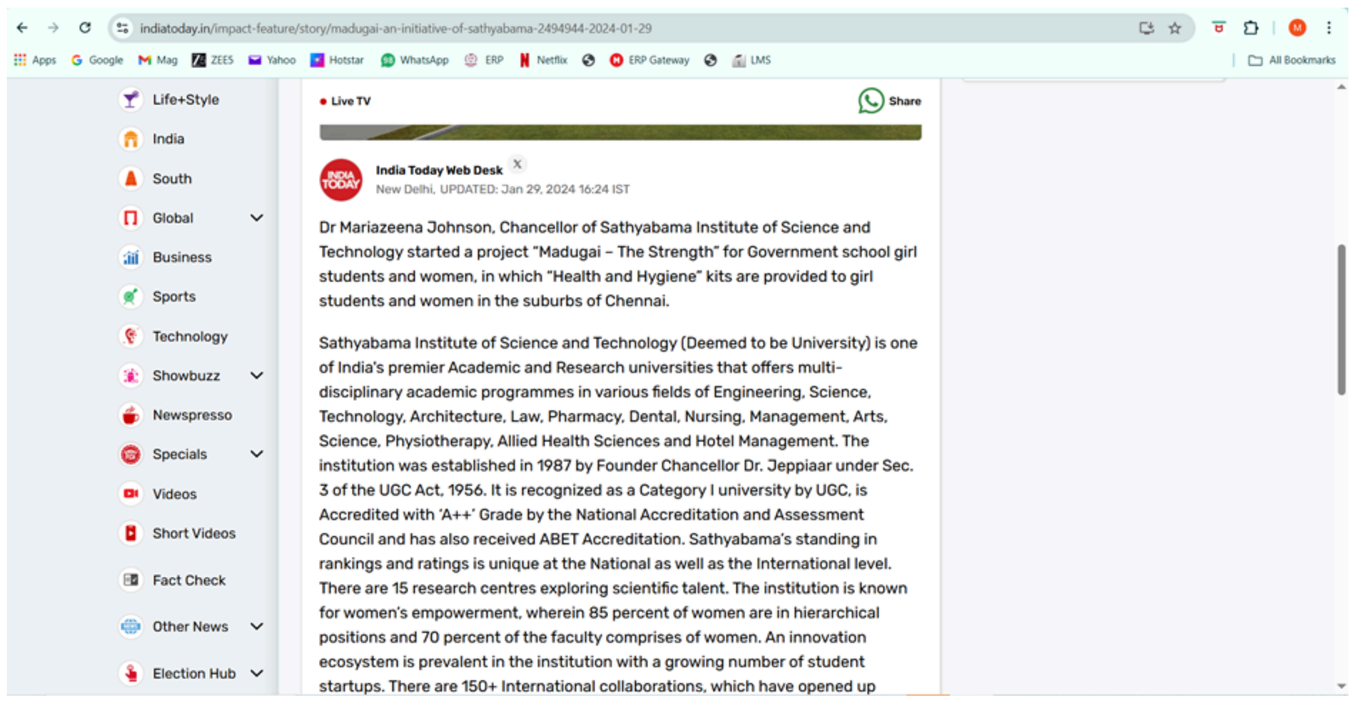


SDG 3 - GOOD HEALTH AND WELL-BEING

Sexual and reproductive health care services for students

Sathyabama Institute of Science and Technology provide students access to sexual and reproductive health care services for students. Sathyabama has a General Hospital on campus with medical staff, paramedical staff who serves our staff, students and general public by providing sexual and reproductive health-care services. There are separate medical rooms for male and female students.

Madugai – an initiative of Sathyabama – aims at nourishing pre-adolescent girls and women while promoting healthy and hygienic practices among high school–going girls. The initiative contributes to improved well-being and is it is mentioned in India Today news on 29th January,2024.



https://www.indiatoday.in/impact-feature/story/madugai-an-initiative-of-sathyabama-2494944-2024-01-29

Sathyabama College of Nursing organised a seminar on "Personality Development & Menstrual Hygiene" to raise awareness about personality development and the consequences of poor menstrual hygiene.



SDG 3 - GOOD HEALTH AND WELL-BEING





The international women's day was commemorated on 4th March, 2024 by the department of Psychology. The event fostered a supportive environment for mentorship and personal development, strengthening the bond between students and faculty.

SDG 3 - GOOD HEALTH AND WELL-BEING



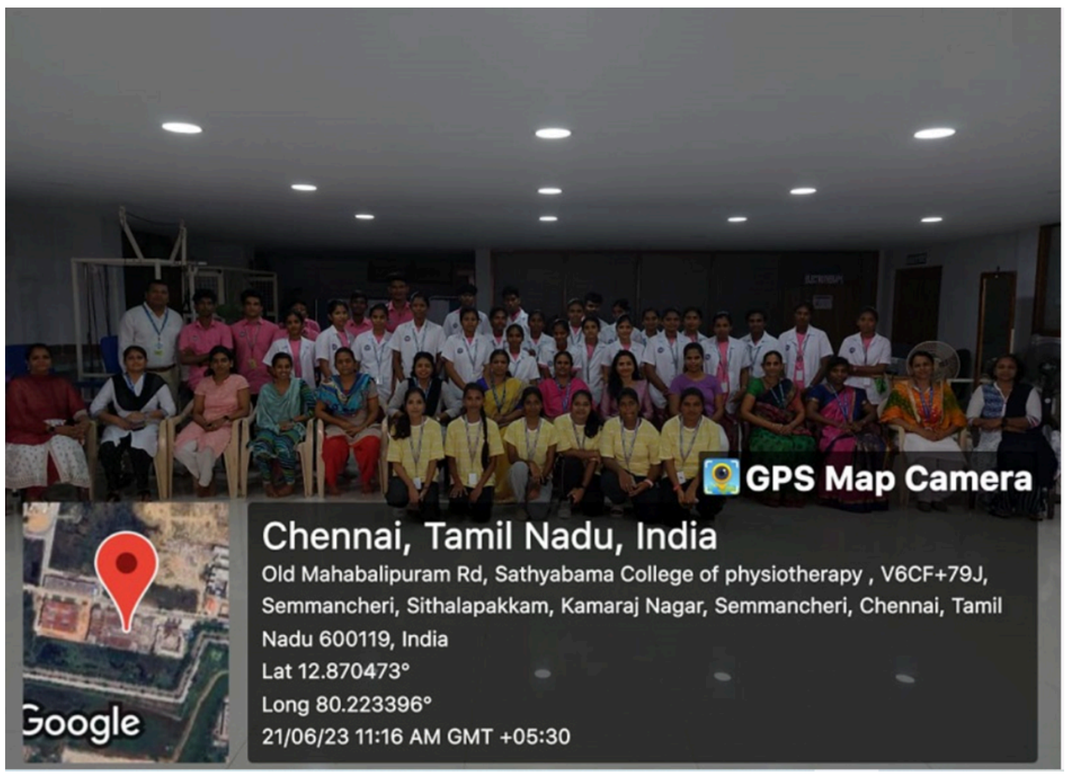
Mental health support for students

Our institute has a student Counselling & Psychological Support Centre comprising both male and female counsellors offering confidential mental health support and organises yoga programs to promote mental well-being. Highly trained therapists are available to provide advice and support to students with learning disabilities and help them to deal with their problems, Students are provided with Directive counselling, Non-Directive counselling and Eclectic Counselling based on their needs. Counsellors are appointed to support and mentor students with learning disabilities. Special care is taken to support students with learning disabilities like dyslexia, dysgraphia and autism.Various initiatives being taken to support student mental health.

World Yoga Day 2023

The World Yoga Day was observed on 21st June 2023, organized by the Faculty of Physiotherapy, Sathyabama College of Physiotherapy. The session was conducted at the Physiotherapy Department OPD, led by the resource person Mrs. Shanmugapriya Madeshwaran, MA Yoga, PGDIP Yoga. Around 50 participants, including students and faculty members, actively took part in the yoga session. The programme emphasized the role of yoga in promoting physical and mental well-being, and the speaker provided demonstrations and insights on adopting a healthy lifestyle.

SDG 3 - GOOD HEALTH AND WELL-BEING



The Department of Psychology organized an interactive seminar titled "Life Unscripted" to raise mental health awareness among students. The session covered crucial topics such as suicide prevention, psychological disorders, and mental well-being. The guest speaker, Ms. Aishwarya Ejoumale, a media psychologist, delivered an insightful talk exploring various psychological disorders, film references related to mental health, and strategies for coping with suicidal thoughts. The seminar fostered active student participation, encouraging discussions that enhanced their understanding of mental health.



On 10.10.2023, the Calm Room—an initiative to provide a safe space for emotional expression and support—was inaugurated by Vice President Ms. Maria Bernedette Tamilarasi. Psychology students conducted an interactive demonstration highlighting the importance of mental health awareness. This initiative reflects the institution's commitment to SDG 3: Good Health and Well-Being, by promoting emotional well-being, reducing stress, and creating a supportive environment for students and staff. The Calm Room serves as a dedicated space that fosters mental wellness within the campus community.

SDG 3 - GOOD HEALTH AND WELL-BEING



Smoke free Policy

As an educational institution, Sathyabama has taken major responsibility towards smoke-free campus and implemented policy such as "Policy on Prevention of Tobacco, Alcohol and Drugs" thereby promoting a healthy, safe, and supportive environment in alignment with SDG 3 and it is documented in the university website.

https://sist.sathyabama.ac.in/download/SmokeFreePolicy.pdf

Mental health support for Staff

Our institute provide staff with access to mental health support. The campus have General Hospital with separate medical room for staff in order to have fairly accessible medical care. The Department of Psychology provides continual health mental support to teaching and non-teaching staff and conducted a faculty development programme addressing the mental health support on 7th May 2024.



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 4 QUALITY EDUCATION



WWW.SATHYABAMA.AC.IN

SDG 4 - QUALITY EDUCATION

The United Nations Sustainable Development Goal 4, “Quality Education,” is at the heart of Sathyabama Institute of Science and Technology’s mission. It calls for ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. Sathyabama has consistently advanced this goal through its academic programs, infrastructure augmentation, faculty development, research excellence, and student support systems.

Sathyabama has earned a reputation for quality education through strong national rankings and prestigious accreditations. It is consistently ranked among the top universities in India under the National Institutional Ranking Framework (NIRF) and has also been recognized in international listings such as Times Higher Education and QS rankings. The institution holds the highest ‘A++’ grade accreditation from NAAC, with several engineering programs accredited by the National Board of Accreditation (NBA) and internationally recognized by ABET (USA).

The institution’s achievements in this domain not only strengthen its reputation as a premier institution but also contribute directly to national and global educational priorities.By increasing underprivileged populations' access to education, fostering academic achievement, and integrating sustainability and equity into its outreach, research, and teaching initiatives, Sathyabama furthered this objective. The organization's programs were intended to improve students' employability and creativity while lowering educational disparities.

Multidisciplinary Approach

The institution offers a wide range of undergraduate and postgraduate programs across disciplines including Engineering, Science, Technology, Law, Dental Science, Pharmacy, Nursing, Physiotherapy Humanities, and Management. It has the approvals from professional councils including UGC, AICTE, the Council of Architecture, Dental Council of India, Pharmacy Council of India, and Indian Nursing Council reflect its multidisciplinary strength. Declared a Category-A University by the Ministry of Human Resource Development, Sathyabama’s accreditations and rankings highlight its commitment to academic excellence, global benchmarking, and student-centered learning, ensuring graduates are well-prepared to meet international standards and societal needs.

SDG 4 - QUALITY EDUCATION

This multidisciplinary approach ensures that students have access to diverse learning opportunities, preparing them to address complex global challenges and emphasizes on inclusive and equitable quality education on promotion of lifelong learning opportunities for all. Their collective contributions ensure that education is not only academically rigorous but also socially impactful, preparing professionals who serve society with competence, compassion, and innovation.

The Health Science Departments

- **Provides hands-on clinical training through dental hospitals, nursing, Physiotherapy and outreach camps on gender equality in education, empowering women to take leadership roles in healthcare**
- **Promotes community-based education and equitable access to education, where students engage in oral health awareness programs for rural and marginalized populations or varied socio-economic backgrounds**
- **The Department of Pharmacy focuses on training nearby rural communities in drug identification, medical coding and the skills required for employment in medical shops for healthcare delivery. These initiatives empower local residents with practical knowledge and improve their opportunities for sustainable livelihoods**
- **Strengthens lifelong learning and societal impact by training professionals who support primary healthcare systems and pharmacovigilance and use of medicine**
- **Conducts awareness programs on rational drug use, bridging classroom knowledge with real-world rehabilitation needs and societal demands**
- **Engages students in community health initiatives, ensuring experiential learning in maternal and child health, geriatric care, and preventive medicine**
- **Offers skill-based education in rehabilitation sciences, sports medicine, and ergonomics**
- **Encourages inclusive education by training students to support differently-abled individuals and enhance their quality of life**
- **Ensures practical exposure through collaborations with hospitals, diagnostic centers, and public health initiatives**

The Institution provides free education to economically backward students, ensuring that financial constraints do not hinder access to quality learning. Deserving students from rural areas, economically weaker sections, and first-generation learners receive a 100% scholarship along with free accommodation and food

SDG 4 - QUALITY EDUCATION

By embedding practical training, community engagement, interdisciplinary research, and equity-driven initiatives into the curriculum, the Health Science Departments of Sathyabama Institute of Science and Technology ensure that students earn credits for their societal contributions as part of their certification. These initiatives not only enrich student learning but also deliver measurable benefits to the community, making education a transformative force for sustainable development.

Commitment to Inclusive and Equitable Education

Sathyabama Institute of Science and Technology (SIST), under the visionary leadership of Chancellor Dr. Mariazeena Johnson, has consistently worked to ensure inclusive and equitable quality education. The university provides scholarships to thousands of students every year through the Anbu Foundation, enabling access to higher education for economically disadvantaged learners. This initiative play's a vital role on removing financial barriers and promoting equal opportunities.

Access and Scholarships

- **Anbu Foundation Scholarships → Thousands of students supported annually with full scholarships**
- **Global Scholarships (MoUs with International Institutions) → 15 international students funded every year**
- **Equity in Higher Education → Increased enrolment of first-generation learners and economically disadvantaged students**

Skill Development and Lifelong Learning

Sathyabama IST emphasizes lifelong learning opportunities through innovative programs such as "My Saturday University", which offers skill development courses for government school children. These sessions are designed to be interactive and engaging, ensuring that young learners acquire practical knowledge beyond textbooks. Additionally, vocational courses are provided free of cost to school dropouts and rural youth, empowering them with employable skills and focus on lifelong learning.

SDG 4 - QUALITY EDUCATION

Lifelong Learning and Skills

Skill Development Programs: Continuous training modules for government school children.
Jeppiaar IAS Academy: Free civil services coaching for 1000 aspiring students annually.

Vocational Courses: Practical training for rural youth in employable skills.

Vocational Training: Free courses for school dropouts and rural youth, improving employability and reducing education discontinuity.

Initiative	Indicator	Annual Impact
Jeppiaar IAS Academy	Students coached for Civil services and other Competitive Exams	1,000.00
Skill Development	Student and Faculty engaged in training	500+
Vocational Courses	Dropouts trained	200+

Public Events

The Departments of Medical Laboratory Technology and Clinical Nutrition & Dietetics jointly organized a "Nutrition Education" outreach program on 6th March 2023 at the Primary Health Centre, Semmancheri. Students highlighted the importance of nutrition, anemia, diabetes, and obesity. Health workers counseled families on balanced diets, breastfeeding, vitamins, growth monitoring, and safe food practices. Through awareness sessions and practical diet tips using local foods, the program empowered the community to make healthier choices and prevent lifestyle diseases.

SDG 4 - QUALITY EDUCATION



Outreach activities

Sathyabama NCC, organized a Blood Donation Awareness Rally on 22nd February 2023 and flagged off by the President and inaugurated by the Chancellor. The rally encouraged students across departments to donate blood, dispel myths, and embrace social responsibility. Experts guided students through safe donation practices, while posters and campaigns boosted participation. Certificates and refreshments marked a successful event that inspired many first-time donors to contribute to saving lives.

SDG 4 - QUALITY EDUCATION





SDG 4 - QUALITY EDUCATION

The outreach program "Feeding the Future – Empowering Youth through Nutrition" was successfully conducted for middle school children. Through mime, dance, quizzes, and exhibitions, students learned the importance of hygiene, hydration, and healthy snacking. Nutrition students prepared and distributed Ragi Ladoo as a healthy gesture. The program promoted good WASH practices, balanced diets, and practical tips to build healthier habits, boost immunity, and support overall well-being.

Community Outreach and School Development

Through partnerships such as the "Support My School" project with World Vision, SIST has adopted 21 Panchayat schools and 7 villages, providing infrastructure, basic amenities, and holistic development. These efforts strengthen the quality of primary and secondary education in underserved communities, ensuring that children have access to safe, inclusive and effective learning environments.

School Development and Outreach

- **Support My School Project (World Vision Partnership)**
- **21 Panchayat schools adopted**
- **7 villages supported with infrastructure and basic needs**
- **Government School Engagement**
- **Skill development courses for hundreds of children under "My Saturday University**

Initiative	Indicator	Annual Impact
Support My School Project	Schools adopted	21
	Villages supported	7
My Saturday University	Children trained	500+
Vocational Training	Rural youth trained	200+

SDG 4 - QUALITY EDUCATION

Global Educational Support

Sathyabama IST extends its commitment to education beyond national boundaries. By signing an MoU with Nobel Laureate Tawakkol Karman, the institute provides full scholarships to 15 Yemeni students every year, supporting education in conflict-affected regions. This initiative reflects the global dimension of quality education, ensuring inclusive education even in challenging contexts.

Initiative	Indicator	Annual Impact
Anbu Foundation Scholarships	Number of students receiving full aid	1000+
Yemen Scholarship MoU	International students funded	15
Other MoUs	National and International	35
First-generation learner enrolment	% increase in disadvantaged student intake	Rising trend

Research, Innovation, and Higher Education Excellence

The university fosters research-driven education, encouraging students to engage in cutting-edge projects such as the successful launch of SATHYABAMASAT, India's first student satellite developed by SIST staff and students. Such initiatives enhance the quality of higher education, promote innovation and prepare students for global competitiveness.

Higher Education Excellence and Research

SATHYABAMASAT Satellite Project → India's first student satellite launched by involving staff and students.
Research and Innovation → Integration of cutting-edge projects into curriculum, enhancing quality of higher education.

SDG 4 - QUALITY EDUCATION

Initiative	Indicator	Annual Impact
SATHYABAMASAT Project	Student participation	100+
Research Projects	Interdisciplinary student projects	500+ annually

Empowerment Through Education

Sathyabama IST integrates gender equality and empowerment into its educational framework. The establishment of the Women Empowerment Bureauensures that women students and faculty are actively involved in academic, research and leadership roles. By promoting women's participation in education, SIST strengthens inclusivity and equity, core principles of quality education by maintain 75% of the women faculty are in leadership position.

Gender Equality in Education

Women Empowerment Bureau → Programs for economic and social upliftment of underprivileged women.

Inclusive Environment → Active involvement of women in leadership, research, and academic development.

Initiative	Indicator	Annual Impact
Women Empowerment Bureau	Programs conducted	20+ annually
Women in Leadership	75 % women in academic leadership	Increasing

Education for Sustainable Development

Beyond academics, SIST incorporates environmental and social responsibility into its educational mission. Initiatives like tree plantation drives, health awareness campaigns, and mental health programs such as "My Happiness" ensure that students receive holistic education that prepares them to be socially conscious citizens.

SDG 4 - QUALITY EDUCATION

Holistic and Sustainable Education

Mental Health Initiative – "My Happiness" → Identification and support for children with depression and mental health challenges.
Health and Hygiene Campaign – "Blessed to Bleed" → Affordable and free sanitary napkins distributed to women.
Environmental Education → Tree plantation drives with thousands of saplings planted; target of 100 saplings per month.

Initiative	Indicator	Annual Impact
My Happiness	Children supported	200+
Blessed to Bleed	Women receiving sanitary products	1000+
Tree Plantation Drive	Saplings planted	1200+ yearly

Sathyabama Institute of Science and Technology exemplifies the spirit of SDG 4: Quality Education by combining academic excellence with inclusivity, innovation, and social responsibility. Its initiatives from scholarships and skill development to global outreach and research and demonstrate how higher education institutions can transform lives and contribute meaningfully to sustainable development.

Ø Scholarships and financial aid(Equal Access to Affordable Higher Education): Scholarships through Anbu Foundation and global MoUs on expanding inclusive education and access to higher education beyond boundaries.
Ø Skill development and vocational training (Skills for Work): Vocational training, IAS Academy coaching, skill development programsfor Promoting lifelong learning and employability.
Ø School adoption and infrastructure support (Universal Primary & Secondary Education): Adoption of schools and villages, infrastructure support for Strengthening primary and secondary education.
Ø Global scholarships → Extending.
Ø Research and innovation projects(Education for Sustainable Development): Environmental drives, health campaigns, mental health initiatives for enhancing higher education quality.
Ø Women empowerment initiatives(Eliminate Disparities in Education): Women Empowerment Bureau, inclusive scholarships to ensure equity in education.

SDG 4 - QUALITY EDUCATION

Program Alignment

NEP-aligned curriculum and SDG integration,
Access & support for diverse learners, and
School & community outreach to extend quality education beyond campus.

2023–24 Initiatives

1. NEP & SDG-Aligned Curriculum Reform

Ø The curriculum under Regulation 2023 was comprehensively revised to align with National Education Policy (NEP) and Sustainable Development Goals, introducing skill-development and employment-oriented credit courses across programmes.

2. Value-Added Courses & Skill Development

Ø 76 value-added courses were offered in 2023–24, with 12,235 students enrolling, enhancing technical, professional and soft skills linked to employability and innovation.

Ø Around 85% of courses emphasize employability and entrepreneurship; Sathyabama also operates a Centre for Skill Development with national partners, offering courses in AI/ML, Cybersecurity, IoT, Embedded Systems, Robotics, PCB design, etc.

3. Experiential Learning: Projects & Internships

Ø 3,105 students undertook field projects or internships, embedding hands-on learning and real-world exposure into academic programmes.

4. Academic & Career Guidance at Scale

Ø 31,939 students benefitted from guidance and counselling (career, academic and personal), indicating systematic support for student progression and success.

5. Outreach – "Science on Wheels" & "My Saturday University"

Ø Sathyabama organizes school outreach programmes such as "Science on Wheels" and "My Saturday University", where faculty and students conduct sessions, demonstrations and mentoring for government school students, improving quality of school-level STEM learning. (Sathyabama University)

6. Inclusive & Student-Centric Teaching Practices

Ø Teaching is explicitly described as student-centric, with structured support for slow learners and bridge courses to address diverse learning needs.

Outcomes & Evidence

Ø Large numbers enrolled in value-added courses (12,235) and internships/projects (3,105) demonstrate strong integration of quality & practical education.

Ø School outreach programmes extend quality education to local communities in line with SDG 4.

SDG 4 - QUALITY EDUCATION

Adoption of Schools

An educated society will always be a developed society. Schooling at primary and secondary level is very important and through good education poverty can be eradicated from the community. The Institution besides taking care of the tertiary or University level higher education of the needy and the downtrodden also takes care of primary and secondary level school 62 education. It has adopted 21 Schools in the nearby community and provide all financial and infrastructure support to develop these Schools. Sathyabama also takes care of the salary of the Teachers of these adopted Schools

Programmes for the Adopted Schools

a. My Saturday University Sathyabama has introduced Skill Development Courses at the University for the Government School Children under "My Saturday University" Programme The students of these schools use the Laboratories of the Institution on Saturdays so that they can learn new technologies and get equipped.

b. Science on Wheels-a mobile science laboratory This is an initiative wherein basic physics and chemistry laboratory is set up in a bus which reaches out the school children, particularly the rural students 63

c. Educational and Awareness Programmes Our students visit these schools regularly and conduct various educational and awareness programmes. The students of Sathyabama also visit the schools, teach the students there, give them motivation and inspire them. When the school students visit the university they are given hands on training in computers and are really made to understand the importance of good education. Other than school and college students, Sathyabama aims at educating the adults in the rural areas and in the areas below poverty line with vocational courses to help them have a regular income.



SDG 4 - QUALITY EDUCATION

Outcomes

•21 schools were adopted and receive support from the institution. computers, Laptops, Speakers, Projectors, CCTV, Television sets, printers worth more than 2 crore rupees were provided to these schools so far.

•The Institution has spent more than 3 crore rupees towards facilities like class rooms, toilets and laboratories

•As a result of visiting the university on Saturdays students are inspired to study well and get opportunity to study free of cost in the university. Around 100 students from the adopted schools are given 100% scholarship to do higher studies at Sathyabama.



Training students and Adults from Adopted schools & villages

Skill Development Centre

Sathyabama Institute of Science and Technology has a dedicated Skill development Centre that conducts various value added skill development courses in association with National Skill Training Institute (NSTI), Ministry of Skill Development & Entrepreneurship (MSDE) with the objective of promoting entrepreneurship and improving the employability of the students.

The UGC has approved 10 courses/programmes under UGC NSQF (National Skills Qualifications Framework), at different levels for the students, with the aim of enhancing various skill components.

SDG 4 - QUALITY EDUCATION

The Institution offers Certificate, Diploma, PG Diploma, Advanced Diploma and Degree programmes in varied areas. These courses are offered with the objective of strengthening the students' competency level in the relevant areas. Students from other institutions and organizations also enrol in these skill development courses. Every initiative towards the re-skilling and up-skilling of students and faculty is carried out in order to meet the requirements of the industry and work in cutting edge technologies. The Institution offers certificate courses on Banking and Financial Services, Tally ACE Accounting Software, a course on Virtual reality and Augmented Reality, Instrumentation, Quality Control and Non- Destructive Testing technologies, a course on Media and Entertainment, Digital Film Making Techniques for Beginners, Construction Management, Diploma courses in "Hands on Experience in Remote Sensing and GIS" and "MEP Technology," a PG Diploma course in Computational Biology, an Advanced Diploma course in Robotics & Autonomous Machines, and a degree course in Translational Physiology and Public Health Nutrition.

Skill Development Programmes for the general public

The Skill development Centre organises and conducts various skill development and vocational education programmes to youths, who are school drop outs and rural women. These training programmes are conducted with the aim of teaching a vocation or skill to the under privileged people, so that they earn their livelihood. Women are trained in vocations like tailoring, baking, beauty and wellness, incense stick making, candle making, mushroom cultivation, sea weed cultivation and solar lamp making. Men are trained in electrical work, repairs and maintenance of home appliances, laptop servicing and plumbing. These people are also given technical and financial support to start their own business and earn as independent entrepreneurs.

Centre for Professional and Career Advancement

Sathyabama Institute of Science and Technology has established a Centre for Professional and Career Advancement through which Online Certificate and Post Graduate Diploma courses are conducted. This centre works with the objective of providing a life-long learning platform for all aspiring learners in order to reskill or up skill their knowledge and become an industry-ready workforce through a systematic approach. This is an initiative to utilize the faculty expertise and the IT infrastructure available in the Institution to provide benefit to the learners across the globe by providing quality online education. This Centre is highly beneficial to students who are not able to continue with the formal college/university education as it provides Skill Based Vocational Courses and Technology Related Courses that expands the opportunities for employment.

SDG 4 - QUALITY EDUCATION

Guidance for Higher Studies

Sathyabama provides guidance to students for higher studies at top-notch academically and culturally affluent Universities.

To prepare the students for higher studies, GRE, GMAT, TOEFL, IELTS, GATE, CAT training is offered by renowned Training Institutions. A separate and well equipped library is set up to provide study material for the students who are preparing for 66 competitive examinations. Sathyabama's Centre for higher studies counsels and supports its students for their enrollment at Universities across the world.

Jeppiaar IAS Academy

Jeppiaar IAS Academy is one of the initiatives taken by the Institution with the objective to offer free coaching to students who aspire to become civil servants.

EVENTS

An Expert talk on Nothing and Everything is a Myth!

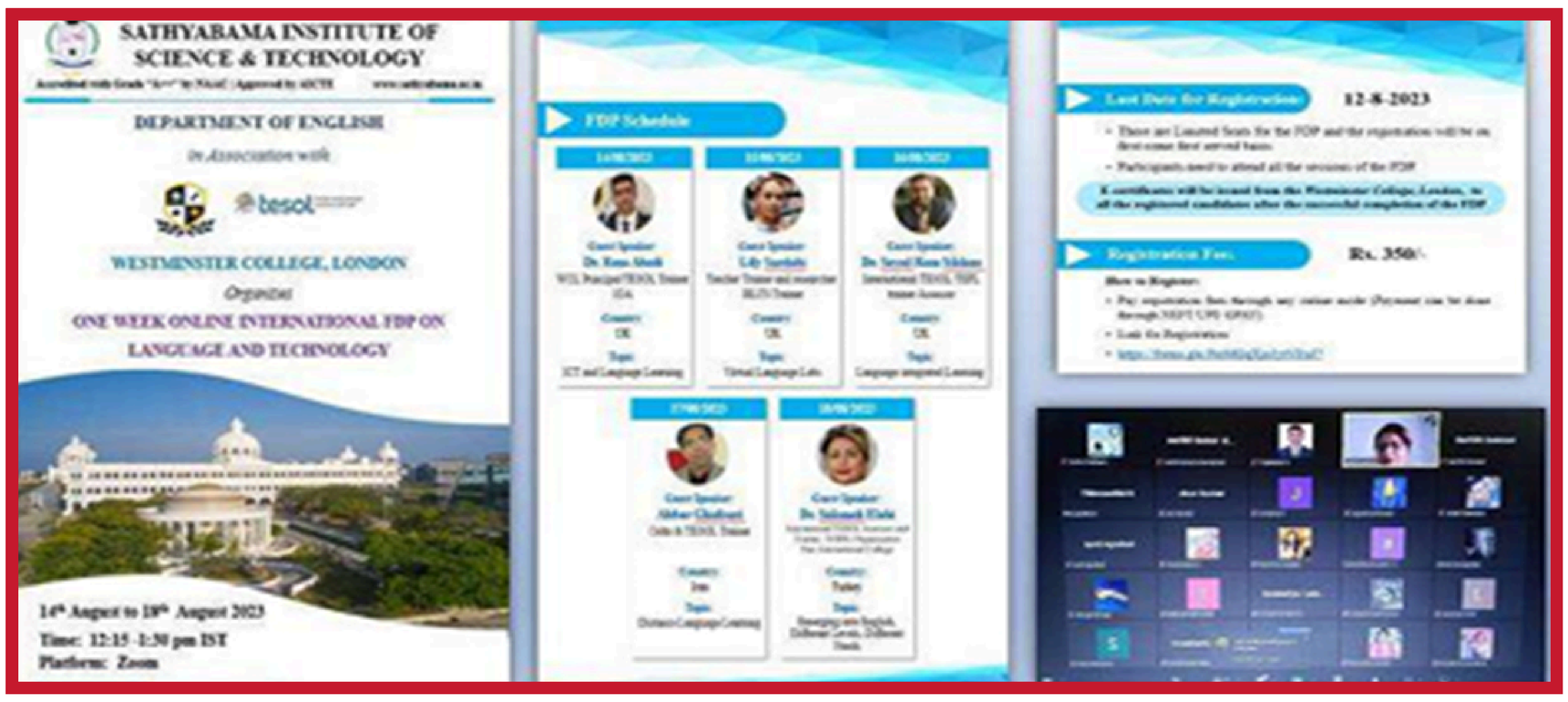
Date: 21st July, 2023



SDG 4 - QUALITY EDUCATION

The Department of English organized an Expert Talk titled "Nothing and Everything is a Myth," featuring Ms. Subhasree, an Assistant Professor at Stella Maris College, known for her expertise in both poetry and subtitle writing for cartoons. Her lecture delved into the concept of myth, its various types, historical significance, and its presence in literature. The talk centered on the profound philosophical exploration of nothingness and totality, suggesting that these concepts are products of human perception rather than objective truths. The audience, primarily comprising students from Sathyabama, greatly benefited from the insightful discussion.

One Week Online International FDP on Language and Technology
Date: 14th to 18th August 2023



The Department of English, in collaboration with Westminster College, London, coordinated a One-Week Online International Faculty Development Program (FDP) on Language and Technology, running from August 14th to 18th, 2023. Upon the successful completion of the one-week FDP, e-certificates were issued by Westminster College, London. The speakers for the FDP included Dr. Reza Abedi, Principal of WCL and TESOL Trainer at IOA, UK; Lily Sardabi, Teacher Trainer and Researcher, also an IELTS Trainer in the UK; Dr. SeyedReza Molaee, an International TESOL/TEFL Trainer Assessor from the UK; Akbar Ghafouri, a Celta & TESOL Trainer from Iran; and Dr. Salomeh Elahi, an International TESOL Assessor and Trainer associated with TESOL Organization at Parc International College, Turkey. Over 400 participants from various regions across India participated in the program.

Music Fest'23 Vibes!
Date: 13th -15th September, 2023

SDG 4 - QUALITY EDUCATION



The Department of English in association with Trinity College, London hosted a remarkable 3-Day Music Fest '23 Vibes! from September 13th to 15th, 2023 at Sathyabama Institute of Science & Technology. This event was elevated by the presence of three eminent figures from the music industry: Samrutha S.B from Leap World Choir, Jude Niranjan, a renowned Music Composer, and Sri Vishnu Bharadwaj, esteemed Film Maker and Musician. Their participation added an indelible charm to the occasion, leaving a profound impact on both students and faculty members with their profound insights. Moreover, the festival provided an exceptional platform for our esteemed faculty to unveil their musical talents. The audience was pleasantly surprised by the hidden musical abilities of the professors, leaving them in utter admiration. As a special highlight, five brand-new guitars were awarded to the most promising talents across five distinct categories. This prestigious award not only served as a token of encouragement but also as a symbol of recognition for budding musicians, inspiring them to persist on their musical journey. The honor of receiving the award from our Vice-Chancellor, Dr. Sasipraba, added an extra layer of significance to the moment. This festival was hailed as a significant milestone in the history of Sathyabama, marking a memorable chapter in its legacy.

SDG 4 - QUALITY EDUCATION

Research Avenues of IoT and Cloud for Intelligent Applications

IE(I) sponsored All India seminar on “Research Avenues of IoT and Cloud for Intelligent Applications” has been organized by the The Institution of Engineers (India)”, Kanchepuram local centre under the aegis of Electronics & Telecommunication Engineering Division in association with Sathyabama IE(I) ECE Student Chapter and the Department of Electronics and Communication Engineering, Sathyabama Institute of Science and Technology, Chennai, India from 14th to 15th June, 2023 for third and fourth year ECE students. It has provided a platform of interaction and exchange of ideas on Internet of Things and Cloud computing. It has also motivated the research scholars, academicians and students to equip themselves with strong knowledge about the various algorithms and tuning methodologies related to it.



ELECTRONIC FUN

The Department of Electronics and Communication Engineering, School of Electrical and Electronics, Sathyabama Institute of Science and Technology , Chennai has conducted an event “ELECTRONIC FUN “ on 1st septemeber 2023. This event is to bring out the technical knowledge of students with fun activities. In this event, 70 ECE 3rd year students were registered. It is a team event contains 3 members in each team. The event contains 3 rounds, 1st round is "QUIZ" it contains 20 mcq's based on basics of electronics. Top 10 teams were qualified for the next round, the 2nd round is "GUESS THE CONNECTIONS" , in this teams have to guess the electronic appliances based on displayed images. Top 5 teams were qualified for the next round “circuit debugging and dumb-charades on electronics“ . At the end of third round, two teams were awarded as winners and runners, and were rewarded with cash prize and certificates. Both participants and the audience enjoyed the event. It was a brainstorming event through the fun activities.

SDG 4 - QUALITY EDUCATION



FULLSTACK WORKSHOP

Fullstack Workshop on 02/09/2023 and 05/09/2023.

SDG 4 - QUALITY EDUCATION



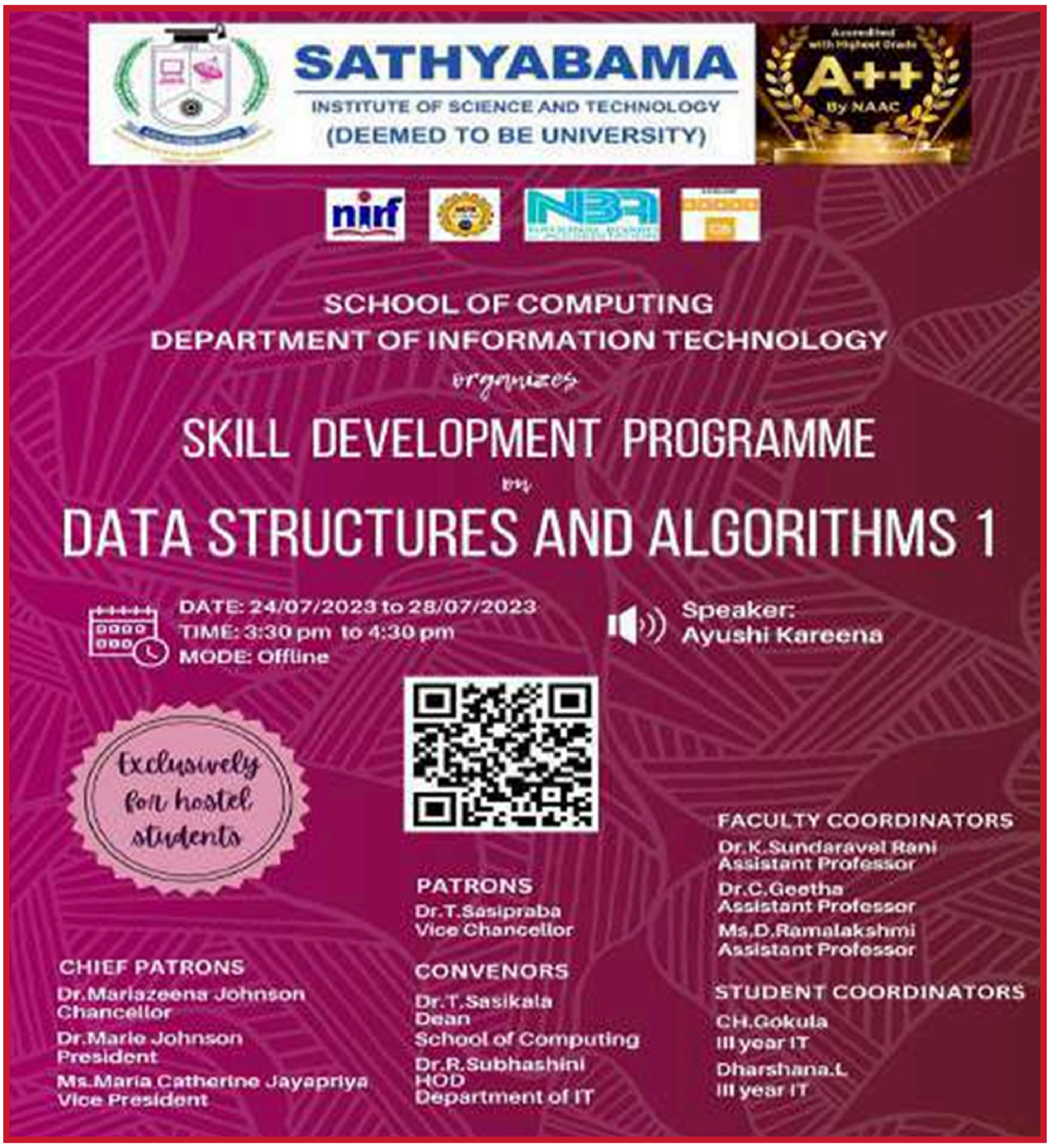


SDG 4 - QUALITY EDUCATION





Department of Information Technology, School of Computing organized "Skill Development Programme on Data Structures “for 2nd years from 24.07.2023-28.07.2023



Department of Information Technology, School of Computing organized 1 week workshop on "Augmented Reality and Virtual Reality" for 3rd years & 2nd years from 24.07.2023 to 27.07.2023

SDG 4 - QUALITY EDUCATION





SDG 4 - QUALITY EDUCATION

Department of Information Technology in association with HACKWIT Technologies Pvt Ltd conducted a skill development program on Augmented Reality & Virtual Reality dated on 15.06.2023 to 27.06.2023



SDG 4 - QUALITY EDUCATION



Contents of the Technical Symposium CIVITAZ The Department of Civil Engineering organized an Inter-Department Technical Symposium CIVITAZ '24' on April 3 and 4, 2024. Technical events like Poster Presentation, Technical Quiz, Bridge Construction, Construction Carnival and Non-technical events like Treasure Hunt, Open Quiz, Memory Line, Escape room were conducted and the students from various departments in the Institution participated enthusiastically and won prizes in the events.



SDG 4 - QUALITY EDUCATION

The GIS Technologies and Society Department of Civil Engineering is conducted Workshop on GIS Technologies and Society on 18.11.2023. This workshop explores the intersection of Geographic Information Systems (GIS) technologies and their impact on society. Participants will learn how GIS tools can be utilized to address societal challenges, enhance decision-making, and foster community engagement.



1.1 Number of programs offered during the year

Program Code	Program Name	Year of offering
1	B.A.-English	2023-2024
2	B.Sc.-Physics	2023-2024
3	B.Sc.-Chemistry	2023-2024
5	B.Pharm.-Bachelor of Pharmacy	2023-2024
6	B.Sc.-Mathematics	2023-2024
7	B.Sc.-Biochemistry	2023-2024
8	B.Sc.-Psychology	2023-2024
9	B.E.-Mechatronics	2023-2024
11	B.E.-Computer Science and Engineering	2023-2024
12	B.Tech.-Information Technology	2023-2024
13	B.E.-Electronics and Communication Engineering	2023-2024
14	B.E.-Electrical and Electronics Engineering	2023-2024

SDG 4 - QUALITY EDUCATION

15	B.E.-Mechanical Engineering	2023-2024
19	B.Tech.-Chemical Engineering	2023-2024
20	B.E.-Civil Engineering	2023-2024
21	B.Arch.-Architecture	2023-2024
23	B.Tech.-Biotechnology	2023-2024
24	B.Tech.-Biomedical Engineering	2023-2024
26	B.E.-Aeronautical Engineering	2023-2024
27	B.Sc.-Visual Communication	2023-2024
28	B.B.A.-Bachelor of Business Administration	2023-2024
29	B.Sc.-Computer Science	2023-2024
30	B.Sc.-Microbiology	2023-2024
31	M.E.-Computer Science and Engineering	2023-2024
32	M.E.-Computer Aided Design	2023-2024
34	M.E.-Power Electronics and Industrial Drives	2023-2024
35	M.E.-Applied Electronics	2023-2024
38	M.E.-Structural Engineering	2023-2024
41	M.B.A.-Master of Business Administration	2023-2024

SDG 4 - QUALITY EDUCATION

44	M.Tech.-Medical Instrumentation	2023-2024
58	M.Sc.-Visual Communication	2023-2024
59	M.Sc.-Physics	2023-2024
63	M.Sc.-Mathematics	2023-2024
74	B.Com.-Bachelor of Commerce	2023-2024
77	B.Sc.-Biotechnology	2023-2024
81	M.Tech.-Biotechnology	2023-2024
84	M.Arch.-Building Management	2023-2024
86	B.E.-Automobile Engineering	2023-2024
89	M.Arch.-Sustainable Architecture	2023-2024
91	M.Sc.-Chemistry	2023-2024

SDG 4 - QUALITY EDUCATION

92	B.Com.-Financial Accounting	2023-2024
93	B.A.-.L.L.B (Honors)	2023-2024
94	B.Com.-L.L.B(Honors)	2023-2024
95	B.B.A-L.L.B (Honors)	2023-2024
97	M.A.-English	2023-2024
101	M.Sc.-Medical Biotechnology and Clinical Research	2023-2024
102	B.Des.-Bachelor of Design	2023-2024
103	M.Com.-Master of Commerce	2023-2024
105	B.Sc.-Fashion Design	2023-2024
106	D.Pharm.-Diploma in Pharmacy	2023-2024
107	L.L.B.	2023-2024

SDG 4 - QUALITY EDUCATION

108	M.E.-Embedded Systems and IoT	2023-2024
571	M.A.-English (OL)*	2023-2024
572	M.Sc.-Mathematics (OL)*	2023-2024
573	M.B.A.-Master of Business Administration (OL)*	2023-2024
574	B.Com.-Bachelor of Commerce (OL)*	2023-2024
575	B.B.A.-Bachelor of Business Administration (OL)*	2023-2024
611	B.E.-Computer Science and Engineering with Specialization in Artificial Intelligence and Machine Learning	2023-2024
612	B.E.-Computer Science and Engineering with Specialization in Artificial Intelligence and Robotics	2023-2024
613	B.E.-Computer Science and Engineering with Specialization in Block Chain Technology	2023-2024
614	B.E.-Computer Science and Engineering with Specialization in Cyber Security	2023-2024
734	M.Sc.-Computer Science	2023-2024

SDG 4 - QUALITY EDUCATION

735	B.Sc.-Computer Science with Artificial Intelligence	2023-2024
731	B.E.-Computer Science and Engineering with Specialization in Artificial Intelligence	2023-2024
732	B.E.-Computer Science and Engineering with Specialization in Internet of Things	2023-2024
733	B.E.-Computer Science and Engineering with Specialization in Data Science	2023-2024
736	B.Sc.-Clinical Nutrition and Dietetics	2023-2024
737	B.Sc.-Medical Lab Technology	2023-2024
738	B.Sc.-Bioinformatics and Data Science	2023-2024
739	M.Sc.-Bioinformatics and Data Science	2023-2024
900	B.D.S.-Bachelor of Dental Surgery	2023-2024
901	M.D.S.-Conservative Dentistry and Endodontics	2023-2024

SDG 4 - QUALITY EDUCATION

902	M.D.S.-Orthodontics and Dentofacial Orthopedics	2023-2024
903	M.D.S.-Paedodontics and Preventive Dentistry	2023-2024
904	B.Sc.-Nursing	2023-2024
905	B.P.T.-Bachelor of Physiotherapy	2023-2024
906	Pharm.D.#	2023-2024
616	B.Sc. - Data Science#	2023-2024
615	B.Sc. - Information Technology #	2023-2024
750	B.C.A. - Bachelor of Computer Applications #	2023-2024
907	M.Pharm - Pharmaceutics #	2023-2024
PHD	Ph.D	2023-2024

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 5

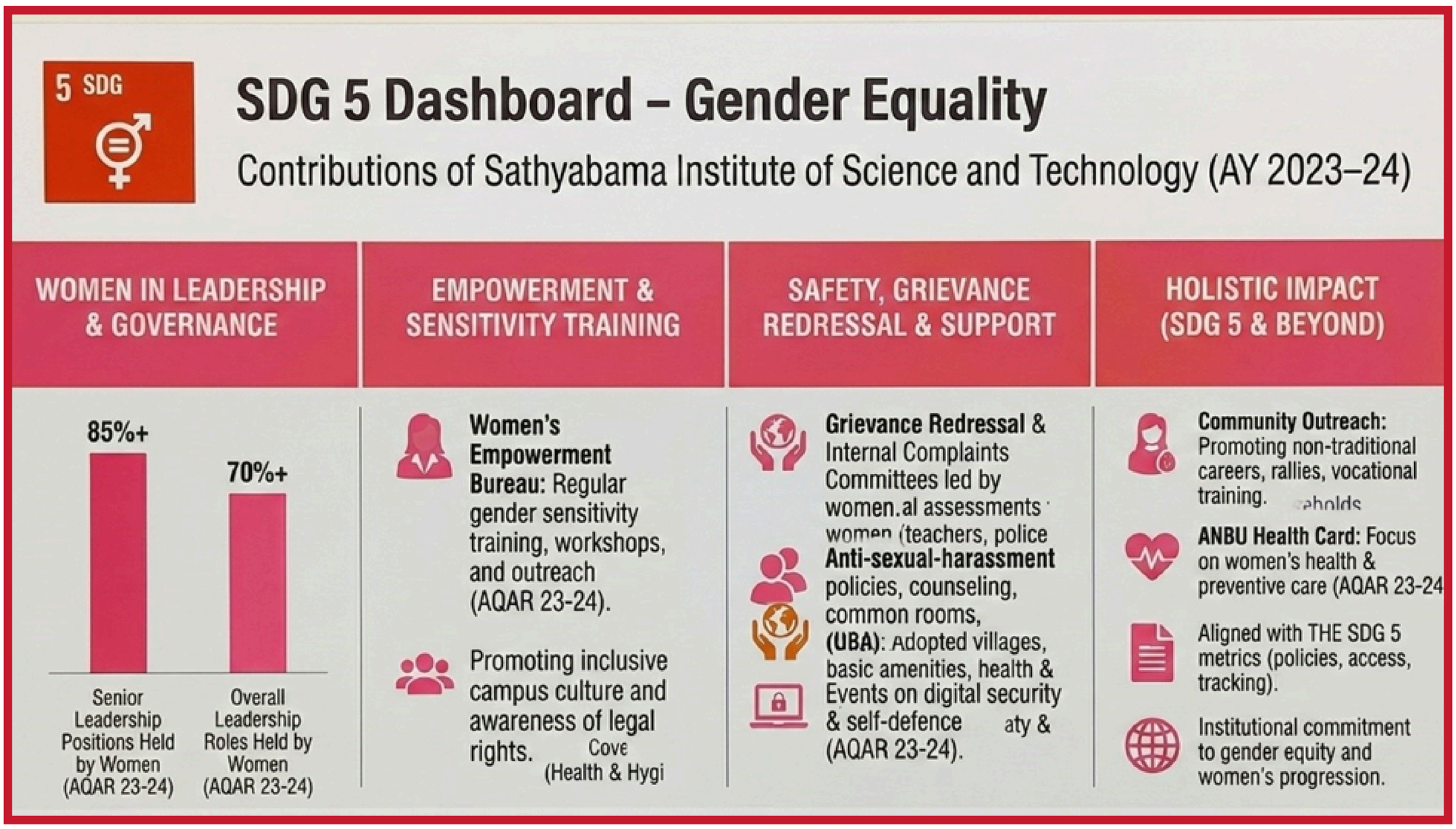
GENDER EQUALITY



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SDG 5 - GENDER EQUALITY

Recognizing gender equality as a fundamental right and a crucial component of sustainable community development, Sathyabama Institute of Science and Technology continuously strives to achieve it. The institution's dedication to guaranteeing females' equitable participation in education is shown in the enrolment statistics across all programs. Sathyabama uses positive discrimination as an employer to encourage women to enter the workforce. Nearly 80% of top leadership positions and over 70% of personnel are held by women, who also hold the majority of important administrative and academic jobs. The institution's inclusive admissions policies, scholarships for women, infrastructure supporting equal participation, and outreach programs that empower girls and women. The university emphasizes equity across education, research, and community engagement, ensuring dignity and opportunity for all students regardless of gender.



Equal representation is strictly upheld in every committee, club, and forum on campus, ensuring that the voices of girls and women are supported and valued at all levels. The principles of gender equality are deeply embedded in the Institution's core values, ensuring that both men and women have equal access to opportunities and participate equally in policy-making and administration.

Sathyabama has always functioned as an unbiased and merit-driven institution, where performance is the only criterion for growth and recognition. With women forming a significant 70% of the workforce, the Institution consciously strives to counteract traditional gender biases prevalent in developing countries like India. The presence of dedicated support structures such as the Women Empowerment Bureau, Anti-Discrimination Cell, Human Rights Cell, and Grievance Cell further affirms the Institution's commitment to maintaining a gender-sensitive and discrimination-free environment.

SDG 5 - GENDER EQUALITY

The Anbu Foundation, the University's CSR arm, strengthens this mission by offering free education to girls from economically weaker families. Over time, it became evident that poverty creates inequality for both boys and girls, leading the Foundation to extend support to boys as well. However, the ratio of girls to boys has been intentionally kept higher to ensure that young women from disadvantaged backgrounds receive the upliftment they often lack.

SDG 5 - GENDER EQUALITY

The Women Empowerment Bureau, along with several other support cells established at Sathyabama, plays a crucial role in ensuring balanced, sensitive, and thoughtful engagement with students, staff, and the communities the Institution serves. The Bureau reflects Sathyabama's strong belief that a society where women are empowered and treated as equals is one where progress becomes inevitable. Its initiatives are designed to promote fairness, enhance participation, and create an environment where both men and women can thrive without bias.

A key focus of the Bureau is strengthening the financial independence of women, particularly those from economically weaker backgrounds. Recognizing that economic empowerment forms the foundation of true equality, the Institution provides training and skill-development programmes to help women acquire employable skills and pursue sustainable livelihoods. Equally important is the emphasis on women's health. In many developing countries, including India, women from low-income families often neglect their own health and hygiene due to financial constraints or social norms. To address this, Sathyabama regularly conducts medical camps not only on campus but also in adopted villages and schools, ensuring that essential health services, awareness, and preventive care reach those who need it most.
Through these combined efforts, the Women Empowerment Bureau contributes significantly to creating an inclusive, equitable, and supportive environment, aligning the Institution's practices with the broader goals of gender justice and sustainable community development.

1. Inclusive Admissions & Equity

- **Sathyabama admits students without discrimination on the basis of gender, caste, creed, or religion**
- **Scholarships and financial aid are provided to support female students from economically weaker sections, ensuring access to higher education**

2. Infrastructure for Equal Participation

- **Facilities such as ramps, tactile pathways, Braille books, and sign-language interpreters ensure inclusivity for differently abled students, including women with disabilities**
- **Safe campus environment with separate hostels, counseling, and mentoring programs supports women's academic and personal growth**

SDG 5 - GENDER EQUALITY

3. Outreach & Empowerment Programs

- **Nutrition and health outreach programs (e.g., "Feeding the Future") empower schoolgirls with knowledge on hygiene, healthy diets, and WASH practices**
- **Blood donation rallies and community health initiatives actively involve female students, promoting leadership and social responsibility**
- **Awareness campaigns on anemia, reproductive health, and lifestyle diseases specifically target women and girls in local communities**

4. Academic & Research Participation

- **Women students and faculty contribute significantly to research publications and innovation projects, aligning with SDG 5 indicators on female participation in knowledge creation**
- **Mentorship and career guidance programs encourage women in STEM fields, addressing gender gaps in science and technology**

https://www.sathyabama.ac.in/ReducedInequalities



Sathyabama is an Inclusive Institute and works with the Motto "Education for all"

SDG 5 - GENDER EQUALITY

5.2 Seminars /Workshops/Sensitization Programmes on Gender Equity and Equality



As a part of the Women's Day festivities, the Department of English organized "Women in Wellington" on March 5, 2024, exclusively for the female students of Sathyabama Institute of Science & Technology. The event served as a dynamic platform that showcased the vibrant talents of the participants. Kicking off with a heartfelt opening address, the event emphasized the significance of gender equality and women's empowerment across all sectors of society. We took a moment to reflect on the progress achieved in advancing gender parity, while also acknowledging the remaining challenges that need to be addressed. Each of the three events was centered around celebrating the essence of womanhood. With over 170 participants joining in, the occasion proved to be a joyous journey of connection and celebration. In essence, the Women's Day event went beyond mere festivities; it stood as a testament to the unwavering spirit of women everywhere—a reminder of the invaluable contributions they make and the boundless potential they possess.

EmpowHER

The student of the Department of Psychology organized seminar on the occasion of Women's Day, where Discussions on various topics concerning women's struggles and awareness took place. This event aimed to recognize the battle women fought and the struggles faced throughout history. The seminar provided a platform to honor these struggles and reflect on their ongoing significance in shaping the landscape of gender relations today. The Women's Day Program Seminar aimed to celebrate the achievements and resilience of women from various backgrounds. It provided a platform for sharing experiences, insights, and knowledge to promote gender equality and empower women. The event took place on March 4th, at

SDG 5 - GENDER EQUALITY

RemibaiJeppiar Auditorium. So, the students of the Department of Psychology put together the seminar to address about the empowerment of women through Unity. The discussion covered topics about famous women in history who helped for empowering women and brought a change to the society, LGBTQ+ Trans femineity, Trans racism, and inclusivity. The seminar also discussed about how emotions play a role in a women's life and how they are provoked.



MANIFEST

The Department of Psychology organized "Manifest," an event tailored exclusively for males, aimed at fostering a supportive environment for emotional expression, personal growth, and the challenging of societal norms surrounding masculinity. The event commenced with venting sessions where participants were encouraged to openly share their feelings and experiences, providing a cathartic outlet for emotional release. This was followed by engaging group art therapy activities designed to promote self-expression and introspection through various artistic mediums. Subsequent discussions delved into male expectations and toxic masculinity, prompting participants to critically examine societal norms and challenge harmful beliefs and behaviors. Emphasis was placed on unlearning toxic masculinity and embracing healthier forms of masculinity through interactive exercises and role-playing scenarios. The event concluded with a music therapy session, where participants bonded over old songs sung together around a clap box, fostering camaraderie and a sense of belonging. Feedback from participants highlighted the positive impact of the event on mental well-being, emphasizing the importance of continued efforts to redefine masculinity in more inclusive and healthy ways.

SDG 5 - GENDER EQUALITY

The event greatly exemplified the Department of Psychology's commitment to promoting gender equality and mental well-being through innovative therapeutic interventions.

World Women's Day



The NSS unit of Sathyabama Institute of Science and Technology commemorated World Women's Day on March 8th, 2024, with the active participation of around 100 volunteers. The event celebrated the achievements and contributions of women while also raising awareness about gender equality and women's rights. Through various activities such as seminars, panel discussions, and cultural performances, volunteers highlighted the importance of empowering women and promoting gender inclusivity. The event served as a platform to inspire positive change and foster solidarity among participants, reflecting the institute's commitment to promoting gender equity and social justice.



SDG 5 - GENDER EQUALITY

Nutrition demonstration on pregnancy diet and health talk on Antenatal Exercise, Antenatal Care and anemia





Sathyabama college of Nursing had organized a nutrition demonstration on pregnancy diet and health talk on Antenatal Exercise, Antenatal Care and anaemia then we conduct skit regarding personal hygiene to commemorate World population day 2023 on the theme "Unleashing the power of gender equality" from 10am to 12.30 pm at pallavakkam PHC. The participants of the programme was 45 patients attending Outpatient department at pallavakkam PHC along with 28 B.Sc (N) IV year students, the patients gained knowledge and developed awareness regarding anemia, personal hygiene and pregnancy diet. The overall feedback from the participants were good and useful.



SDG 5 - GENDER EQUALITY

5.3 Measures for the promotion of Gender Equality

Sathyabama Institute of Science and Technology consistently implements a wide range of measures to promote gender equity and ensure a safe, inclusive, and empowering environment for women. The Institution provides an enabling atmosphere for female students, faculty, and staff through a clearly defined Gender Equity Policy based on respect, equality, and dignity for all. Women are encouraged to participate in all levels of administration and academic governance, including senior leadership and decision-making positions. The Institution upholds equal opportunities for growth, professional development, and recognition irrespective of gender.



Key initiatives promoting gender equality include:

- **Awareness programmes on legal protections available to girls were organised for students**
- **Female employees are provided maternity leave, childcare leave, and special leave benefits in cases of adoption**
- **A significant number of women serve as cadets in the NCC unit, promoting leadership and discipline**
- **Indoor and outdoor sports activities are conducted for men and women students and staff on various occasions**
- **An Internal Complaints Committee (ICC) is constituted to handle issues related to the sexual harassment of women. ICC ensures preventive measures and offers a support mechanism for female students and staff**

SDG 5 - GENDER EQUALITY

- A daycare centre functions on campus to support women with young children, facilitating a healthy work–life balance
- CCTV cameras are installed at strategic points across the campus to ensure round-the-clock safety and surveillance, especially for women
- Committees such as the Anti-Ragging Committee, Students' Grievance Redressal Committee, and Internal Complaints Committee respond promptly to female students' grievances, ensuring a safe and supportive environment
- The Institution has female counsellors who provide psychological counselling and emotional support to students

Additional measures that reinforce gender equity include:

- A strict non-discrimination policy in hiring and promotion processes. The Institution is proud of its large number of women employees serving in senior positions such as Heads of Departments, Deans, Directors, and the Vice Chancellor
- Pay decisions are strictly based on merit, performance, and grade, without any gender-based differences
- Equal access to all institutional facilities is ensured for both male and female students and staff
- Exclusive career counselling and mentorship programmes for female students have significantly increased the number of girl students securing job placements
- Regular workshops on the prevention of sexual harassment are conducted to create awareness and establish a safe campus environment
- Sensitization programmes on gender equity, gender roles, and women's empowerment are conducted for students and staff
- The Women Empowerment Bureau organises training programmes, seminars, and workshops on gender equity for students
- The Women Empowerment Bureau also conducts sessions on cybercrime and crime-defence mechanisms, inviting police officials and legal experts to educate female staff and students

Overall, these sustained efforts create a campus environment where gender equality is actively practiced, encouraged, and safeguarded, ensuring that women at Sathyabama have the support and opportunities needed to excel personally and professionally.

SDG 5 - GENDER EQUALITY



SATHYABAMA INSTITUTE OF
SCIENCE AND TECHNOLOGY

SDG 6

CLEAN WATER AND SANITATION



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SDG 6 - CLEAN WATER AND SANITATION

SDG 6 Clean Water and Sanitation emphasizes the availability and sustainable management of clean water and sanitation for all. According to United Nations statement, due to bad economics or poor infrastructure millions of people including children die every year from diseases associated with inadequate water supply, sanitation and hygiene.

In alignment with this goal, the institution undertakes initiatives that promote safe water practices, efficient water management, hygiene awareness, and sustainable use of water resources. Through community outreach, infrastructure improvements, and awareness programmes, the institution contributes to strengthening water security and fostering responsible water stewardship within the campus and surrounding communities.

Sewage Treatment Plant - Sustainable Wastewater Management

The Sewage Treatment Plant (STP) was established in 2019 through a collaborative effort involving the in-house Department of Civil Engineering, the Department of Chemical Engineering, and the Centre for Waste Management, and Eco Care Engineering Systems Pvt. Ltd with a capacity of 1.5 MLD in the campus to treat waste water and Sequential Batch Reactor technology is adopted for this process. This joint initiative reflects Sathyabama commitment to sustainable wastewater management and environmental responsibility.

The STP treats all campus wastewater through processes such as screening, aeration, sedimentation, and filtration, ensuring that the treated water meets quality standards. The recycled water is reused for gardening, landscaping, and flushing, significantly reducing dependence on freshwater sources. The STP stands as a key component of Sathyabama commitment to water conservation, pollution prevention, and sustainable infrastructure development.

The operational specifications of the Sewage Treatment Plant is given below:

Specifications	Details
Wastewater generated	7.5 lakhs litres
Sources of Water for treatment	Mess Kitchen and hostel toilet water
Capacity of water treatment facility per day	15 lakhs litres
Usage of treated water	Landscaping and gardening
Outcome	Reducing the freshwater consumption for secondary purposes.

6 CLEAN WATER AND SANITATION

SDG 6 - CLEAN WATER AND SANITATION





SDG 6 - CLEAN WATER AND SANITATION



https://www.sathyabama.ac.in/campus-life/stp-plant

Water-Efficient Landscaping

Our institute minimises water usage by using landscape drought-tolerant plants such as Orchid tree, Neem, Indian Almond, Rain tree etc.. and several palms that require less frequent watering are planted in the building entrances, student zones, and open areas across the campus. Lawns and garden areas are designed to minimize water usage and the treated waste water from the STP is used for gardening in order to avoid the use of fresh water.



SDG 6 - CLEAN WATER AND SANITATION





Sathyabama Institute of Science and Technology uses drip irrigation and micro-sprinkler devices to distribute water to plant roots, reducing surface evaporation. The campus gardens with perforated piping systems guarantee soil hydration and responsible water use in align with SDG 6.

SDG 6 - CLEAN WATER AND SANITATION





SDG 6 - CLEAN WATER AND SANITATION



The treated water is used for irrigation and toilet flushing. This approach is in line with the "Water-Conscious Planting" philosophy and reduces the amount of potable water used for non-drinking uses. To ensure balanced irrigation schedules, new green spaces surrounding building entrances, student zone, and around campus are planned with native plants arranged by water-demand zones.

SDG 6 - CLEAN WATER AND SANITATION

Off-Campus Water Conservation Support

An outreach program was organized by the Department of Clinical Nutrition and Dietetics at Government Higher Secondary School, Sholinganallur, on 11th August, 2023, focusing on the theme "Feeding the Future - Empowering Youth through Nutrition". The program covered the importance of drinking water, hand washing, hygiene, and more. Teaching aids, mimes, and interactive games were used to enhance the learning experience. Additionally, nutritious snacks were provided, reinforcing the message of choosing healthier alternatives over unhealthy junk food. The students' active participation made a lasting impact, contributing to a well-informed and conscious future generation.

















SDG 6 - CLEAN WATER AND SANITATION

The NSS unit of Sathyabama Institute of Science and Technology hosted an "Awareness of Health and Hygiene" event on 29.08.2023, involving 200 volunteers at a special camp in Kumizhi. Through interactive sessions, demonstrations, and distribution of hygiene kits, participants educated the community on the importance of personal hygiene, sanitation practices, and preventive healthcare measures. The initiative aimed to foster a healthier environment and promote well-being among residents of Kumizhi and surrounding areas.

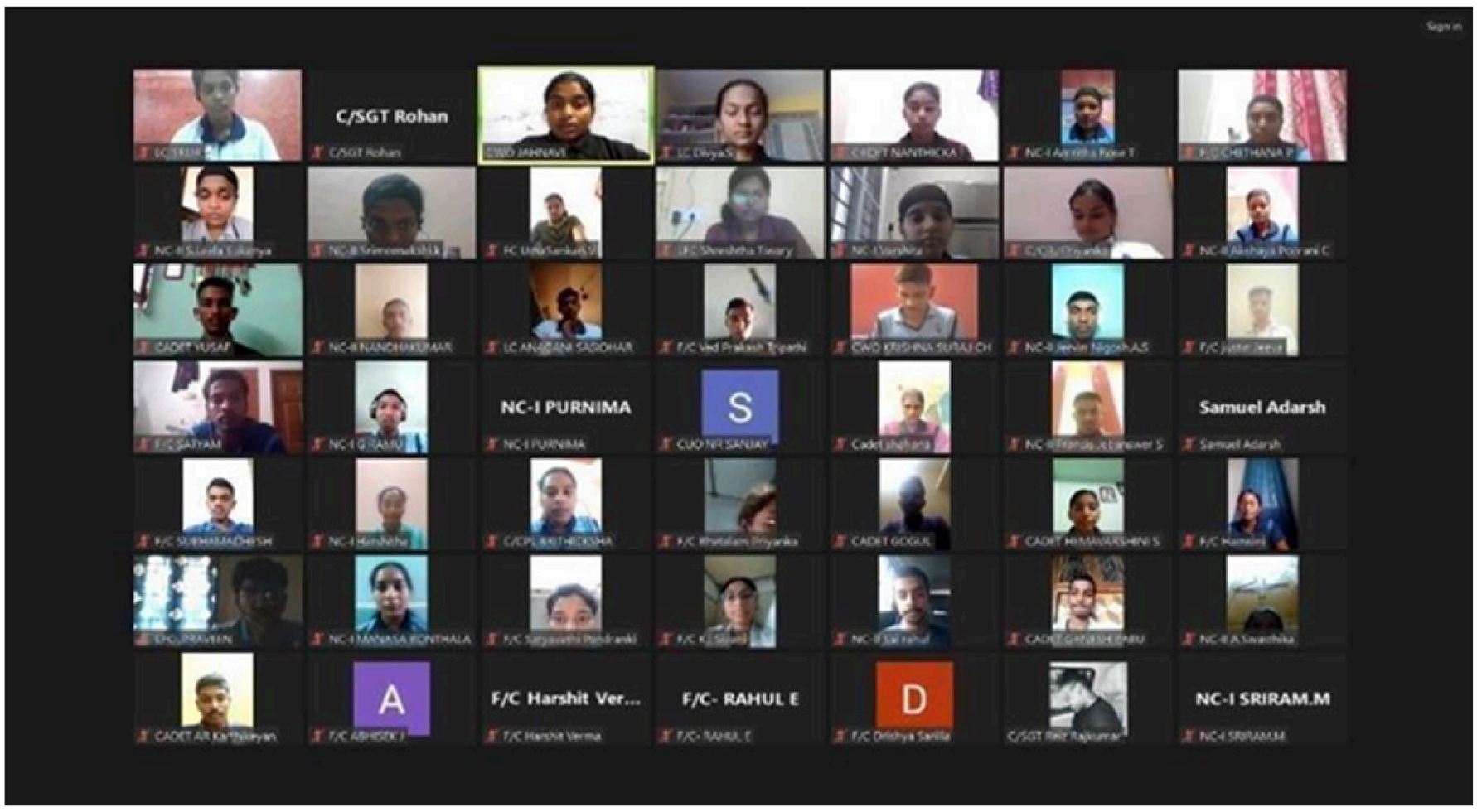




The NSS unit of Sathyabama Institute of Science and Technology orchestrated a Village Rally on promoting a plastic-free environment on 30.08.2023, rallying 200 volunteers at a special camp in Kumizhi. Participants marched through the village, raising awareness about the detrimental effects of plastic pollution and advocating for sustainable alternatives. Through informative banners, speeches, and community engagement, the event aimed to inspire collective action towards preserving the environment for future generations.



SDG 6 - CLEAN WATER AND SANITATION



On the occasion of the Garbage Free India – Swachhata Hi Seva (SHS) Campaign, the NCC Cadets of Sathyabama University actively contributed to SDG 6 by promoting sanitation and hygiene. Cadets were educated about the history and objectives of the Swachh Bharat Abhiyan, followed by a webinar where they took the Swachhata Pledge and discussed challenges in maintaining cleanliness along with simple, practical solutions. Each cadet took initiatives to raise public awareness near their homes and ensured proper disposal of waste, maintaining cleanliness in their surroundings. This collective effort reinforced the importance of sanitation, responsible waste management, and community participation in achieving clean and healthy environments.



SDG 6 - CLEAN WATER AND SANITATION









The observance of World Food Day, World Forest Day, and World Water Day collectively emphasizes the critical interdependence between food systems, forest ecosystems, and sustainable water resources. These global days remind us that clean water is central to healthy forests, responsible agriculture, and resilient communities. By promoting efficient water use, protecting natural ecosystems, and reducing pollution, we advance the objectives of SDG 6—ensuring the availability and sustainable management of clean water and sanitation for all.

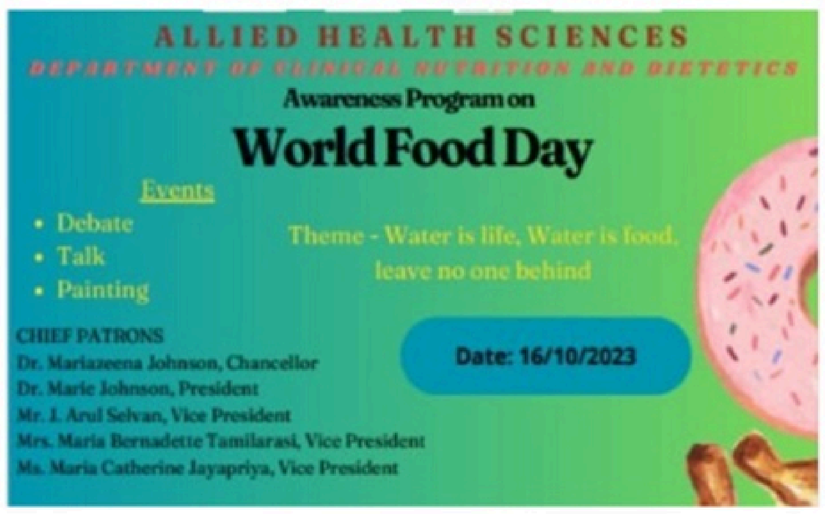
SDG 6 - CLEAN WATER AND SANITATION

World Food Day 2023

On the eve of World Food Day, an awareness program on "Water is Food, Water is Life: Leave no one behind" was conducted on 16th October, 2023. The students participated in numerous competitions conducted and created awareness on the importance of water.







World Forest Day 2023

The NSS unit of Sathyabama Institute of Science and Technology observed World Forest Day on March 22, 2024, through activities that also supported SDG 6 by promoting ecosystem health and sustainable water resources. More than 100 volunteers participated in tree-planting drives, biodiversity awareness sessions, and clean-up activities. The increase in green cover helps enhance groundwater recharge, improve soil moisture retention, and protect watersheds—key components of clean water availability. Through these initiatives, the NSS unit encouraged students and the community to understand the link between forest conservation and sustainable water management, reinforcing the responsibility to safeguard natural resources for future generations.

SDG 6 - CLEAN WATER AND SANITATION



World Water Day 2024

The NSS unit of Sathyabama Institute of Science and Technology commemorated World Water Day on March 22, 2024, with enthusiastic participation from approximately 100 volunteers. The day's activities highlighted the importance of water conservation and sustainable management practices. Volunteers engaged in various initiatives, including awareness campaigns, clean-up drives along water bodies, and distribution of water-saving tips. Through these endeavours, the NSS unit aimed to foster a greater understanding of the vital role water plays in our lives and inspire collective action toward ensuring its availability for future generations.

SDG 6 - CLEAN WATER AND SANITATION



Through the DST supported Science, Technology & Innovation Hub, Sathyabama partners with government officers to implement rooftop rainwater-harvesting systems, recharge pits and pond-revival programs in rural villages. Faculty experts assist government stakeholders by conducting water-quality testing, preparing analytical reports and delivering technical recommendations for safe drinking-water access. The institute also participates in government campaigns on World Water Day, Jal Shakti Abhiyan and Swachh Bharat to raise public awareness on water conservation.

Renew intercollege competition organised by center for waste management to develop scientific solutions to address water and wastewater water problem.

SDG 6 - CLEAN WATER AND SANITATION

Sathyabama Institute of Science and Technology

(Deemed to be University)

Chennai, Tamil Nadu

Centre for Waste Management (CWM)

Organizes

INTER COLLEGE PROJECT COMPETITION

RESEARCH EXPLORATION FOR NOVEL & ENERGY-EFFICIENT WATER MANAGEMENT TECHNIQUES (RENEW-2024)

About RENEW-24

To commemorate the "**World Water day**", CWM organizes RENEW -2024 and the aim of this program is to encourage the development of innovative scientific solutions to address water and wastewater problems. Students and academicians who are interested may submit their unique, original project abstracts on or before 10th March 2024 to centreworkcwm@gmail.com

Themes

- Green Technologies for Crude Oil Processed Water Treatment
- Advancements in Membrane Technologies
- Emerging Contaminants in water and wastewater
- Novel Desalination Technologies
- GIS and Remote sensing in Water management
- Nanomaterials based Water Treatment
- Advanced oxidation processes
- Zero liquid discharge
- AI based water Management
- Sensors for pollutant monitoring
- Resource recovery
- Hydroponics and Smart Farming
- Socioeconomic issues concerning wastewater management
- Water Sanitation & Hygiene

Selection Process

Based on the following parameters, the top scoring teams will be selected:

- Originality, novelty, relevance of theme, scalability, potential of impact, cost/market value, acceptance, durability, usability, and implementation ability.

The finalist will exhibit their project during the "World Water Day" celebration on March 22nd 2024.

Registration

For Registration: Click here (only for selected participants)

Fee: ₹ **150**/- per participant or ₹ **400**/-for team (Maximum of three participants)

Account Details:

Account Holder Name: Vice Chancellor, Sathyabama Institute of Science and Technology,

Account No: **6500955039** IFSC: **IDIB000S201**

(The same account can be used for GPay Transaction also.)

PATRONS

Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President
Mr. J. Arul Selvan, Vice President
Mrs. Maria Bernadette Tamilarasi, Vice President
Ms. Maria Catherine Jayapriya, Vice President
Dr. T. Sasipraba, Vice Chancellor

Convener

Dr.Dawn SS, Professor (Research)

Organizing Secretary

Dr. Sathish Kumar R, Associate Professor (Research)

Co-ordinators

Dr.J Arun, Assistant Professor (Research)
Dr.N Nirmala, Assistant Professor (Research)
Dr.Sivasakthi M, Assistant Professor (Research)
Dr.P Priyadharsini, Scientific Assistant

Organizing committee members

Mr. A. Santhosh, Project Coordinator (STI-HUB)
Ms. A. Bhuvaneswari, Project Assistant (STI-HUB)
Mr. J. Jayakanth, Project Assistant (STI-HUB)
Ms. S.V. Sivashankari, Project Associate I (SERB)
Mr. S. Sanjay Kumar, Project Assistant (STI-HUB)
Mr. P. Mazhalaiselvan, Project Assistant (STI-HUB)
Ms. J. Merlin, Research Scholar

ADDRESS FOR CORRESPONDENCE

Centre for Waste Management-IRC, Sathyabama Institute of Science and Technology,
Jeppiaar Nagar , Rajiv Gandhi Salai, Chennai- 600 119, Tamil Nadu, India.
Mobile: +91 9715270393; +91 9385547308. (Dr Sathish Kumar R)
Email: sathishkumar.ramachandran.irc@sathyabama.ac.in

Sustainable Water Extraction on Campus

The university utilises sustainable water extraction technologies on associated university grounds on and off campus .The water taken from private suppliers is carried in tanker lorry and poured in the percolation pit and purified in the RO plant which is installed in the campus.

SDG 6 - CLEAN WATER AND SANITATION





Free Drinking Water

Our institution provides free drinking water for students, staff and visitors. The Reverse Osmosis Plant installed in the Sathyabama campus, caters to the drinking water needs of all the students, teachers, supporting staff and the visitors. The raw water with an average Total Dissolved Solids [TDS] of 750-1000 ppm is treated to reduce the TDS content to less than 100 ppm the generally acceptable upper limit of the TDS. The maximum capacity of the plant is 1500 litres per hour [at the rate of 250 lit per membrane]. The utilized capacity is 1000 lit/hr potable water. 66 filtered water stations and coolers are connected to this plant providing drinking water in every floor of class room blocks, administrative block, library, hostels and in common areas. The mineral water facility is documented on the institute's website.

SDG 6 - CLEAN WATER AND SANITATION





https://www.sathyabama.ac.in/about-us/infrastructure/mineral-water-facility

Enhancing Sustainable Water Management on Campus

The NSS unit of Sathyabama Institute of Science and Technology conducted a Tree Plantation Drive on 27.03.2024 as part of its initiatives to promote conscious water usage on campus. In honour of the special day, our Vice Presidents inaugurated the activity by planting saplings within the campus. The drive emphasized the role of trees in improving groundwater recharge, reducing surface runoff, and supporting sustainable water management practices. As an effort to encourage natural regeneration and water-responsible landscaping, 100 saplings—preferably drought-tolerant species—were planted. Around 80 NSS volunteers actively participated and contributed to advancing SDG 6 through environmentally responsible and water-efficient greening efforts on campus.

SDG 6 - CLEAN WATER AND SANITATION





The NSS Unit Sathyabama Institute of Science and Technology coordinated a Volunteer Task on Campus Cleaning from June 1, 2023, to May 31, 2024, with the active participation of around 100 volunteers. This initiative played a key role in enhancing sustainable water management on campus by ensuring that areas around water bodies, drainage pathways, and water storage zones were kept clean and free from waste. Regular clean-up drives focused on preventing litter and pollutants from entering storm water channels, thereby protecting groundwater quality and supporting efficient rainwater flow across the campus. Volunteers also promoted responsible waste disposal and segregation practices among students and staff to minimise water contamination risks. Through these efforts, the NSS unit strengthened campus water stewardship and contributed to SDG 6 by maintaining a clean environment that safeguards water resources.

SDG 6 - CLEAN WATER AND SANITATION





The university actively promotes conscious water usage on campus by fixing water conscious posters near water coolers, installation of water-efficient fixtures such as low-flow taps, dual-flush toilets to reduce unnecessary water consumption and regular maintenance of water distribution systems to prevent leakage and wastage.



Water Reuse Measurement

Our institute measure the reuse of water across the university which is documented in the water quality standard and discharge policy.

https://sist.sathyabama.ac.in/download/Water_Quality.pdf

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 7

AFFORDABLE AND CLEAN ENERGY





87a, Rajiv Gandhi Salai, Chemmancherry, Chennai, Tamil Nadu 600119, India

Chennai
Tamil Nadu
India

WWW.SATHYABAMA.AC.IN

SDG 7 - AFFORDABLE AND CLEAN ENERGY

Sathyabama Institute of Science and Technology (SIST) has demonstrated significant progress in advancing Affordable and Clean Energy during the academic year 2023–2024. Our institution has consistently aligned its initiatives with the UN Sustainable Development Goals. The institution integrates renewable energy adoption, energy conservation, advanced research, and community outreach to reduce dependence on conventional energy and minimize carbon emissions. Through renewable energy adoption, energy-efficient infrastructure, advanced research at the Centre of Excellence for Energy Research (CEER) and community outreach programs, the institution has reduced its carbon footprint, enhanced sustainability, and contributed to national and global clean energy goals. Our institution has implemented substantial measures to advance the utilization of sustainable and renewable energy throughout the campus.

Institutional Pathways to Energy Optimization

Our institution has undertaken a series of impactful alternate energy source initiatives to advance sustainability and clean energy. Through renewable energy installations such as solar panels, wind energy projects, and biogas plants, it is actively reducing dependence on conventional power sources. Solar photovoltaic panels, solar thermal systems, and small-scale windmills are included into the design of all newly built buildings, lowering dependency on the grid and providing clean electricity for laboratory operations and illumination. Complementing this, energy efficiency measures including smart lighting systems, regular energy audits, and the development of green buildings ensure optimal resource utilization and reduced environmental footprint. At the governance level, the establishment of an institutional energy policy, a dedicated sustainability cell, and strategic collaborations further strengthen the framework for long-term energy management and eco-conscious growth.

Solar Energy:

The Institution is actively engaged in the advancement of various solar cell technologies within the realm of research and innovation. These encompass thin-film solar cells, silicon-based photovoltaic modules, perovskite solar cells, and heterojunction oxide solar cells. Our institution has,

·10 kW rooftop solar panels powering pavements and laboratories.

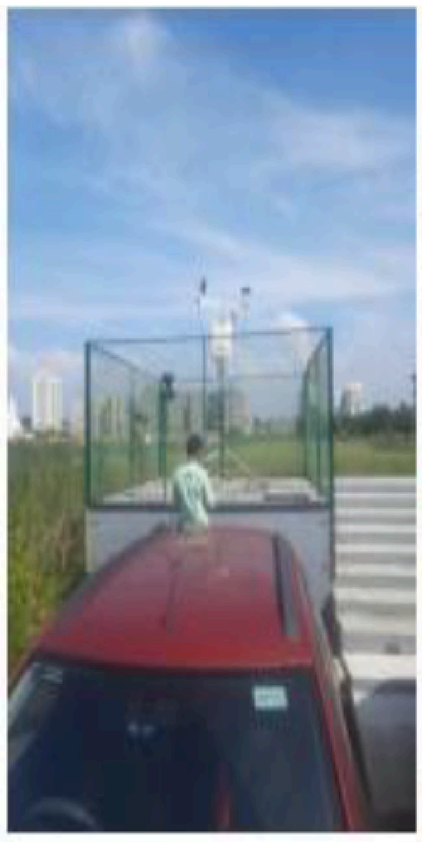
·Solar-powered kitchen recommissioned, reducing LPG usage.

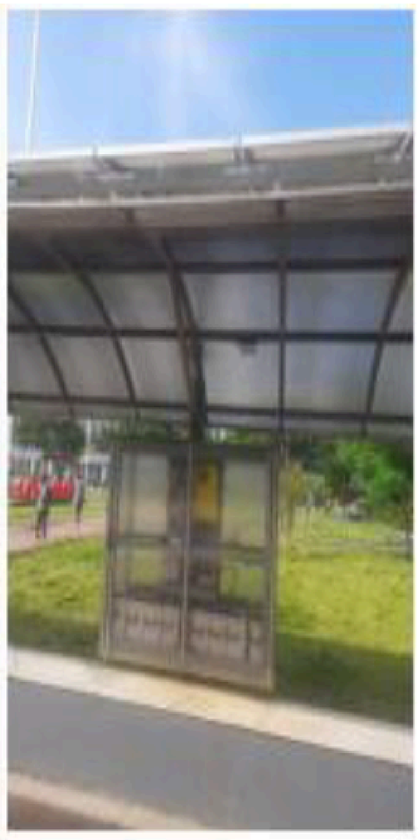
·Solar lamps installed along walkways.

Research on third-generation solar cells to power battery-operated vehicles.

SDG 7 - AFFORDABLE AND CLEAN ENERGY







Biogas Plant:

The Institution manages biogas systems that transform organic waste into fuel for cooking in the hostel mess. The biogas plant in our institution has

·20 L capacity demonstration unit using food waste.

·Biogas used to replace approximately three LPG cylinders/day in kitchens.

·Research on microbial fuel cells (MFC) for electricity generation from food waste



SDG 7 - AFFORDABLE AND CLEAN ENERGY

Wind Energy:

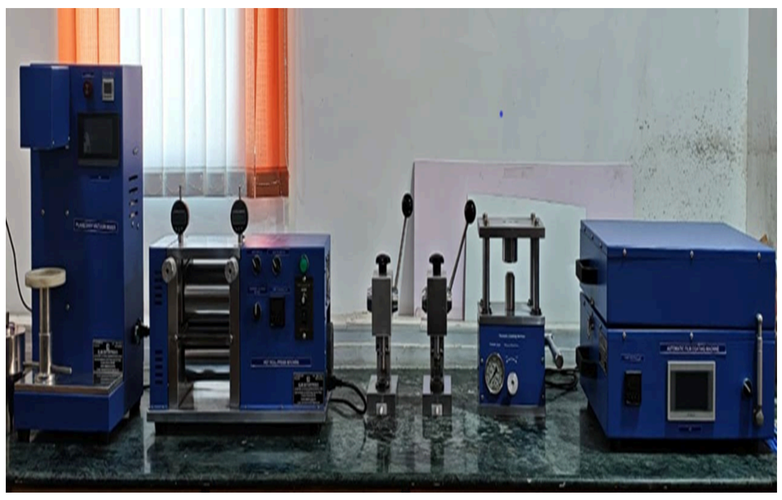
Sathyabama has established a solar-wind hybrid system to enhance its renewable energy framework, providing stable and continuous power to multiple scientific facilities while alleviating the burden on the conventional grid.





Hydrogen-based Energy Innovations

The Institute has developed advanced infrastructure to facilitate hydrogen-based energy innovations. This encompasses sophisticated systems for hydrogen generation using water-splitting methods, with facilities for energy storage utilizing proprietary solid oxide fuel cells (SOFCs), batteries, and supercapacitors.



SDG 7 - AFFORDABLE AND CLEAN ENERGY

Biodiesel

Biodiesel Plant for the usage in Institutional buses and Gensets. The institution operates a pilot scale biodiesel production unit that converts 50 litres of waste cooking oil generated in the institution mess. This initiative prevents approximately 15,000 to 20,000 Litres of waste cooking oil from being consumed, thrown into the sewer line or dumped onto the landfill every year. The waste cooking oil is properly assessed and converted into Biodiesel.

The produced biodiesel is evaluated to meet the ASTM standards. Fifteen of the institution buses are operated with B15 blends of diesel. Also, two of the Gensets are powered with B-100. With this initiative the institution has reduced 4,82,460 TCO2E from 37,84,000 TCO2E per annum by operating biodiesel powered buses and gensets which is 33,01,540 TCO2E. The institution has set its target to achieve 50 percent by increasing the blending percentage as well as the number of biodiesel powered buses. The scope for the institution to reduce emissions is huge and will be achieved as set by the nation.

Biodiesel Production Unit at CWM, Sathyabama

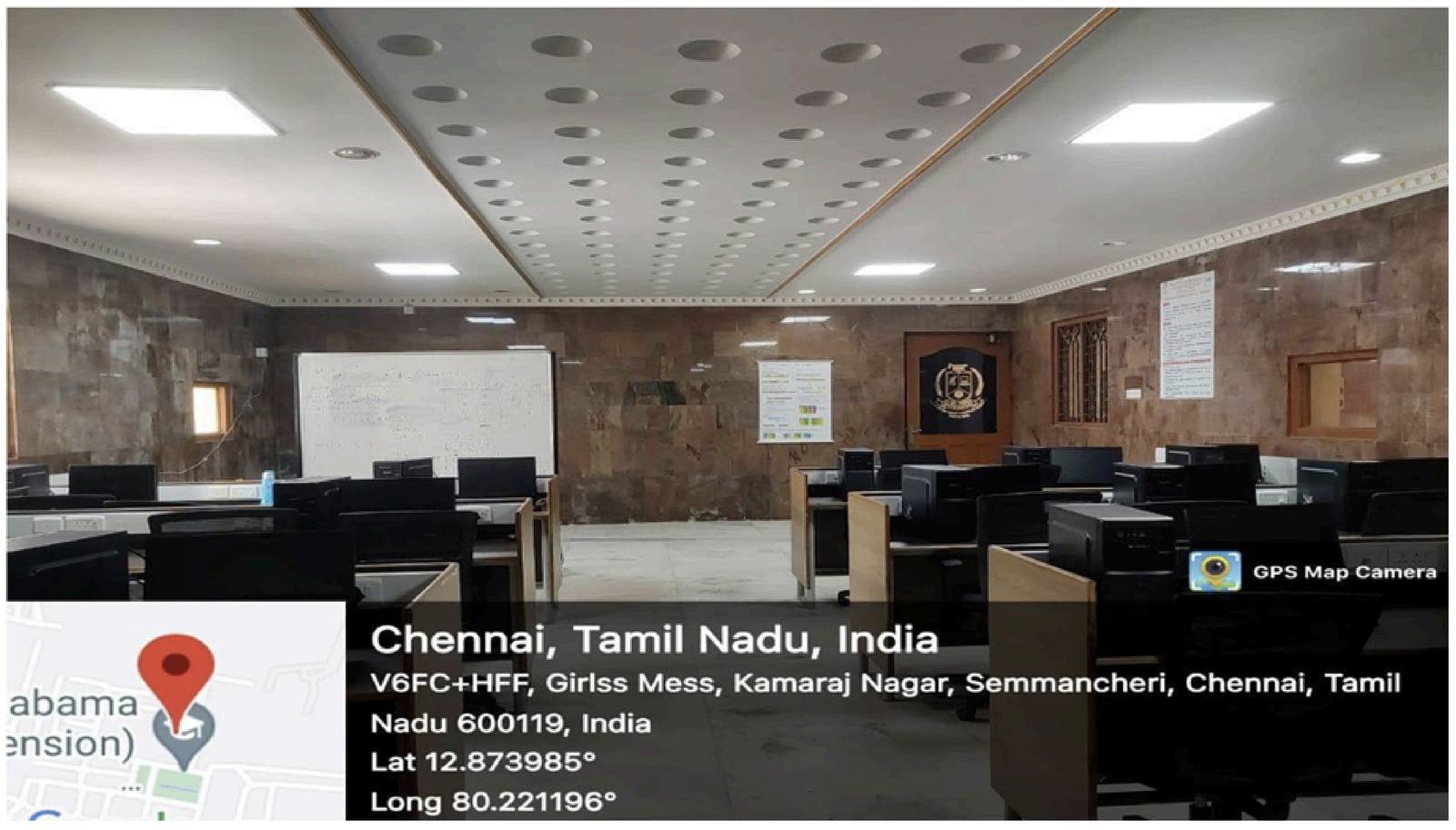


Energy Conservation Initiatives of Institution

- Replacement of incandescent bulbs with LEDs.
- Use of 5-star rated air conditioners and refrigerators.
- Annual energy audits ensure compliance with Bureau of Energy Efficiency (BEE) standards.
- BLDC fans and LED retrofits
- Motion sensors in administrative buildings.
- Smart HVAC systems with automatic cut-off for optimal energy use.

SDG 7 - AFFORDABLE AND CLEAN ENERGY

LED bulbs/ Power Efficient Equipment



Impact of the Institutional Facilities for Alternate Energy

Source	Initiative	Impact
Solar Energy	10 kW rooftop panels, solar kitchen recommissioned, solar lamps for walkways	Reduced LPG and grid electricity usage
Biogas Plant	20 L demo unit using food waste	Replaced approximately three LPG cylinders/day
Wind Energy	500 W windmill powering cabins	Proof-of-concept for IoT-integrated windmills
Sensor-Based Conservation	Motion sensors, smart HVAC	Optimized energy consumption
Energy-Efficient Equipment	LED retrofits, 5-star ACs, refrigerators	Lowered electricity bills and emissions

Sathyabama Institute of Science and Technology has clearly implemented low-carbon usage strategies as part of its sustainability and green audit initiatives. A Green Audit is a systematic process that assesses the environmental impact of an organization, project, process, or product. It focuses on evaluating sustainability practices, resource usage, waste management, and overall environmental responsibility. The aim of this green audit is to identify, assess, and prioritize actions for environmental sustainability, ensuring compliance with relevant regulations, policies, and standards. This proactive approach highlights our commitment to a greener, more sustainable future. From the year 2024 Green Audit Report, here are the main ways this is achieved.

SDG 7 - AFFORDABLE AND CLEAN ENERGY

Low-carbon energy tracking

Measure of the amount of low carbon energy used across the university:

The energy-saving projects focus on reducing energy consumption, cutting operational costs, and lowering carbon emissions. Two key measures have been identified:

·Replacing Conventional Ceiling Fans with BLDC Fans: This measure leads to significant annual energy savings of 558,080 kWh, with an investment of INR 27,904,000. The monetary savings amount to INR 4,334,421 per annum, achieving a payback period of 6 years while reducing emissions by 396 tons of CO2 annually.

·Replacing Tube Lights with LED Tube Lights: Transitioning to LED lighting results in annual energy savings of 241,920 kWh, requiring an investment of INR 2,268,000. This measure generates annual monetary savings of INR 1,878,912, with a payback period of 14 years and an emissions reduction of 172 tons of CO2 annually.

Together, these projects yield total energy savings of 80000 kWh per annum, requiring an investment of INR 30,172,000 and producing annual savings of INR 6,213,333. They also contribute to a total emissions reduction of 568 tons of CO2 per year. These initiatives demonstrate a strong commitment to sustainability and energy efficiency while offering substantial long-term cost and environmental benefits.

The proposed energy-saving measures result in significant improvements to energy efficiency. With an annual electrical energy consumption of 5,477,235 kWh, the energy-saving initiatives, including replacing conventional ceiling fans with BLDC fans and switching to LED tube lights, achieve an annual savings of 80000 kWh. This translates to an impressive 14.6% reduction in energy consumption.

NIN Energy India Private Limited is providing Energy Related services like Energy Audit, Power Quality Audit, Infrared Thermography, Thermal Audit, PAT Monitoring and Verification Audit, PAT Consultancy, Green Building Commissioning, Electrical Safety Audit, Internet of Things, Carbon Foot Printing, etc.

S. No	Energy Efficiency Measures	Estimate annual Energy Savings, kWh/Annum	Estimated Investment, INR	Monetary Savings, INR	Payback Period, Years	Emission Reduction, t CO2/Annum
1	Replace existing conventional ceiling fan to BLDC ceiling fan	558080	27904000	4334421	6	396
2	Replace existing tube light to LED tube light	241920	2268000	1878912	14	172
Total		80000	30172000	6213333	5	568

SDG 7 - AFFORDABLE AND CLEAN ENERGY

Annual Electrical Energy consumption, kWh/Annum	5,477,235
Annual Electrical Energy Savings, kWh/Annum	80000
Electrical Energy Savings, %	14.6

Carbon footprint can be measured by the total sum of greenhouse gases (GHG) emission caused by an organization, event, product, or person. As we are aware, the increasing concentration of GHGs in the atmosphere can accelerate climate change and global warming, it is very necessary to measure these emissions from our day-to-day activities. The first step towards managing GHG emissions is to measure them. There are some standards and guidelines to measure GHG emissions like GHG protocol, ISO 14064, the more comprehensive one Life Cycle Assessment (LCA), and market-based mechanisms. Out of them, ISO 14064 is an offset protocol and independent, voluntary GHG project accounting standard helps to quantify GHG emission of the organization, event, product, or person.

Our day-to-day activities are dependent on electricity which is mostly coming from coal-based power plants, Diesel and Petrol for our vehicles and LPG for cooking in our kitchen. All of the energy we use is derived from these fossil fuels which are GHG intensive. The following methodology helps you to calculate your carbon footprint resulting from the use of Electricity, Petrol, Diesel, and LPG.

Floristic status of the institution:

The Current situation of planted trees are as follows:

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SDG 7 - AFFORDABLE AND CLEAN ENERGY

Floristic status of the institution:

The Current situation of planted trees are as follows:

	Type of Trees	Total No of Trees	CO2 Absorption	Unit
1	No of matured trees (Age more than 10 years)	88	598.4	kg
2	No of Semi matured trees (Age below10 years)	156	530.4	kg
3	No of plants/herbs/Shrubs	815	163	kg
4	No of medicinal plants	89	17.8	kg
5	Any other plants details, if any	216	43.2	kg

Carbon absorption by flora in the Institution

Carbon absorption capacity of one matured tree = 6.8 kg of CO2. Carbon absorption capacity of one full grown tree = 3.4 kg of CO2. In bushes it absorbs an average of 200 g of CO2.

·The carbon absorption capacity of 88matured trees in campus of (88× 6.8 kg CO2/Annum) = 47.6 kg of CO2/Annum.

·The carbon absorption capacity of 156 semi-grown trees in campus of (156 × 3.4 kg CO2/Annum) =20.4 kg of CO2/Annum.

There are 1120 bushes of various species being raised in the gardens of the Institution total carbon absorption was calculated to be (1120× 0.2 kg CO2/Annum) = 135.2 kg of CO2/Annum.

The grand total of carbon absorption by the flora in the campus is 1352.8 kg per year.

Description	Unit	Values
Annual Emissions from Electricity, tCO2	tCO2 /year	3889
TOTAL EMISSIONS FROM FACILITY	tCO2 /year	3889
Carbon absorption by mature trees, semi mature trees, bushes and lawns	tCO2 /year	1.29
Net carbon emission of the campus	tCO2 /year	3888
Carbon reduction opportunities by energy saving projects	tCO2 /year	568
Estimated Carbon Emissions after implementing the Energy Saving Projects	tCO2 /year	3320

SDG 7 - AFFORDABLE AND CLEAN ENERGY

Initiatives of the Institution for Carbon Reduction

Sathyabama Institute of Science and Technology has undertaken extensive plantation drives across its campus to strengthen its commitment to sustainability and carbon reduction. The institution recognizes the vital role of flora in absorbing carbon dioxide and improving air quality, and therefore maintains a diverse green cover that includes matured trees, semi-grown trees, and a wide variety of bushes.







Research and Innovation in Clean Energy Technology

Sathyabama Institute of Science and Technology has established multiple dedicated research centres to encourage advanced Research and Development activities in innovative technologies that foster a cleaner and greener environment.

Centre of Excellence for Energy Research (CEER)

The Centre of Excellence for Energy Research (CEER) at Sathyabama Institute of Science and Technology was established under the MHRD's Frontier Areas of Science and Technology (FAST) scheme and inaugurated on December 9, 2014, by Dr. A. P. J. Abdul Kalam, Former President of India, in the presence of Col. Dr. Jeppiaar, Founder Chancellor.

SDG 7 - AFFORDABLE AND CLEAN ENERGY

CEER serves as a premier hub for sustainable energy technologies, focusing on advanced research in solar photovoltaics, fuel cells, supercapacitors, batteries, electrocatalysis, thermoelectric devices, and bioenergy. With state-of-the-art infrastructure and expert faculty, the centre bridges academic innovation and industrial application, fostering product development and technology transfer. Its vision is to be a global leader in transformative energy research, driving sustainable innovation and shaping the future of clean and efficient energy technologies for societal and environmental betterment. Through interdisciplinary collaboration with academia, industry, and government bodies, CEER promotes impactful solutions for affordable and clean energy, while also advancing knowledge dissemination and capacity-building programs that strengthen global energy security and contribute to long-term sustainability.

https://centreforenergyresearch.com/index.html





SDG 7 - AFFORDABLE AND CLEAN ENERGY





Centre for Waste Management

In collaboration with the National Solid Waste Association of India (NSWAI), Sathyabama established the Centre for Waste Management (CWM) in 2011. Since its inception, the Centre has become a hub for waste-to-energy research and innovation, focusing on converting food waste, plastics, ritual waste, biomedical waste, and e-waste into valuable resources such as biogas, biodiesel, activated carbon, microbial fuel cells, and sustainable building materials.

The Centre's work includes developing patentable technologies, publishing in peer-reviewed journals, training graduate students, and offering consultancy services. Beyond research, it actively engages in public awareness campaigns on waste segregation and recycling, ensuring that scientific outcomes are transferred for societal benefit. By integrating the 3R principles—Reduce, Reuse, Recycle— into its mission, the Centre exemplifies how waste can be transformed into clean energy, thereby reducing carbon footprints and promoting a circular economy.

https://www.centreforwastemanagement.com/index.htm

https://centreforenergyresearch.com/publications.html Publications | Centre for Waste Management (CWM) at Sathyabama Institute of Science and Technology (Deemed to be University)

SDG 7 - AFFORDABLE AND CLEAN ENERGY





Centre for Waste Management

Centre for Waste Management, Centre of Excellence for Energy Research jointly with Centre for Aquaculture Sathyabama Institute of Science and Technology organizes many Biodiesel production and Characterization training. Participants in this project, many of whom were from institutions and enterprises in Chennai and other regions of India, were able to comprehend realistic strategies for implementing decentralized waste-to-energy systems. The Centre for Waste Management's Training-cum-Workshop on Food Waste Utilization for Biogas Production, which took place on July 26, 2024, is a crucial service provided to business. Through live demonstrations at the campus biogas plant, participants received practical instruction in anaerobic digestion, food waste processing, biogas scrubbing, and clean fuel utilization.

The institute offers advanced scientific instruction related to energy materials and characterisation. The Training Program on Advanced Characterization Techniques (June 23–24, 2023) is one of the major programs. It introduced participants to sophisticated spectroscopy and microscopy instruments that are necessary for evaluating materials used in energy devices.

SDG 7 - AFFORDABLE AND CLEAN ENERGY



Researchers and industry professionals were introduced to state-of-the-art solar materials, hydrogen energy systems, battery technologies, and supercapacitors during the Five-Day FDP on Advanced Materials for Energy Applications (October 9–13, 2023).



SDG 7 - AFFORDABLE AND CLEAN ENERGY



The Centre for Waste Management, Centre of Excellence for Energy Research, jointly with the Department of Chemical Engineering and Department of Information Technology, Sathyabama Institute of Science and Technology in association with British Council, organized a Tech Talk on "Innovating to Net Zero: The Role of STEM and how to get Involved"." The event gathered experts, professionals, and students to explore net-zero initiatives in STEM. Dr. Michael Short, Professor and Associate Dean for Research and Innovation at the School of Computing, Engineering, and Digital Technologies, Teesside University, UK, delivered an insightful talk emphasizing energy reduction, recycling, and the pursuit of sustainable energy sources. The session engaged students from Chemical Engineering and Information Technology, culminating in a compelling message on the vital need to achieve net-zero targets to protect the planet for future generations.





SDG 7 - AFFORDABLE AND CLEAN ENERGY

The Faculty training was organized by the Department of Chemical Engineering in association with Centre for waste management on from 17th July 2023 to 22th July 2023. The enrichment training was given on the biogas facilities and the O&M activities. Around 70 participants from Department of Biotechnology, AVC College., and Department of Agriculture Engineering, Mahendra Engineering College and Department of Agriculture, Paavai Engineering College and Department of civil, University College of Engineering Dindigul, and Department of IT, Saveetha School of Engineering Participated and inhouse faculty from Biotechnology, Automobile, Electrical Engineering of Sathyabama institute Benefited from the programme. The participants had visited the Biogas facility and the operation and production of biogas from food waste at Sathyabama Institute of Science and Technology. The training program included biogas plant silage water testing, projects in the alternate fuel domain.





SDG 7 - AFFORDABLE AND CLEAN ENERGY

Powering a Sustainable Future:

Sathyabama Institute of Science and Technology always adopt the Energy pledge of Government of India. The organization has consistently encouraged the switch to cleaner fuels, carbon emission reduction, and responsible energy use. Sathyabama has embraced many green initiatives throughout the years, including expedited bio-composting of market waste, biogas production from food waste, biodiesel synthesis from leftover cooking oil, and sustainable energy-based research. These initiatives have led to a quantifiable decrease in greenhouse gas emissions and demonstrate the institution's commitment to helping India achieve its Net-Zero and energy conservation objectives. Sathyabama continues to uphold the national Energy.



Outreach and Community Engagement Programs on Clean Energy

Sathyabama Institute of Science and Technology, through its Centre for Waste Management (CWM) and the Science Technology & Innovation Hub (STI-Hub), runs the Village Program to promote scientific and technological interventions for the socio-economic development of local communities.

As part of enriching Women to become active contributors to household energy security and income generation, fostering gender equity and sustainable livelihoods, our institution conducted an outreach program tiled ‘Women Empowerment through Renewable Energy Practices’. Women from adopted villages were trained to:

·Operate biogas units for household cooking.

·Produce bio-fertilizers and compost.

SDG 7 - AFFORDABLE AND CLEAN ENERGY

Biodiesel for pumpsets and gensets in Mittapalli, Aadhanur, Eachampoondi, Meensuruti villages Apart from directly contributing, the institution through its biofuel promotion activities has also contributedto Carbon footprint reductions. About 5300 L of biodiesel has been given away for operating pumpsets in Mitapalli village, Aadhanur village, Eachampoondi village in Tamilnadu. The institution is also taking initiatives to provide biodiesel to power fish catching boats in Meensuruti village in Kattumannarkoil Taluk, Cuddalore district.In addition to the biodiesel plant commissioned in the Centre for Waste management Laboratory at Sathyabama Institute of Science and Technology, a pilot scale biodiesel plant has been set up in Cuddalore to cater to the diesel requirements in few of the villages in Kattumannarkoil Taluk. This way 2.14 TCO2E has been achieved indirectly by the initiatives taken by our institution during 2023-2024, which would have been high with diesel used as a fuel.The target will be to increase in cumulative reduction of 5, 10,15,20 tonne year after year in next four years and achieve a total of 55 TCO2E by 2028. Through the Science Technology and Innovation hub established at Kattumannarkoil Taluk C, D block Cuddalore District around 150 marginal and non-workers including women have been trained to make biodiesel from waste cooking oil. They are given sufficient awareness on the impact of consuming several times fried waste cooking oil and throwing away of the same on landfills and into the sewer lines.They have been trained to check the quality of the oil, categorize it for biodiesel production, divert it for other application like detergent soap making, 1 Litre biodiesel production and 20 L pilot scale biodiesel production.



SDG 7 - AFFORDABLE AND CLEAN ENERGY



Biodiesel Plant housed inEachampoondi Village, Cuddalore District in the STI Hub, a DST-Sathyabama Joint initiative

Our institution's Fly ash brick manufacturing workshops promoted eco-friendly construction materials, reducing reliance on traditional clay bricks. Hydroponics training introduced farmers to water-efficient farming methods, addressing challenges of water scarcity.



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 8

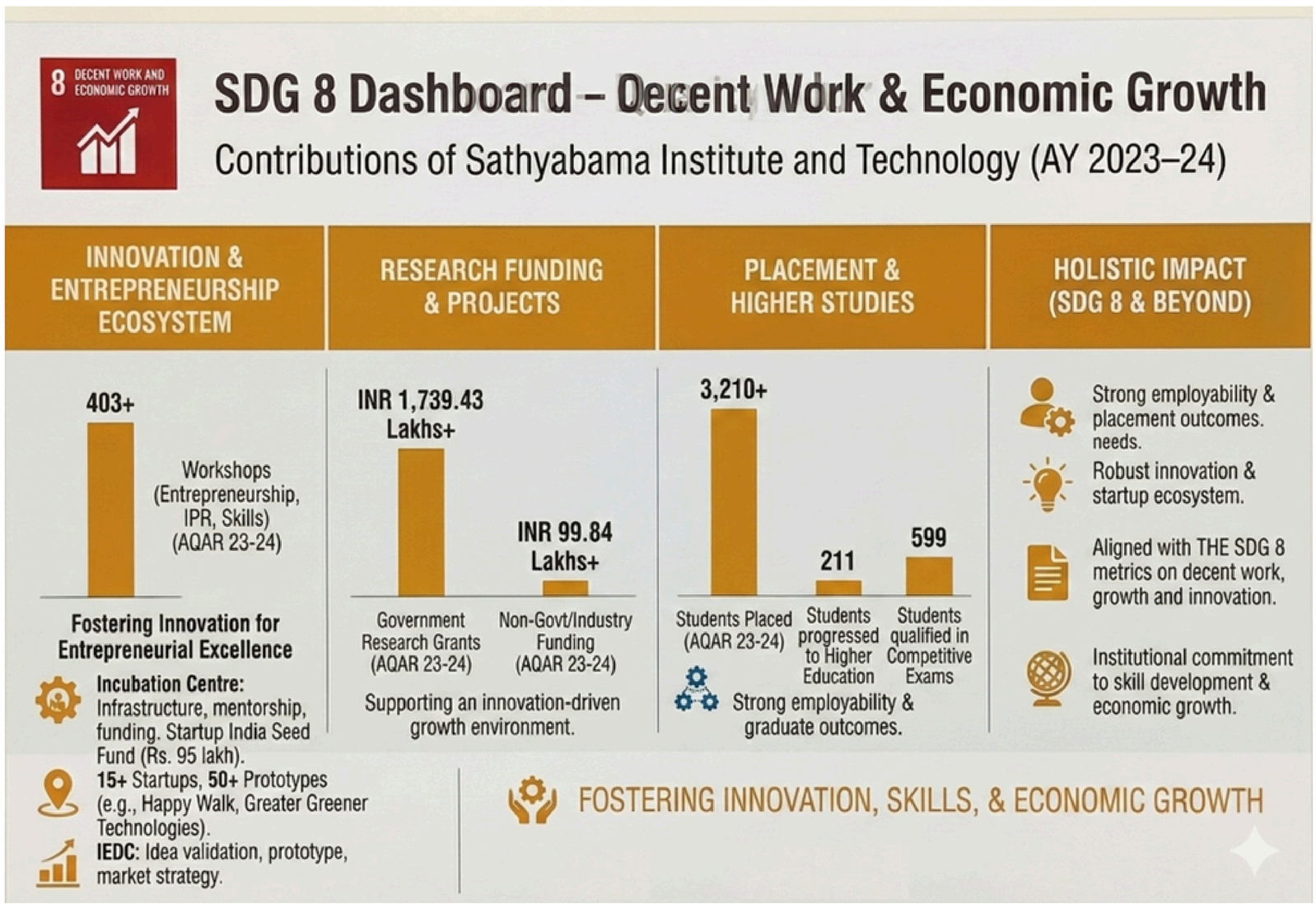
DECENT WORK AND ECONOMIC GROWTH



WWW.SATHYABAMA.AC.IN

SDG 8 - DECENT WORK AND ECONOMIC GROWTH

By promoting employability, entrepreneurship, and inclusive workforce development at Sathyabama Institute of Science and Technology shows the Decent Work and Economic Growth of its employee and justifies SDG 8. With over 2,300 students landing positions in a variety of fields, including as IT, biotechnology, and sustainable agriculture, the institution attained a placement rate of 92% in 2024. During campus recruitment drives, over 150 firms offered excellent packages and international chances. Sathyabama trained 3,500 students in cutting-edge sectors including artificial intelligence, renewable energy, and sustainable business practices, while also supporting 120 student-led firms through incubation programs. These quantifiable results demonstrate the organization's dedication to fostering innovation, generating fair employment opportunities, and promoting sustained economic growth.



8.1 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The University is committed to long-term strategies that focus on creating, promoting, and delivering opportunities that enhance the employability of students and emerging talent. Building a sustainable talent pipeline is a key priority, supported by structured initiatives that equip individuals with the right tools, skills, and resources. By providing an enabling platform for employees and students to excel, the Institution strengthens its long-term success while making a meaningful contribution to the broader community.

SDG 8 - DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The University's productive employment strategy is built on developing and implementing simple, consistent, and efficient processes and systems that support the growth and evolution of its workforce. These mechanisms strengthen employee engagement, well-being, and long-term professional development. All employment policies and practices are fully compliant with legal requirements and uphold fairness, transparency, and equal opportunity. This approach has enabled the University to retain a committed workforce and sustain its reputation as a fair and responsible employer since its inception.

8.2 Graduate Employability

Graduates of Sathyabama Institute of Science and Technology are highly sought after by employers, as evidenced by the University's strong performance in national and international rankings, including the NIRF (India) rankings and the QS Graduate Employability Rankings. The Institution plays a significant role in enhancing employment opportunities for its students and contributes actively to job creation both within India and globally.

The commercialization of research outputs generated by faculty and researchers has had a substantial impact on employment generation and entrepreneurial development. Many graduate-led ventures demonstrate growth and survival rates that exceed the national average, reflecting the strength of the University's research ecosystem and its positive influence on innovation-driven employment.

8.3 Study Programmes

The University's robust curriculum design, accredited by national and international agencies, plays a pivotal role in shaping responsible, ethical, and globally aware citizens. Aligned with global initiatives led by the United Nations, the Institution effectively disseminates principles of Corporate Social Responsibility, Sustainable and Green Engineering, and socially responsible management practices through its teaching, learning, and research frameworks. Continuous technology upgrades, innovation-driven academic practices, and a wide range of value-added courses across disciplines have created pathways for employment that significantly enhance economic productivity.

A strong emphasis on entrepreneurship, creativity, and innovation is fostered through the University's Technology Business Incubators, supported by the Department of Science and Technology (Government of India) and the Ministry of Micro, Small and Medium Enterprises (Government of India). Mission-oriented approaches that promote inclusive, social, and digitally enabled innovation for sustainable development particularly in the growth of formal MSMEs with improved access to financial services have been widely recognised and appreciated by stakeholders. These initiatives collectively strengthen the ecosystem for job creation, entrepreneurial ventures, and economic growth.

SDG 8 - DECENT WORK AND ECONOMIC GROWTH

8.4 Informal Student employment initiatives

The "Earn while You Learn Programme," launched in 2010, is one of the University's most sought-after initiatives, providing students with meaningful career opportunities during their period of study. This programme enables students to develop essential skills, gain work experience, and enhance their employability while contributing productively to the campus ecosystem.

The University also promotes inclusive access to knowledge by supporting basic literacy, open access to scientific and technological resources, and flexible intellectual property practices that allow fair use. Students benefit from access to physical infrastructure, digital platforms, hands-on learning environments, and open repositories of scientific and technological information. These efforts collectively advance the goal of achieving full and productive employment and decent work for all—women and men, including young people by 2030, in alignment with the UN Sustainable Development Goals.

8.5 Integration of persons with disabilities

With growing emphasis on the principle of inclusive education for students with disabilities, the University has incorporated systematic measures to ensure supportive and accessible conditions within higher education. A transparent, fair, and effective method of financing education through designated grants is actively practiced to reduce barriers and promote equal access.

The Institution is strongly committed to integrating persons with disabilities by upholding impartial standards that ensure equal pay for work of equal value. This approach reflects the University's broader vision of fostering an inclusive academic and work environment where all individuals regardless of ability,receive equal opportunities for participation, growth, and recognition.

8.6 Educational equity and community Development

Shared accountability and the coordinated integration of services related to education, health, and livelihood promotion have significantly contributed to the joint development and welfare of the local community. The University implements a variety of Skill Development and Capacity Building programmes aimed at poverty alleviation, the promotion of small businesses, financial security, and overall community empowerment. These initiatives also address essential areas such as health and hygiene, physical and psychological well-being, literacy, and personal safety for both men and women. Through these sustained efforts, the Institution supports economic inclusion, enables individuals to build assets, and contributes to long-term community sustainability and resilience.

SDG 8 - DECENT WORK AND ECONOMIC GROWTH

8.7 Strategy for Economic empowerment

The series of reforms and enablers of the Government in the Economic package to make India Atmanirbhar and measures for relief and credit support to businesses, especially MSMEs to support Indian Economy's fight against COVID-19 have been followed to address rural and urban employment generation activities. The startups initiated at the university have been supported to contribute efficiently to the labour market with a distinct focus on inclusive and indiscriminative approach towards equity and sustainability.

b. 2023–24 Initiatives

1.Innovation & Incubation Ecosystem

- **A dynamic Incubation Centre supports innovators and entrepreneurs with infrastructure, mentorship and funding, leading to several successful startups across domains.**
- **The Innovation and Entrepreneurship Development Cell (IEDC) guides students through idea validation, prototype development and market strategies.**

2.Workshops on Research, IPR, Entrepreneurship & Skills

- **In 2023–24, Sathyabama conducted 403 workshops/seminars on research methodology, Intellectual Property Rights (IPR), entrepreneurship and skill development.**

3.Entrepreneurship Best Practice – "Fostering Innovation for Entrepreneurial Excellence"

- **Recognized as a Best Practice (7.2.1), this initiative includes:**
- **The Innovation Hangar for ideation & prototyping;**
- **Mentorship, grants and Startup India Seed Fund (Rs. 95 lakh);**
- **PCB printing facilities;**
- **Sathyabama TBI with startups like Happy Walk and Greater Greener Technologies;**
- **More than 15 startups, 50+ prototypes, and 200+ students in innovation challenges.**

4.Research Funding & Projects

- **Government research grants in 2023–24 totaled INR 1,739.43 lakhs, and non-government/industry funding was INR 99.84 lakhs, supporting an innovation-driven growth environment.**

5.Placement, Higher Studies & Competitive Exams

- **3,210 students were placed through campus recruitment, 211 students progressed to higher education, and 599 students qualified in competitive exams, confirming strong graduate outcomes.**

SDG 8 - DECENT WORK AND ECONOMIC GROWTH

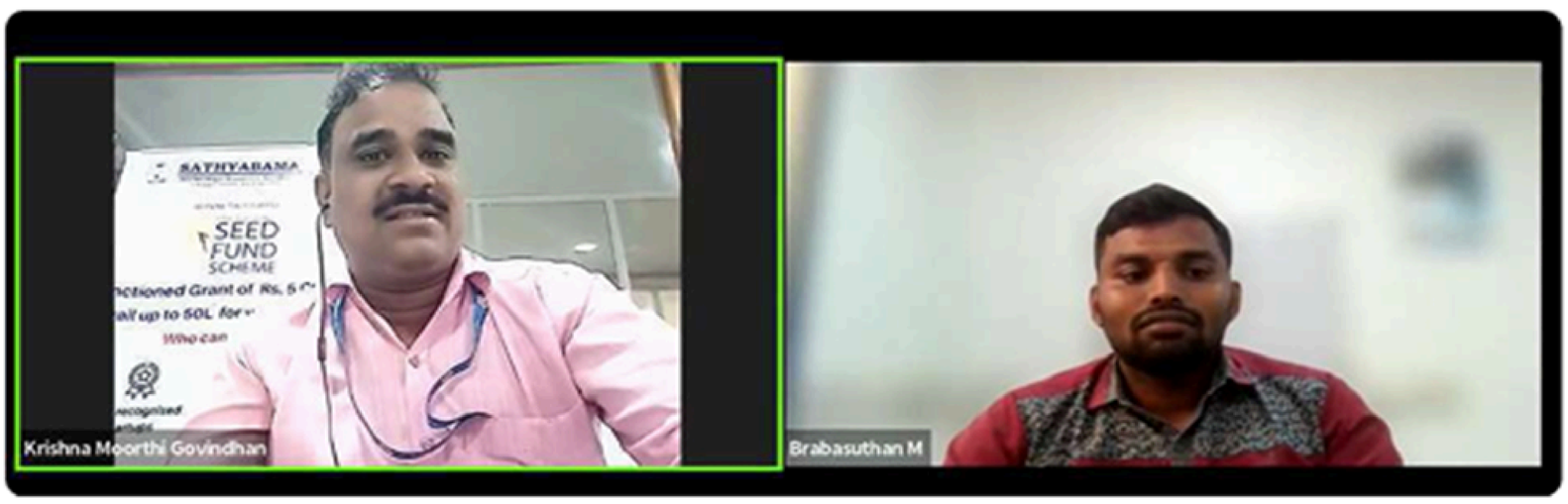
c. Outcomes & Evidence

- **Strong research funding, startup pipeline and high placement numbers align well with THE's SDG 8 metrics on decent work, growth and innovation linkages.**

Events :

STARTUP SME GROWTH SCHOOL

STARTUP SME GROWTH SCHOOL ON MSME - AWARENESS ON UDAYAM REGISTRATION



Udayam Registration - Online session
23.01.2024

Sathyabama TBI's initiative, Startup SME Growth School, organized a session on MSME Awareness focusing on Udyam Registration to explore its possibilities and complexities on January 23, 2024. Attendees benefited from comprehensive insights, gaining valuable knowledge essential for business growth and compliance. The session included practical tips for navigating the registration process and understanding the regulatory requirements. Participants were also provided with resources to help them implement what they learned effectively in their own ventures.

MENTOR DEVELOPMENT PROGRAM



Mentor Development Program
05.01.2024 & 06.01.2024

SDG 8 - DECENT WORK AND ECONOMIC GROWTH

Sathyabama TBI Organized a Mentor Development Program for the faculty members of Engineering & Technology from January 6, 2024, to January 7, 2024. Mr. Gaddam Sudarshan, Mentor at Bhartiya Yuva Shakti Trust, trained the mentors to support aspiring student entrepreneurs in building successful ventures. This program aimed to equip faculty members with the necessary skills to guide students through the entrepreneurial process. The interactive sessions included best practices for mentoring and strategies for fostering innovation and growth in startups.



Scale Your Startup
27.02.2024

Sathyabama TBI and Open Weaver jointly organized the "Scale Your Startup" training on February 27, 2024, at the Sathyabama TBI Training Hall. The program, led by Mr. Ashok Balasubramanian, CEO of Open Weaver, provided practical insights for scaling startups in today's competitive landscape. Around 50 students attended, gaining valuable strategies for navigating startup challenges. The training covered key topics such as growth strategies, operational efficiency, and market expansion. Participants had the opportunity to engage in interactive sessions and receive personalized advice from the expert, enhancing their ability to implement effective scaling strategies in their ventures.



SDG 8 - DECENT WORK AND ECONOMIC GROWTH

“Startup Voyage” – An Entrepreneurial talk series was organized by Sathyabama TBI, to promote growth stage startups with valuable insights and guidance to aspiring entrepreneurs. The program focused on skills for startup and aspects of fund raising for successful business.



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3rd International Conference on Waste, Energy and Environment



SDG 8 - DECENT WORK AND ECONOMIC GROWTH







Governance and policies supporting decent work

·Employment standards: Policies for non-discrimination, equal opportunity, and safe workplaces; staff development and transparent recruitment.

·Student employability: Structured placement support, internship facilitation, and industry partnerships embedded into academic planning.

·Responsible operations: Procurement and vendor engagement aligned with ethical labor, safety, and compliance norms.



SDG 8 - DECENT WORK AND ECONOMIC GROWTH

Programs advancing economic growth and employability

·Placement and career services: Annual placement cycles, employer engagements, and skills bridging programs.

·Entrepreneurship and incubation: Support for student startups, innovation challenges, and mentorship networks to catalyze local job creation.

·Community skilling: Outreach training for youth and marginalized groups, aiming at employability, micro-entrepreneurship, and digital inclusion.

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 9

INDUSTRY, INNOVATION AND INFRASTRUCTURE



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SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

To advance inventive technologies and redefine scientific and engineering frontiers, Sathyabama Institute of Science and Technology has invested in cutting-edge research and interdisciplinary collaboration. By addressing global challenges in energy, healthcare, environment, and technology, we aim to build a sustainable, equitable, and innovative future. Our institution consistently promotes innovation through faculty development programs, student workshops, expert lectures, outreach initiatives, and events on Intellectual Property Rights and emerging research technologies. Our incubation centre operates within the Sathyabama Research Park, spanning 22,000 sq. ft. of dedicated space for startups, research, and innovation Accordingly, the following facilities were developed during the academic year 2023–2024.

Driving Innovation Through Startups

Sathyabama Institute of Science and Technology has built a dynamic Startup Cell that actively nurtures entrepreneurial talent among students, alumni, and faculty. Its initiatives are designed to transform ideas into viable ventures, with a strong emphasis on innovation, sustainability, and industry relevance.

During the academic year 2023-2024, our institution has established total of around 97 spin-offs in which maximum spin-offs were with institution ownership and there are also spin-offs which were not owned by the institution.

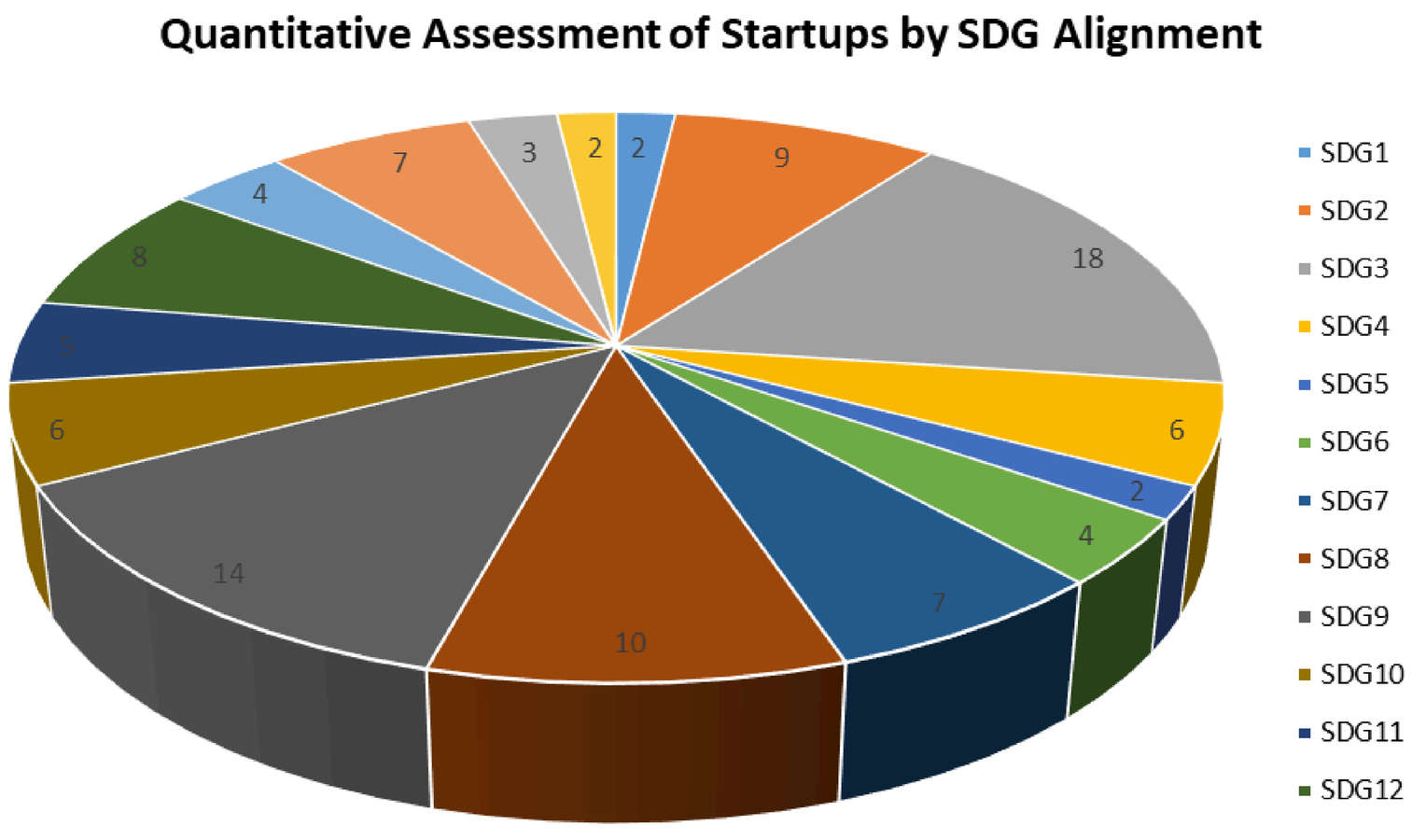
Our institution continues to foster innovation and entrepreneurship through its Technology Business Incubator (TBI), which supported numerous startups and spinoffs. Department of Science & Technology, the Sathyabama TBI is the first in India to focus on the Blue Economy, supporting ventures in marine sustainability, manufacturing, and social impact These ventures, involving both students and faculty, span diverse domains including healthcare, aquaculture, agriculture, embedded systems, fintech, web applications, agricultural equipment, and waste management. Sathyabama TBI is acknowledged as a leading incubator in South India by Startup India, Startup TN, and DST-NSTEDB.

The Sathyabama Technology Business Incubator (TBI) conducted several events in 2023-2024, including awareness sessions on "Innovation and Entrepreneurship" and "Startup Anchor," as well as programs like the "Startup SME Growth School" and "Investor Cafe". These activities aimed to support students in developing their innovative ideas into successful startups, from ideation and skill development to attracting investment.

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

The TBI also has specific focus areas like the Blue Economy and Marine Bioresource Utilization, and offers support like mentorship and grants to budding entrepreneurs. To further strengthen its entrepreneurial ecosystem, the university hosted StartUp Fest 2024, providing funding and recognition to top-performing ventures. Backed by the Government of India, the Sathyabama TBI continues to serve as a hub for incubation, mentorship, and support, empowering students and faculty to transform ideas into impactful enterprises.

Centre for Innovation and Technology Transfer is a Sathyabama Innovation Council formed as a non-profit section 8 company by Sathyabama Institute of Science and Technology for fostering entrepreneurship and nurturing deep tech start-ups. It administers a business incubator which provides 'Start to scale' support for technology-based entrepreneurship and facilitates the conversion of research activity into entrepreneurial ventures.



Diverse Startup Portfolio:

- **PrEl's Biotech India Pvt Ltd: Focused on Blue Biotechnology, developing enzyme-based solutions for oil and heavy metal pollution in water.**
- **MVG Digital Consulting Pvt Ltd: A Web 3.0 company creating educational products for children using advanced technologies.**
- **Glonix Electronics Pvt Ltd: Specializes in customized PCB board manufacturing, supporting electronics innovation.**
- **Koshell Cutlery Pvt Ltd: Innovating in sustainable consumer products, reflecting the institute's emphasis on eco-friendly ventures.**

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Highlights of 2023–2024 startups include:

- **Smart wearable glasses for enhanced accessibility**
- **Organic immune boosters for aquaculture**
- **AI-powered agro drones for precision farming**
- **Autonomous spray-painting drones for industrial use**
- **A fintech ecosystem with “buy now, pay later” solutions**
- **A digital platform for educational accreditation documents**
- **Equipment designed to remove pesticide residues**
- **Biodiesel production from waste oil**
-

Startup Fest 2025 – Ignition: Inspire & Ideate has brought together founders, investors, and mentors from Zoho, AccelerateX Ventures, ECO HQ, Bluewind Innovations, and others, creating a collaborative platform for students to connect with real-world entrepreneurs.

DPIIT Connect 2025: Organized with StartupTN, TANSAM, and EDII, linking startups with mentors, bankers, and industry leaders for funding and legal support. The Institution Innovation Council of Sathyabama Institute of Science and Technology observed India’s Presidency of the G20 on 30 August 2023. Student participants were briefed on the significance of the G20 Summit, India’s role and presidency, its objectives, goals, and various initiatives.

Research Projects

The institution has 82 projects in which 51 new projects secured worth approximately 20 crores in the 2023-2024 period. This includes an EU-funded ERASMUS capacity-building project where Sathyabama is one of 14 coordinating institutions worldwide.

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Project	PI	Funding Agency	Department	Year	Funds (Lakhs)
All India Workshop on An Awareness Workshop on Energy Management and Audit	Dr. S. D. Sundarsingh Jebaseelan (PI)	IEI - The Institution of Engineers (India), Kolkata	Electrical and Electronics Engineering	2023	0.4
Developing Future-Oriented Academic Curricula in Teacher Education with Innovative Methodologies for Nex-Gen Asian HEIs – FRACTION	Dr. Kannan N, Dr. Kalai Lakshmi TR	ERASMUS+	Management Studies	2023	58
Optimization and Life Cycle Assessment of the One Part Alkali Activator Solution for the Production of Geopolymer Composites	Dr. SivaSakthi (PI)	SERB -POWER GRANT	Centre for Waste Management	2023	26.76025
Exploring Temperature and Salinity Tolerant Mosquitoes along the Coastal Tamilnadu and Its Influence on Mosquito Borne Disease	Dr. Grace Kanmani	ICMR	Biomedical Engineering	2023	33.37356
BIRAC - BIG 22	Dr. Anima Nanda	BIRAC	Biomedical Engineering	2023	5

Competency Assessment of In-Service Community Health Officers in Public Primary Health Centre Setting in Odisha Health Policy and System Research	Ms. Ponnambily Chandy (PI), Dr. Y Swarnalatha (Co-PI)	ACCESS Health International, USA	Biomedical Engineering	2023	36.63697
Surface Modification and Nanotechnological Approaches for Antifouling Applications (Marine Biotechnological Studies (MBT))	Dr. D. Inbakandan	MoES-ESTC	Department of Atomic Energy	2019	67.99693
Studies on the Implication of Nanoparticles and Bionanocomposites on Aquatic Organisms (Marine Biotechnological Studies (MBT))	Dr. V. Karthick, Dr. Stalin Dhas T	MoES-ESTC	Department of Atomic Energy	2019	88.25368
Enhancement of Marine Microbial By Products for Biomedical Applications	Dr. L. Stanley Abraham	MoES-ESTC	Marine Biotechnological studies (MBT)	2019	59.64333
Isolation and Identification of Bioactive Compounds from Marine Sponges for White Spot Syndrome Virus (WSSV) Control	Dr.K.Govindaraju	MoES-ESTC	Marine Biotechnological studies (MBT)	2019	54.43963

Biofunctionalization of Nanoparticles for Anticancer Applications Using Marine Bioresources	Dr. Ganesh kumar v	MoES-ESTC	Marine Biotechnological studies (MBT)	2019	59.22383
Exploring Fish Gut Associated Bacteria for Their Aquaculture Probiotic Properties Ministry of Earth Sciences	Dr. Gopikrishnan (PI), Dr. Radhakrishnan (Co-PI), Dr. T. Rajasekar (Co-PI), Dr. S. Kumaran (Co-PI)	Ministry of Earth Sciences	Pharmacy	2023	9.2
Bioinert Super Hydrophobic Coating A Better Alternative for Excessive Bone Overgrowth Protection (Indian Council of Medical Research, India)	Dr. Gobi Saravanan (PI), Dr. Manjunath Kamath (Co-PI)	Indian Council of Medical Research, India	Centre for Nanoscience and Nanotechnology	2023	18.5
Exploring Temperature and Salinity Tolerant Mosquitos along the Coastal Tamil Nadu and Its Influence on Mosquito Borne Disease Dynamics	Dr. Amitkumar (PI), Dr. Krupakar Parthasarathy (Co-PI), Dr. Grace Kanmani (Co-PI) - Biomedical, Dr. Bethanney Janney (Co-PI) - Biomedical	Indian Council of Medical Research, India	Biomedical Engineering	2023	97
Assessing the Conservation Priority of Freshwater Shrimps of Central Western Ghats (Association of Tropical Biology and Conservation)	Dr. Prakash (Mentor), Ms. K Kunjulakshmi (PI)	Association of Tropical Biology and Conservation	Biomedical Engineering	2023	0.8

Preclinical and Clinical Validation of Safety and Efficacy of Traditional Unani Formulation	Dr. Swarnalatha (PI), Ms. Sidhika (Co-PI), Mr. Krishnamani Kumar (Co-PI)	Central Council for Research in Unani Medicine	Biomedical Engineering	2024	41.3784
Systematic Study on Vascular Plant Rhizosphere Soil Microbiota from Arctic Ecosystem for	Dr. K. Manigundan (PI), Dr. Radhakrishnan (Co-PI)	NCPOR	Biotechnology	2024	20
Two Days National Conference on Recent Advances in Biomaterials for Medical	Dr. T. Rajasekar	DBT	Bio and Chemical Engineering	2023	1.5
National Conference on Current Trends in Marine Biotechnology from Sustainable	Dr. T. Rajasekar	MoES	Bio and Chemical Engineering	2023	1
Three Day Workshop on Primer Designing & RT PCR for Biomedical Agricultural and	Dr. T. Rajasekar	SERB	Bio and Chemical Engineering	2023	1.5
SCSP Science for Equity Empowerment and Development (SEED) Division	Dr. S. Barani, Dr. S. Poonapushpakala, Dr. M. Subramoniam	DST	Electronics and Communication Engineering	2023	236.05264

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

DST STEMM	Dr. V. Vijaya Baskar, Dr. M. S. Godwin Premi, Dr. R. Narmadha, Dr. N. Mathan	DST	Electronics and Communication Engineering	2023	23.52
BRNS	Dr. V. Vijaya Baskar, Dr. E. Logashanmugam, Dr. M. S. Godwin Premi	BRNS	Electronics and Communication Engineering	2023	21.875
DST STEMM	Dr. V. Vijaya Baskar, Dr. M. S. Godwin Premi, Dr. R. Narmadha, Dr. N. Mathan	DST	Electronics and Communication Engineering	2023	21.585
Prediction and Analysis of Mesoscale Thunderstorm in India - A Computational Approach-MOES	Dr. Sardar Maran, Dr. L. Lakshmanan	MoES	Computer Science and Engineering	2023	20.73
Yukti Innovation	Dr. Sivasangari	AICTE	Computer Science and Engineering	2023	4
Effectiveness of URHAB Platform	Dr. Deepa S, Assistant Professor (PI), Dr. Priya Kumari, Assistant Professor (Co-PI)	SMART home health care solutions PVT LTD	Physiotherapy	2023	1

National Skill Development Corporation under PMKVY 4.0 -240 TARGETS	Dr. S. Radhika (PI)	Skill India-Pradhan Mantri Kaushal Vikas Yojana (PMKVY)	Electrical and Electronics Engineering	2023	16
Mosquito Power Guard: An Innovative Solution for Safe Mosquito Control in Rural Communities	Dr. V. SenthilNayagam (PI), Dr. M. Kavitha (Co-PI)	Unnat Bharat Abhiyan (UBA) Program of MOE	Electrical and Electronics Engineering	2023	1
Solar Powered Wood Chekku Oil Machine	Dr. S. D. Sundarsingh Jebaseelan (PI), Dr. D. Godwin Immanuel (Co-PI), Dr. Ramesh Babu (Co-PI)	Unnat Bharat Abhiyan (UBA) Program of MOE	Electrical and Electronics Engineering	2023	1
Margadarshak Scheme	Dr. Sasiprbha, Dr. M. Bavanilatha, Dr. Gobi Saravanan	AICTE	Computer Science and Engineering	2023	6
Awareness on Cyber Threats and Security Measures for Online Safety among School Children	Dr. Bharathi B, Dr. Sathyabama	Government of India, Department of Science and Technology	Department of science and technology	2023	28.905
Development of Antifouling Technologies Against Green Mussel Fouling for Process Cooling Water System of MAPS	Dr. D. Inbakandan	DAE-BRNS	Department of Atomic Energy	2020	33.971
Marine Microbial Product Based Eco-Friendly Nanocomposites for Marine Antifouling	Dr. D. Inbakandan	DBT	Department of Atomic Energy	2021	60.5048

SERB Start Up Research Grant	Dr. D. Jeyapragash,	SERB	Department of Science and Technology	2022	24.5026
Development of C60-Fullerene-PDMS Based Catheter Endowed with Reduced Inflammation & Infection	Dr. V. Karthick	DAE-BRNS	Department of Atomic Energy	2022	19.371
Toxicity of Microplastics and Phthalates, as Well as Their Abundance, Distribution and Diverse in Ground Water and Surface Water from Ennore to Kovalam on the East Coast of India	Dr.P.M.Velmurugan (PI)	DST-SERB	Center for Earth and Atmospheric Sciences	2022	22.6336
Toxicity of Microplastics and Phthalates, Their Quantity, Distribution, and Causes in Groundwater and Surface Water, and Essential Preventive Measures on the East Coast of Tamil Nadu, India, from Cuddalore to Nagapattinam	Dr.P.M.Velmurugan (Co-PI)	DST-SERB	Center for Earth and Atmospheric Sciences	2023	29.9757
DST-SERB-Outreach	DST-SERB-Outreach	DST-SERB	Physics	2024	1.5
MoES-Outreach	Dr. K. Nagamani	MoES	Centre for Remote Sensing and Geoinformatics	2024	2.5

ISRO DMSP Outreach	Dr.K.Nagamani	ISRO DMSP	Centre for Remote Sensing and Geoinformatics	2023	2.47
Extramural Research Grant Scheme	Dr.K.Nagamani	CSIR	Centre for Remote Sensing and Geoinformatics	2021	21.25
Scaleup Incubator MSME, Govt. of Tamil Nadu	Dr. B. Sheela Rani, Mr. R. Praveen	STARTUP - TN	Electronics and Communication Engineering	2023-2024	5
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 BAC'I'EC MGIT 960 System ICMR NIRT	Dr. Krupakar Parthasarathy	ICMR NIRT	Centre for Drug Discovery and Development	2023	15
ICMR DHR Sponsored Workshop Hands on Training & Workshop on Flowcytometry and Cell Sorting for Clinical and Translational Research Applications ICMR DHR	Dr. Krupakar Parthasarathy	ICMR DHR	Centre for Drug Discovery and Development	2023	0.2

Elucidating the Offset Effects of Tribles Gene Using Zebrafish as Excellent In Vivo Models in Treating Acute Myeloid Leukemia (ASEAN-India Science & Technology Development Fund(AISTDF))	Dr. T. Rajasekar (Mentor), Mr. Maheswaran Solayappan (AIMST University Malaysia)	ASEAN-India Science & Technology Development Fund(AISTDF)	Chemical	2024	2.7
Chasing Corallimorpharin Sea Anemone Infestation in the Coral Reefs of Lakshadweep Archipelago (The Habitat Trust)	Dr. S. Prakash, Dr. Amit Kumar	The Habitat Trust	Ocean Resesearch	2023	3
Venom Proteins from Sting Rays: Unraveling Anti-Proliferative Potential Against Breast Cancer MOES	Dr. S. Prakash (PI), Dr. Amit Kumar(Co-PI), Dr. Madan Kumar (Co-PI)	MOES	Ocean Resesearch	2024	62.40528
Development and Fabrication of Advanced Electrodes Architectures for Efficient Hydrogen Production Using Solid Oxide Electrolysis Cells (DST-	Dr. Ajith Kumar(PI), Dr. P. Kuppusami(Co-PI), Dr. Gopika G (Co-PI)	DST-SERB	Ocean Resesearch	2023	20.85

Cspbbr3 Perovskite/ Transition Metal Di-Chalcogenides(Tmdcs) Based Composite Solar Cell for Enhanced Power Conversion Efficiency (SERB)	Dr. Gopika G	DST-SERB	Center for Nanoscience and Nanotechnology	2022	18.3
Development of 1T Transition Metal Di-Chalcogenides Based Heterostructures for Efficient Hydrogen Evolution Reaction (UGC-DAE)	Dr. Gopika G (Co-PI), Dr. P. Vengatesh	UGC-DAE	Center for Nanoscience and Nanotechnology	2023	1.35
Investigations on Rare Earth Doped Oxide Color Tunable Phosphors for White Light Emitting Diode Applications (UGC)	Dr. D. Balaji(PI), Dr. Shyju T S (Co-PI), Dr. P. Kuppusami	UGC -DAE-CSR	Chemistry	2024	1.8
Biofilm Engineering Methods for Enhancing the	Dr. Sathish Kumar R	DST	Chemistry	2024	26.55899
Corrosion and Wear Resistant Behavior of Compositionally Graded NiCrYSZ Nanocomposite Coatings for Nuclear Waste Processing Applications (CSIR ASPIRE)	Dr. Dharani (PI), Dr. Kuppusami (Co-PI), Dr. S. Anandh Jesuraj (Co-PI)	CSIR ASPIRE	Center for Nanoscience and Nanotechnology	2024	26.66832

Awareness on Cyber Threats and Security Measures for Online Safety among School Children (Ministry of Science and Technology (NCSTC))	Dr. Bharathi CSE (PI), Dr. Sathyabama CSE (Co-PI)	Ministry of Science and Technology (NCSTC)	Computer Science and Engineering	2024	28.905
Margdarshan Scheme- Serving as Mentor Institute in Order to Improve the Quality of Technical Education in Mentee Beneficiary Institutions (AICTE)	Dr. T. Sasipraba (Chief Co-ordinator), Dr. Gobi Saravanan (Co-Ordinator), Dr. Bavanilatha (Co-Ordinator) Dept of Biotech	AICTE	Computer Science and Engineering	2024	6
Highly Durability and Flexible Polymeric Nanocomposite for EMI Shielding (BRNS)	Dr. Sanjeev Prasath (PI)	BRNS	Centre for Nanoscience and Nanotechnology	2024	33
Sustained Release of Chrysin and Cerium Oxide Ions from 3D Printed Scaffolds for Prevention of Relapse and Bone Regeneration at Cancer Excision Site and Combinatorial Effect of High Energy Radiation	Dr. Manjunath Kamath (PI), Dr. Subha Krishna Rao (Co-PI)	UGC-DAE-CSR	Centre for Nanoscience and Nanotechnology	2024	1.8
Investigation of the Temperature-Dependent Electrical Properties and Structural Characteristics of Ionic Liquid Mediated Solid Polymer Electrolyte for Sodium Ion Battery	Dr. Sony (PI), Dr. S. Preethi (Co-PI)	UGC-DAE-CSR	Physics	2024	1.95

Development of Magneto-Elastomer for EMI Shielding by Synthesizing Nano-Magnetite from Iron Ore Tailings and Graphite Concentrate from Low Grade Graphite Ore	Dr. Chennakesavelu (PI) - Dept of Chemistry, Dr. Ramanjaneya Reddy Gontu (Co-PI)	UGC-DAE-CSR	Chemistry	2024	1.95
Genotypic Diversity of Microbial Flora in OXIS Contacts of Primary Motors- A Preliminary Exploratory Study	Dr. Sumaiyya S (PI) - Dept of Periodontics, Dental, Dr. Thirugnanasambandam (Co-PI) Dept of Periodontics, Dental, Dr. Vishnu Rekha (Co-PI) Dept of Periodontics, Dental, Dr. Dhanraj Kalaivanan (Co-PI) Dept of Periodontics, Dental, Dr. Muthu Murugan (Co-PI) - Sri Ramachandra Institute of Higher Education and Research	ICMR	Dental	2024	32.76511
Innovation, Design, and Entrepreneurship (IDE) Boot Camps	Dr. T. Sasipraba (Nodal Head), Dr. Bharathi (Co-Ordinator) CSE	Ministry of Education's Innovation Cell & AICTE	Computer Science and Engineering	2024	13.19
Development of DMAZ Fuel That Is Hypergolic with Hydrogen Peroxide	Dr. Subhenjit Hazra (PI), Dr. Kuppusami (Co-PI), Dr. Ajith Kumar (Co-PI)	ISRO	Centre for Nanoscience and Nanotechnology	2023	16.8366
Generation of TTT and CCT Diagrams for 3 Nickel Base Superalloys (XH67, XH55 and XH43) for Application in Liquid Engines	Dr. Dinesh Kumar (PI), Dr. Kuppusami (Co-PI), Dr. Kamalan Kirubakaran (Co-PI)	LPSC/ISRO	Centre for Nanoscience and Nanotechnology	2023	19.0028

Prediction and Analysis of Mesoscale Thunderstorm in India-A Computational Approach	Dr. P. Sardar Maran (PI) - CSE, Dr. Lakshmanan (Co-PI) - CSE	MoEs	Computer Science and Engineering	2023	20.7328
Assessing the Conservation Priorities of Freshwater Shrimps of Western Ghats, India	Dr. Prakash (Mentor), Ms. K Kunjulakshmi (PI)	The Rufford Foundation, UK	Climate change	2023	5.8
Development of Novel Biofilm Detecting Sensor for Oil and Gas Pipelines	Dr. Sudha Uthaman (PI)	SERB -POWER GRANT	Centre for Nanoscience and Nanotechnology	2024	27.676
Development of Novel Copper Sulfide-Based Heterostructure Nanocomposite for High-Performance Thermoelectric Device Application	Dr. M. Rajasekar (PI), Dr. Murugadoss (Co-PI)	UGC-DAE CSR	Centre for Nanoscience and Nanotechnology	2023	15
Real-Time Plasma Localization System for Tokamak Plasma Images in SST-1	Dr. Vijayabaskar (PI) CSE, Dr. Logashanmugam (Co-PI) - ECE, Dr. Godwin Premi (Co-PI) - ECE	BRNS	Electronics and Communication Engineering	2023	24.5625
Smart Projector	Dr. Vijayabaskar (PI) - CSE	EDII- IVP	Electronics and Communication Engineering	2023	2.45

Media Treated Seedlings for Spoilage-Free Farming	Dr. Sudha (PI)	EDII- IVP	Centre for Nanoscience and Nanotechnology	2023	2.19
Ozonizer for Removal of Pesticides on Vegetables and Fruits	Dr. Chennakesavelu (PI)	EDII- IVP	Chemistry	2023	2.55
Smart Stick for Elders	Dr. Vigneshwari (PI)	EDII- IVP	Computer Science and Engineering	2023	2.47
Real-Time Facemask Detection on Convolution Neural Network	Dr. Godwin Premi (Mentor) - ECE, Dr. Nay Kyi Tun (Myanmar)	FICCI	Electronics and Communication Engineering	2024	4.15
Traffic Sign Recognition System Using Convolutional Neural Network	Dr. Godwin Premi (Mentor) - ECE, Dr. Kay Thinzar Phu (Myanmar)	FICCI	Electronics and Communication Engineering	2023	4.15
Tomato and Potato Plant Disease Recognition and Classification Using Convolutional Neural Network	Dr. Godwin Premi (Mentor) - ECE, Dr. Soe Paing (Myanmar)	FICCI	Electronics and Communication Engineering	2023	4.15
Evaluation of the T Lymphocyte Response in Breast Cancer	Dr. Manjunath (Mentor), Mr. Djimenan Boilengar (Chad)	FICCI-CV Raman Fellowship	Centre for Nanoscience and Nanotechnology	2023	1.65

Evaluation of the Anticancer Activity and the Anti-Metastasis Mechanism of Action in Vitro and In Vivo of Tetrapleura Tetrapleura Fruits Crude Extract	Dr. T. Rajasekar (Mentor), Mr. Idrios Bonsou (Cameroon)	DBT UNESCO TWAS	Centre for Nanoscience and Nanotechnology	2023	4.292
Diversity and Distribution Actino Bacteria in Arctic During Polar Nights and Their Adaptation Properties	Dr. Radhakrishnan (PI), Dr. Gopikrishnan (Co-PI)	NCPOR	Centre for Nanoscience and Nanotechnology	2023	20
Creating Awareness on Extended Technologies-Artificial Intelligence, Augmented Reality and Virtual Reality	Dr. Godwin Premi (PI) - ECE, Dr. Vijayabaskar (Co-PI) - CSE, Dr. S. Karthikeyan (Co-PI) - ECE, Dr. R. Narmadha (Co-PI) - Mechatronics, Dr. Susitra (Co-PI) - EEE, Dr. Anderson (Co-PI) - Aero, Dr. Magalaon Leo (Co-PI) - ECE	DST-NCSTC	Electronics and Communication Engineering	2023	24.58
Fundamental Research Grants Scheme	Dr. Manjunath Kamath (PI)	Ministry of Education, Malaysia	Centre for Nanoscience and Nanotechnology	2023	32
Mutational and Functional Analysis of Nucleocapsid(N) Protein of SARS CoV-2 and Its Variants in the Formation of Virus Like Particles (VLPs)	Dr. Krupakar Parthasarathy (Mentor), Ms. Sudhanarayani Rao	UGC- SJSGC	Centre for Drug Discovery and Development	2023	26.48

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Total amount generated from consultancy and corporate training year wise during the year (INR in lakhs)			
Name of the consultant	**Name of consultancy project**	**Consulting/Sponsoring agency with contact details**	**Revenue generated (INR in Lakhs)**
Dr.A.Mary Posonia.Dr.B.Bharathi,Dr.D.Usha Nandini,Dr.B.Ankayarkanni	Excelr	Excelr Edtech Pvt Ltd	0.99
Dr.K.Ashokkumar, Dr..S.Prince Mary , Dr.A.Yovan Felix	Smart Bridge Pvt Ltd	Smart Bridge Pvt Ltd	0.55
Dr.K.Ashokkumar, Dr.J.Albert mayan	Cognibot Robotics	Cognibot Robotics	1.19
Dr.L.Lakshmanan, Dr.K.Ashokkumar, Dr.J.Albert mayan	Macincode Technologies	Macincode Technologies	2.03
Dr.Usha Nandhini, Dr.Mary Posonia	SmartBridge Educational Service Pvt Ltd.	SmartBridge Educational Service Pvt Ltd.	1.05
Dr.Prince mary, Dr.Ramya Franklin	Cognibot Robotics Pvt Ltd	Cognibot Robotics Pvt Ltd	1
Dr.Gomathi 2. Dr.Prince mary 2. Dr. J. Albert Mayan 3. Dr.Cruz Antony 4. Dr.Ramya Frnklin 5.Ms.D.Deepa, 6.Mr.R.Vignesh	Cognibot Robotics	Cognibot Robotics	1
Dr. K. Ashokkumar Dr. L. Lakshmanan Dr. J. Albert Mayan	Algox Fusion	Algox Fusion	2.35
Dr.Vigneshwari Dr.Veena Dr.R.Sathyabama	Credo Systemz	Credo Systemz	1.95
Dr.Sivasangari Dr.Ajitha Dr.Sathyabama Dr.Rajasekar	Futuro Focus Pvt Ltd	Futuro Focus Pvt Ltd	0.58
Dr.K.Ashokkumar, Dr.J.Albert mayan.Dr.Dhamodaran	Excel R	Excel R	0.83
Dr A.sivasangati	Iview sense technology	Iview sense technology	0.5
Dr. L. Stanley Abraham	Bioefficacy of EM Solution	Kanishka Imports and Exports	1.54

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

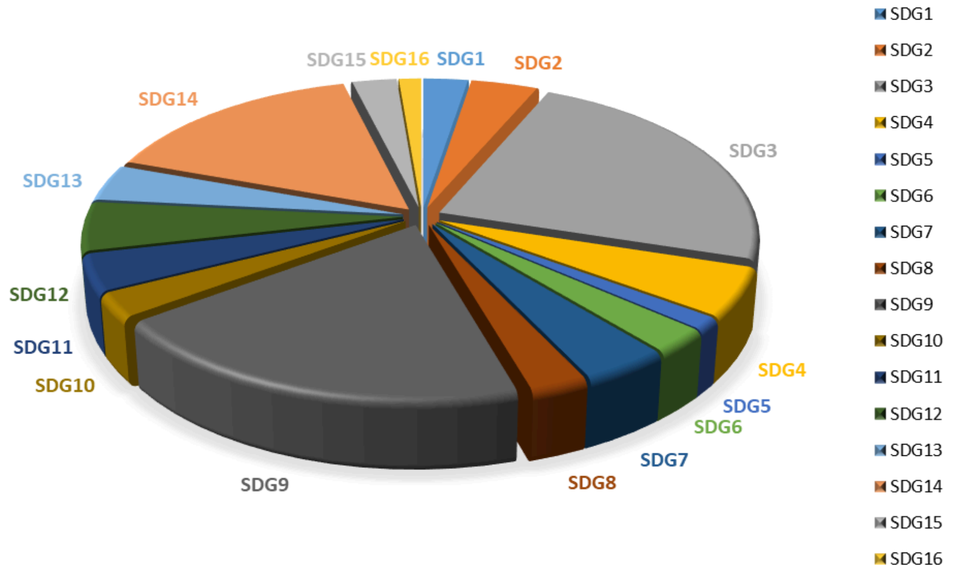
Dr. V. Karthick	Plant-based edible scaffolds microcarriers and assess its blocompatibilltv on primary muscle progenitor cultures of fish for meat production	Umami Bioworks	2.20011
Dr.K.Govindaraju	Enzymatic inhibition assay and in vitro studies for the test product GLUBLOC	My Pura Vida Wellness Pvt Ltd	0.59
NRSC-ISRO	NRSC-LDS Sathyabama stattion	National Remote Sensing Centre, Balannagar, Hyderabad, Telangana	1
Geospatial and Marine Consulting Services, Madurai	Creating a Digital Database of Arizona City in the US using Remote sensing and GIS	Geospatial and Marine Consulting Services, Madurai	1.5
Shiva Prema Industries	Skill Development Program on New Product and Rapid Prototyping using 3D printers		0.096
Think-In Lab	Proto Cafe (Internship on Innovation and Product development)		0.366
MSME	MSME-EDP Program for Startups & MSMEs		0.12
Dr. Radhakrishnan	COPD Bio marker Discovery	Medway Institute of Pulmonology, Chennai	3
Dr. Radhakrishnan	Molecular cloning of Industrially Importment	PrELs Biotech	1

Dr.Krupakar Parthasarathy	Flowcytometry for Diagnostics	VivagenDx Labs	2
Er. Vanjinathan	Third party Inspection & Municipality Consultancy-Civil	Nagarpura Salai Mempattu Thittam, NSMT	39.17068
Dr. Viswanathan	Elemental Compositional Analysis	ZF Commercial Vehicle Control System India Limited (Formerly Known as WABCO INDIA LIMITED) Plant III,Unit I,Plot No.A, A8,Central Avenue,Auto Ancillary-SEZ ,Mahindra World City,Chengalpet,Kanchipuram Dt., PIN 603 002,India.Phone:91-44-47442000,30901200.Fax:044-47490006	0.97704
Dr. Viswanathan	Elemental Compositional Analysis	ZF Commercial Vehicle Control System India Limited (Formerly Known as WABCO INDIA LIMITED) Plant III,Unit I,Plot No.A, A8,Central Avenue,Auto Ancillary-SEZ ,Mahindra World City,Chengalpet,Kanchipuram Dt., PIN 603 002,India.Phone:91-44-47442000,30901200.Fax:044-47490006	0.25
Dr. Viswanathan	Elemental Compositional Analysis	Metallurgical Testing Services Porur | Chennai | 600116 . Phone: +91 44 24765675, +91 44 48636661 GSM : +91 73977 98474 | E Mail : info@mts-india.in Website: Metallurgical Testing Services (MTS)	1.1
Dr. Viswanathan	Elemental Compositional Analysis	GLR Labs	4.4

Dr. Viswanathan	Elemental Compositional Analysis	Kemin Industries South Asia Pvt Ltd	0.136
cSoftTechmologies Private Ltd	Automation of API Testing	cSoftTechmologies Private Ltd	0.1
Hackwit Technologies Pvt Ltd	Pro-Tutor	Hackwit Technologies Pvt Ltd	1.5

Total Research Income (in INR)	192333783
Research income from industry and commerce by subject area (in INR): STEM	115866174
Research income from industry and commerce by subject area (in INR): Medicine	59544633
Research income from industry and commerce by subject area (in INR): Arts & Humanities/ Social Sciences	8516025

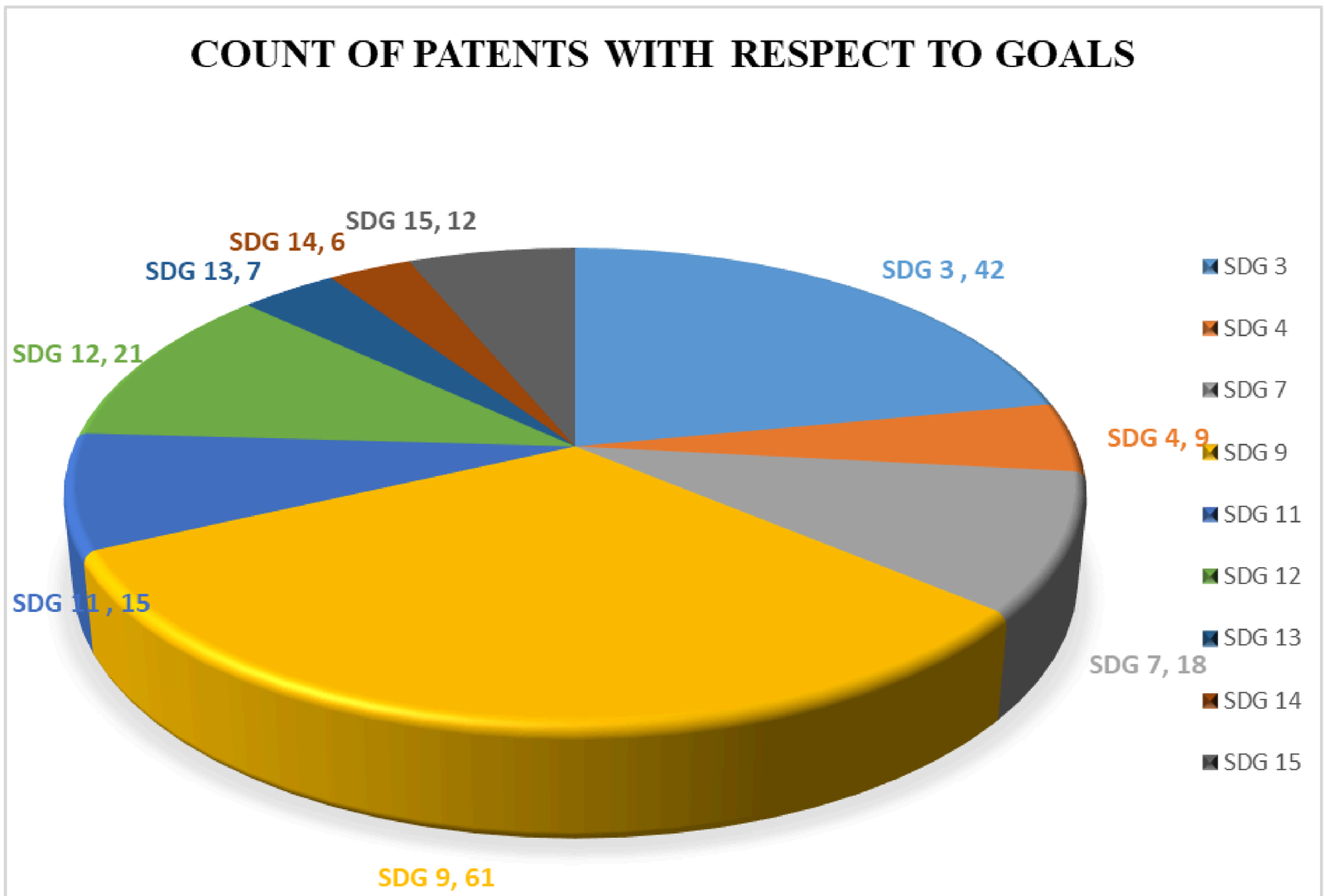
CONTRIBUTION TO DIFFERENT GOALS THROUGH RESEARCH AND CONSULTANCY



SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Research Patents

Sathyabama advanced around 237 patents during the assessment year spanning mobility, assistive health technologies, smart infrastructure, clean water, advanced materials, and sustainable energy. Below are standout filings and grants with the key impact they enable.



Industry-Academia MoU

Sathyabama has signed a total of 70 Memoranda of Understanding (MoUs) during the academic year 2023-2024 to foster technology transfer, skill development, and research.

Name of the institution/ industry/ corporate house

- ExcelR solutions
- Multi Dimensional Technologies(OPC) Pvt Ltd
- Oracle Corporation
- Space Zone India
- FABC (First Academy of Blockchain Council),Dubai
- Hackwit
- UOW Malaysia KDU Penang University College Sdn Bhd
- Vasinev Gaming Solutions private limited
- Mobile Tutor Pvt. Ltd
- Epical Layout Pvt. Ltd
- TIAS Energy PVT LTD

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

TRANSUN Energy india PVT LTD

- **DG Vaishnav College**
- **Lead Consultancy Engineering Services India Pvt.Ltd**
- **Infinity PMC Solutions Pvt. Ltd**
- **Techapps Consulting, Chennai**
- **Apparel,Made-ups & home furnishing sector skill council, Tirupur, India**
- **Kidzee preschool, sithalapaakam**
- **New hope and New life orphanage, perumbaakam**
- **kidzee preschool, Perumbaakam**
- **Kirubai old age home, Perumbaakam**
- **Incare lab and cannarma private limited**
- **Hemp engineering**
- **Cheeba cannabis academy**
- **Hiyoshi India Ecologicals Pvt. Ltd**
- **Space Zee technology**
- **Gulf Medical University**
- **Surana & Surana**
- **Selvam & Selvam**
- **Indian Community Welfare Organization**
- **Legal Rights and Consumer Protection Organization**
- **Dr.Kalaignar M.Karunanidhi Government Institute for Post Graduate Studies & Research**
- **National Remote Sensing Centre, ISRO, Dept of Space, Atmospheric Science Division**
- **Mongolian University of Science and Technology, Mongolia**
- **Tamil Nadu Startup and Innovation Mission**
- **Hosur Industries Association Hosur Micro Industrial Association**
- **Ticel Bio Park**
- **Double Loop Advisory PVT LTD**
- **Vel tech TBI**
- **Cultiv8 ,Coimbatore**
- **Connect 2 Investors**
- **CSIR - NEERI, Nagpur**
- **Medway Hospital, Chennai**
- **Copperbelt University, Kitwe, Zambia**
- **Avyukth Cow Products**
- **AATSEA, Thailand**

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

- KMITL, Thailand
- Biopol Bioscience Pvt. Ltd., Bengaluru, India
- Ramakrishna Medical Centre LLP, Trichy, Tamil Nadu
- AVN Ayurveda Formulations, Madurai, Tamil Nadu
- Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu
- Central Institue of Brackishwater Aquaculture, Chennai
- Neelithal Aqua Farms Ltd.
- AAARNA Therapeutics and Vaxigen International Research Centre Private Limited
- Federal state autonomous educational institution of higher education, Volgogard State University
- Orcci Eco Products
- Transilvania University of Brasov, Romania
- University Technology Malaysia (UTM), Malaysia
- Nottingham Trent University , UK
- MAHSA University, Malaysia
- Cukurova University, Turkey
- University Malaysia Pahang(UMP), Malaysia
- University Putra Malaysia(UPM), Malaysia
- Universiti Teknologi Mara (UiTM), Malaysia
- LeTourneau University, USA
- Powiślański University, Poland
- STIKI Malang, Indonesia
- Masha University
- Manipal University
- Universiti Technology Malaysia

In continuation to our MoU with Medway Hospital, our Centre of Excellence for Additive Manufacturing have printed a complete ‘Human Lung Model’ for COPD using the CT lung scan with our 3D printers at the Makerspace Lab, Sathyabama Centre for Advanced Studies.

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE



Centre of Excellence for Drones and UAVs has been established by the Department of Aeronautical Engineering, in collaboration with our MoU partner Jet Aerospace Aviation. The Research Centre was formally inaugurated on 7 August 2023.



SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Industry–Institute Interaction Cell (IIIC)

Ongoing collaboration between industry and academia is vital for preparing graduates to meet real-world expectations. To strengthen this relationship, Our Institution has established the Industry–Institute Interaction Cell (IIIC). The Cell provides a dynamic platform for students and faculty to understand industry needs, explore emerging technologies, and adopt best practices. Through IIIC, industry experts actively contribute to curriculum design and career development programs, ensuring students acquire relevant skills. Faculty members also gain valuable industrial exposure, enriching the teaching–learning process and enhancing the institution's standing in the global knowledge index.Beyond academics, students participate in national and international industry-related contests, consistently earning recognition in hackathons and coding competitions, further demonstrating the university's commitment to nurturing innovation and excellence.

https://www.sathyabama.ac.in/placements/Industry-Relations

Sathyabama has signed several MOUs with numerous industries for the purpose of enriching the Quality of Education imparted to students. Some of the notable Industrial accreditations / MOUs signed with are:

♦ Infosys	♦ Cognizant Technology Solutions
♦ Wipro Technologies	♦ HCL
♦ QMax Test Equipments Pvt. Ltd	♦ Capgemini
♦ Accenture	♦ Control Techniques India Pvt. Ltd
♦ Biozone	♦ Virtusa
♦ ServiceNow	♦ ICT Academy

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Infrastructure and Facilities Established

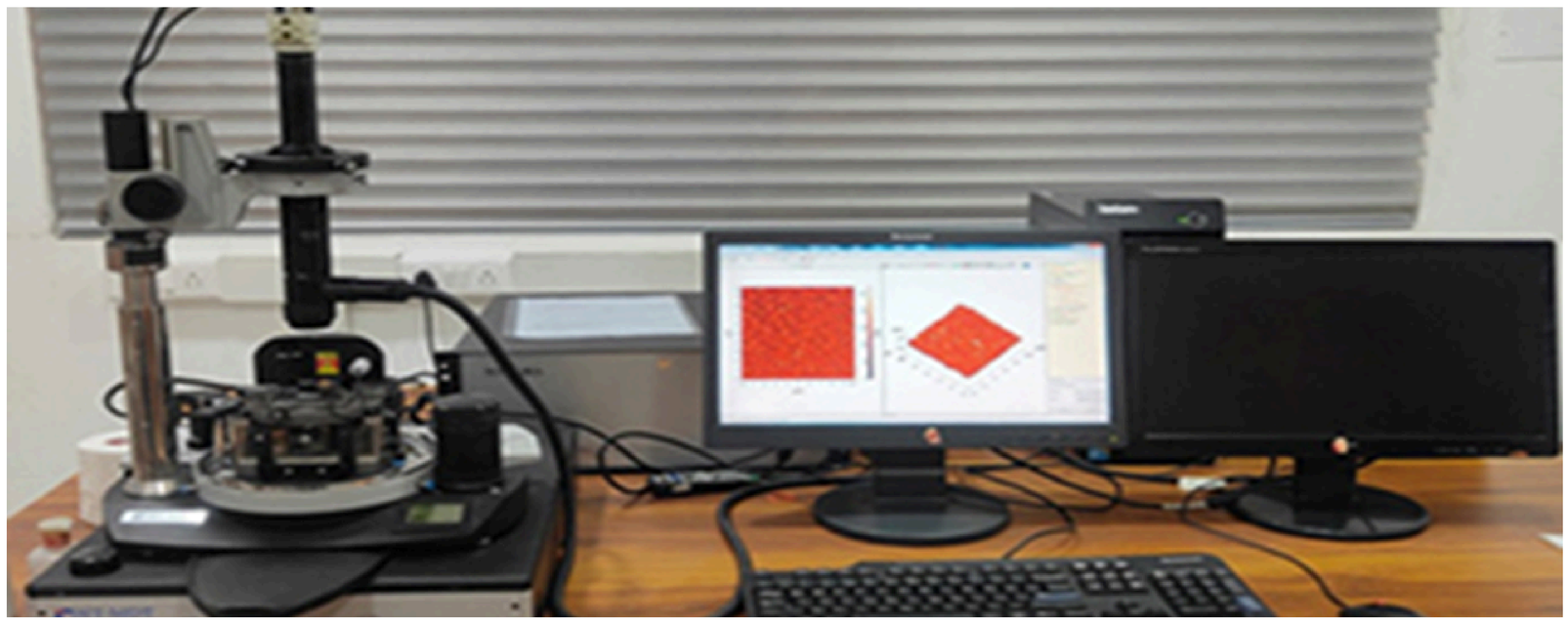
The National Facility for Coastal and Marine Research (NFCMR) has been established at Sathyabama Institute of Science and Technology. It is a world class research infrastructure and received the National Tag from the Ministry of Earth Sciences, Government of India, first of its kind facility for nurturing blue biotechnology research in the country and fostering interdisciplinary collaboration. Dr. M. Ravichandran, Hon'ble Secretary of MoES, declared it a national facility by signing an MoU and exchanging it with our Hon'ble Chancellor. This facility is equipped with an array of specialized laboratories like Bio Visualization Lab, Marine Metabolic Engineering Lab, Cellular Agriculture Lab, Molecular Imaging Hub, Mass Spectrometry Labs (GC-MS/MS and LC-MS/MS), Water Quality Analysis Lab, Toxicology Lab, Underwater Monitoring Lab, Next Generation Sequencing Hub, and Microbiome Lab required for advanced research in marine science and biotechnology.

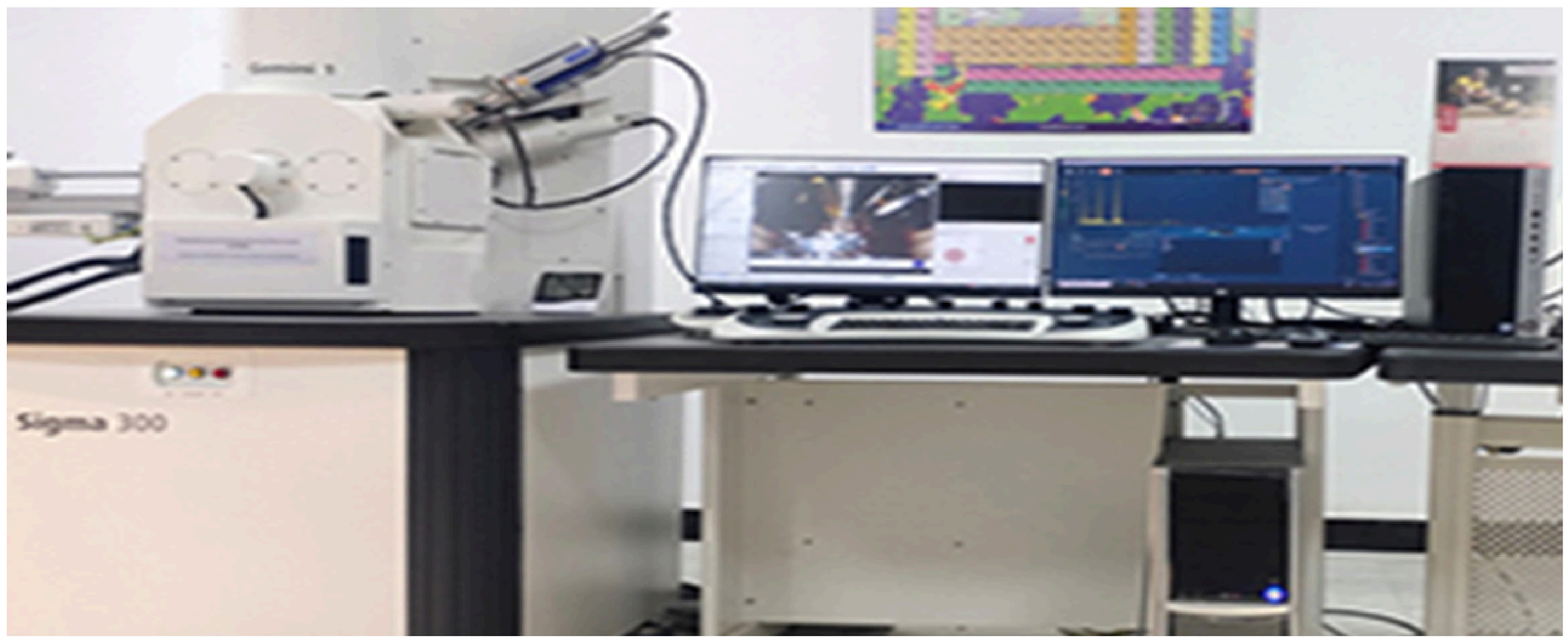


Livelihood and Skill Development Facility is also established to conduct training programs for local communities on marine resource management and sustainable livelihoods Applied Phycology Lab, Halophytes Conservation Lab, and Biomolecules Separation Lab were established in the Centre for Ocean Research to upscale the Blue biotechnology research. Downstream Processing Facility is created for the production of algal-based natural products Advanced GeoEnvironmental Lab was set up in the Centre for Earth and Atmospheric Sciences (CEAS) Molecular Theranostics lab has been set up in the Centre for Laboratory Animal Technology and Research to help the researchers to perform genomic expression studies to make artificial tissues or scaffolds and organoid models which helps in Regenerative Medicine

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Sathyabama Institute of Science and Technology became the first institution in India to install the Nikon Super Resolution Confocal Microscope (AXR with NSPARC technology) and the Flow Cytometry Research Facility (CytoFLEX – Beckman Coulter). The facilities were inaugurated on 27 June 2024 at the Centre for Molecular and Nanomedical Sciences, International Research Centre.





MAKERSPACE (Centre of Excellence for Additive Manufacturing by Stratasys, India)

Sathyabama Institute of Science and Technology in Chennai has a dedicated Makerspace, a state-of-the-art facility accredited as a "Centre of Excellence for Additive Manufacturing" by Stratasys, India which focuses on 3D printing and related technologies. This facility is used for student innovation, research, and industrial support. The centre supports research in various fields, including a project on "Superhydrophobic Coated 3D Printed Temporary Implants" with funding from the Department of Science and Technology (DST), Govt. of India. Students have also used 3D printing for academic projects like designing a bionic arm and re-modelling a customized tooth cap.

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE



The Makerspace provides consultancy services to students, faculties, researchers, and industries for their 3D designs and printing needs. They also provide internship opportunities. Sathyabama frequently organizes workshops and value-added courses on 3D printing and additive manufacturing for students, faculty, and industry professionals. These programs offer hands-on experience in areas like 3D part design, fracture analysis, and the application of 3D printing in various industries.

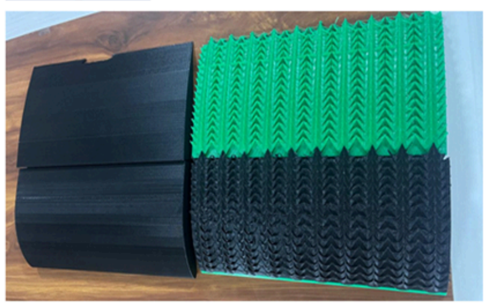


Stratasys Dentajet J5 printer



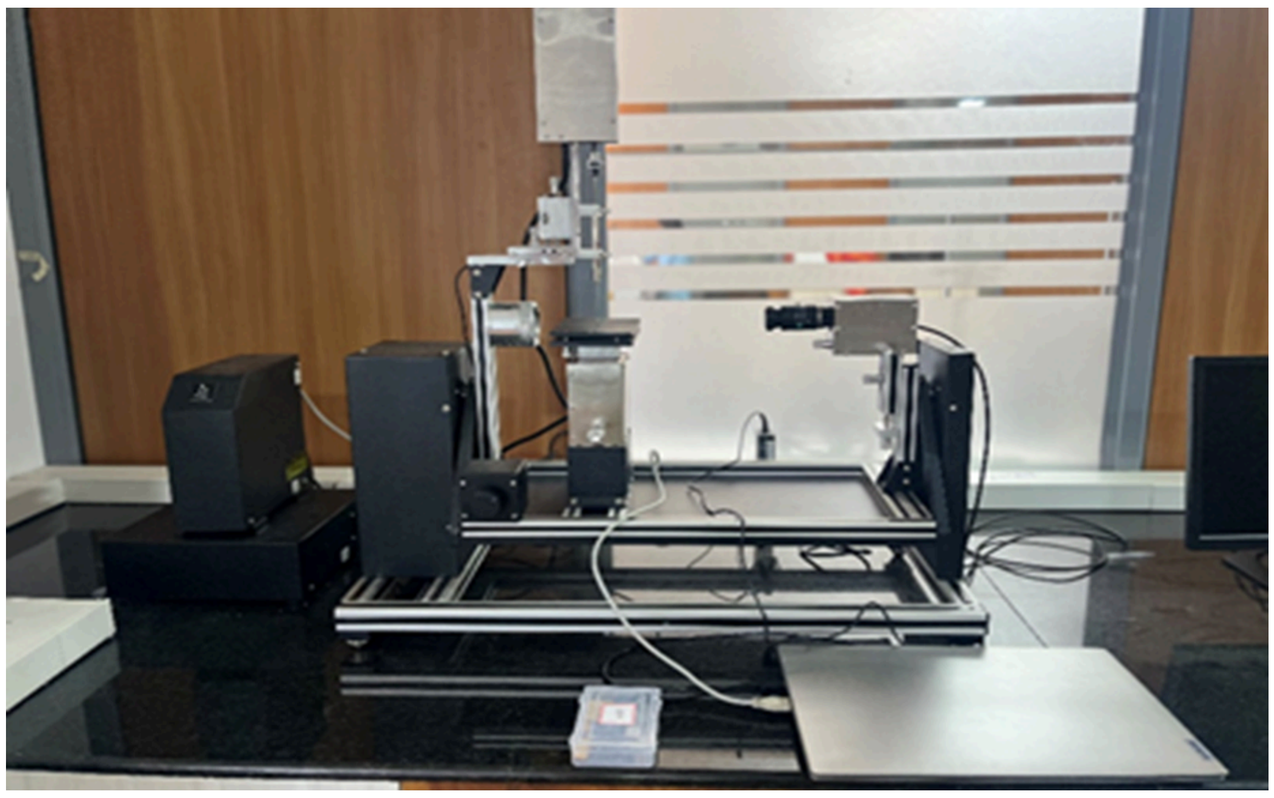






Stratasys F370 printer

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE







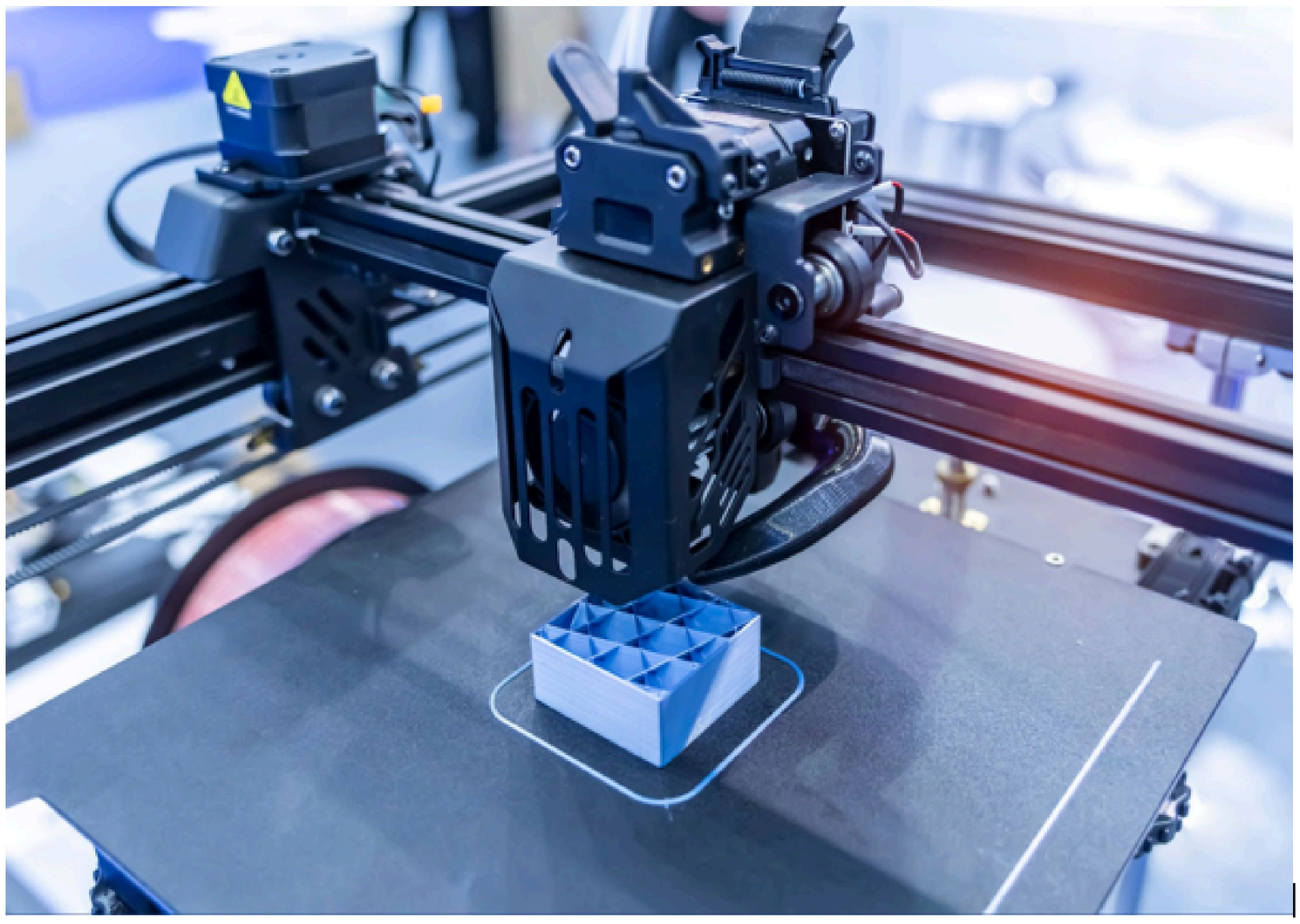
Polyga Desktop S1 scanner



Polyga Handheld H3 scanner

SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

Advanced Prototyping lab – 3D Printing Lab



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 10

REDUCED INEQUALITIES



WWW.SATHYABAMA.AC.IN

SDG 10 - REDUCED INEQUALITIES

Sathyabama Institute of Science and Technology stands as a beacon of inclusive education, ensuring that every student, regardless of background, ability, or circumstance, feels welcomed and supported. The institution embraces students from diverse social, cultural, and economic backgrounds, ensuring that no individual is excluded on the basis of religion, caste, creed, or ability. Employment policies are firmly anchored in non-discrimination, reinforcing equal opportunity for all. The institution not only provides accessible infrastructure such as ramps, tactile pathways, Braille books, and interpreters, but also fosters a compassionate environment where faculty and peers extend genuine care and understanding. Scholarships and financial aid further open doors for students from economically weaker sections, while counseling and mentoring programs nurture emotional well-being and academic growth. The curriculum is designed with flexibility to accommodate diverse learning needs, and workshops on skill development prepare students for industry challenges. Beyond academics, the university encourages differently abled students to participate in cultural and community activities, reinforcing their confidence and sense of belonging. With a strong placement cell dedicated to securing rewarding careers for all, Sathyabama ensures that students not only receive quality education but also step into life with dignity, independence, and opportunity.

Institution Goals for Reduced Inequality

- Ensure equal access to higher education for students from diverse socio-economic, cultural, and differently abled backgrounds.
- Provide scholarships, fee concessions, and financial aid to economically weaker sections and first-generation learners.
- Expand accessible infrastructure including ramps, tactile pathways, elevators with audio assistance, and wheelchair-friendly hostels.
- Strengthen support systems with Braille books, sign language interpreters, adaptive learning resources, and counseling services.
- Promote gender equality by encouraging women's participation in STEM programs and leadership roles.
- Conduct awareness campaigns and workshops on diversity, equity, and inclusion.
- Enhance career opportunities through dedicated placement initiatives for differently abled and marginalized students.

SDG 10 - REDUCED INEQUALITIES

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SDG 10 - REDUCED INEQUALITIES



Scholarship Website link: https://anbufoundation.in/

Anbu Scholarship Policy: CLICK HERE

Video Link: https://youtu.be/K4mWKqTwZhE

Scholars Feedback: Anbu Foundation Sathyabama

Number of Students benefitted through Government and Institution Scholarship Scheme for the Academic year 2023-2024

Sl. No.	Name of the Scheme	Number of students benefitted
1	Government Scheme	328
2	Non-Government Agency	31
3	Institution Scholarship	1504
	Total	1863

Scholarship for Differently Abled Students

Sathyabama Institute of Science and Technology demonstrates its commitment to Reduced Inequalities by extending completely free education to students supported by the Ability Foundation, an NGO dedicated to empowering children with disabilities. Each year, the institution reserves completely free seats for the disabled students recommended by the Foundation, ensuring equitable access to higher education. These students are provided with full scholarships, including free accommodation, food and allied support services, thereby removing financial and

social barriers to education. Exclusive Disabled Friendly Policy has been developed and reviewed periodically for the disabled students.



Scholarship for children of Crime Victims

Sathyabama Institute of Science and Technology, in collaboration with the Global Network Equality (GNE) by expanding outreach programs to identify and support children of prisoners. Admissions are offered to them free of cost and these students are given special attention and care as they experienced a traumatic childhood. Our university introduced tailored mentorship and psychological counseling sessions to help these students overcome emotional barriers and integrate smoothly into academic life. Special bridge courses and life skills training were also launched to empower them with confidence and independence.

Scholarship for Socially and Financially Poor Background Students

Sathyabama Institute of Science and Technology is deeply committed to uplifting students from socially and financially disadvantaged backgrounds by enabling them to pursue higher education and improve their living standards. To achieve this, the institution provides completely free education, along with hostel facilities and transport support, thereby removing barriers that often prevent marginalized students from accessing quality education. A distinctive feature of this initiative is the alumni contribution model, wherein graduates who have benefitted from these scholarships and are now well-placed in their careers, return to sponsor new students. This compounding effect creates a ripple of positive change in society and

stands as a source of immense pride for the institution. Deserving students from marginalized communities, economically weaker sections, and vulnerable groups such as children of destitute women, war widows, prison inmates, and acid attack survivors are granted 100% scholarships to pursue higher education.

Institution's Scholarship Details:

https://www.sathyabama.ac.in/student/scholarships_cheme

List of Students Benefited by Scholarships 2023-2024

https://sist.sathyabama.ac.in/website/2023-2024.pdf

In addition, students with outstanding academic records are recognized and supported through merit scholarships, ensuring that excellence is rewarded alongside inclusivity.



SDG 10 - REDUCED INEQUALITIES

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC

Chancellor's Scholarship 2024

3RD YEAR RANK HOLDERS



ENGINEERING, ARCHITECTURE (2022 Batch)



ENGINEERING, ARCHITECTURE (2022 Batch)



ARTS, SCIENCE, LAW AND PHARMACY (2022 BATCH)



ANBU SCHOLARSHIP

Over 500 Students received the most academically competitive merit based scholarship during 2023-24 of worth ₹1 Crore

www.sathyabama.ac.in SathyabamaOfficial sathyabama.official SathyabamaSIST @sathyabamaofficial

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC

Chancellor's Scholarship 2024

2ND YEAR RANK HOLDERS



ENGINEERING, ARCHITECTURE (2023 Batch)



ENGINEERING, ARCHITECTURE (2023 Batch)



PG (2023 BATCH)



ARTS, SCIENCE, LAW AND PHARMACY (2023 Batch)

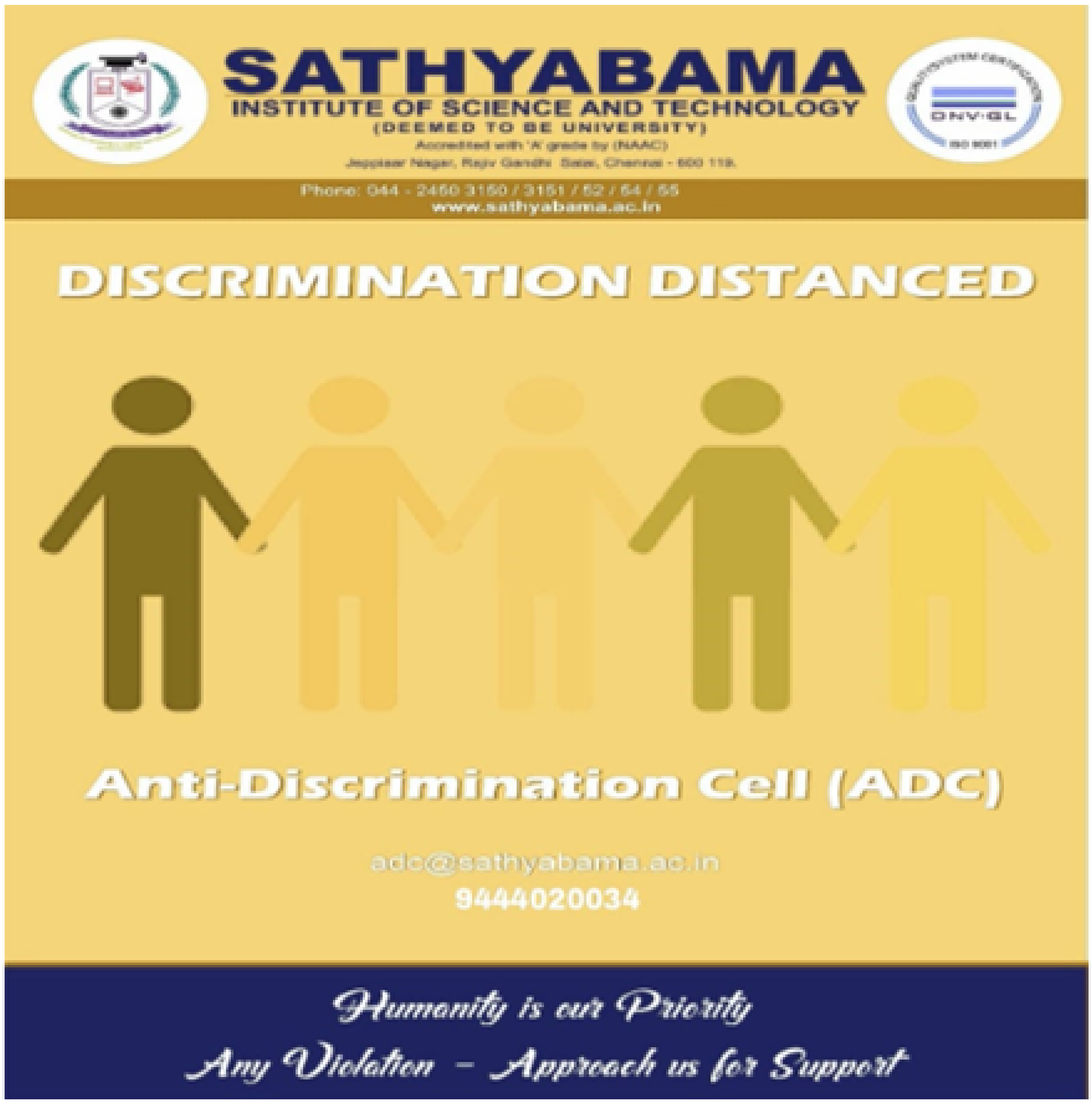
Over 500 Students received the most academically competitive merit based scholarship during 2023-24 of worth ₹1 Crore

SDG 10 - REDUCED INEQUALITIES

Anti-Discrimination and Equal Opportunity

Sathyabama Institute of Science and Technology is firmly committed to the principles of equal opportunity and inclusive education, ensuring that every individual is welcomed into its fold irrespective of caste, religion, language, or gender. The University guarantees that all members of the campus community are able to exercise their equal rights in both the offering and receiving of education. To safeguard this environment of harmony, any act, speech, or intention that disrupts peace or undermines inclusivity is treated with utmost seriousness and addressed immediately to restore balance. The institution has established a dedicated Anti-Discrimination Cell (ADC) to monitor and prevent the occurrence of such incidents. This Cell provides a structured mechanism for grievance redressal, enabling individuals or victims to register complaints directly via email at adc@sathyabama.ac.in. This proactive system ensures accountability, transparency, and the continuous reinforcement of an equitable and respectful campus culture.

Website Link: https://www.sathyabama.ac.in/student/anti-discrimination-cell



SDG 10 - REDUCED INEQUALITIES

Objectives of the Cell

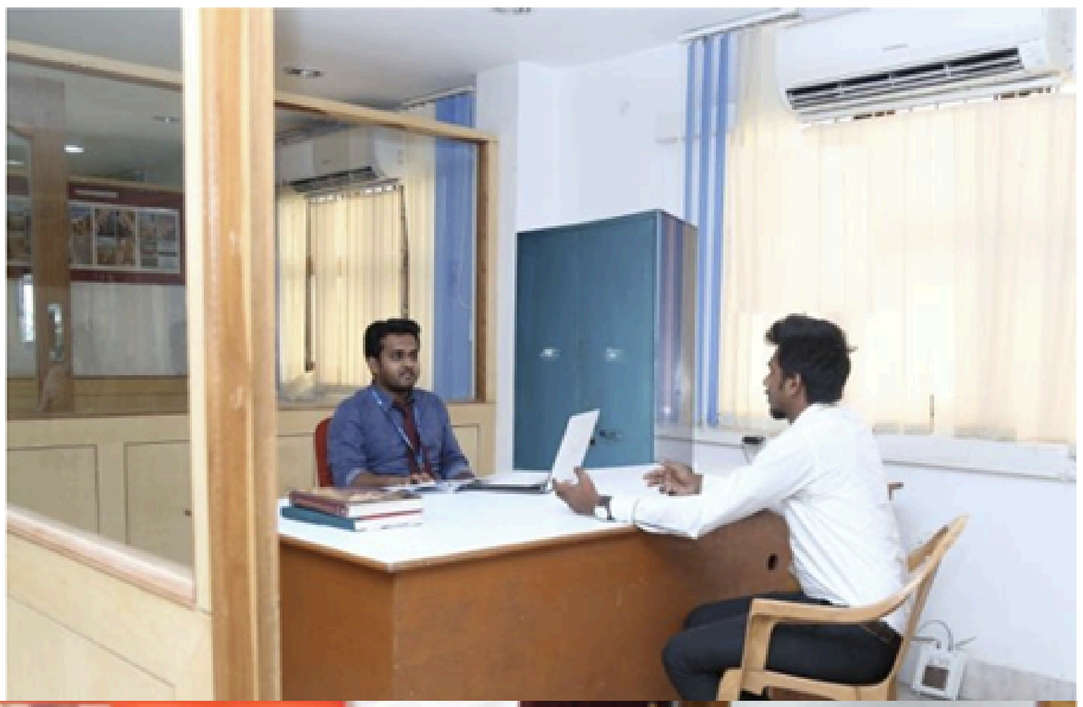
This cell will look after the related matters (if any) of depriving a student / staff or group of students on the basis of caste, creed, language, ethnicity, gender, different ability. This cell always tries to uphold the dignity of the institution by addressing the concerns (if any) brought into the notice related to equality in offering or receiving education inside the campus. This cell protects the rights of individuals without any prejudice to their appearance or lifestyle in the process of learning inside the campus.

Anti-Discrimination Policy:
https://www.sathyabama.ac.in/sites/default/files/2021-03/ADC%20Policy.pdf
Click here for Online submission: https://www.sathyabama.ac.in/student/anti-discrimination-cell-adc

Programs and other Supports to Underrepresented Groups

Sathyabama provides visually disabled students with scribes. They help the students in class rooms and examinations. Counsellors are appointed to support and mentor students with learning disabilities. Special care is taken to support students with learning disabilities like dyslexia, dysgraphia and autism.







SDG 10 - REDUCED INEQUALITIES

We also provide Braille reading material and computer systems equipped with Braille software for the visually disabled students to study. Hearing disabled students are provided with Sign language interpreters in their classes. They attend the classes with other students with the help of interpreters.





Access to Library for Students with Special Needs

Sathyabama do not discriminate students with disabilities and ensures that they have equal access to Library resources. The students with disabilities are provided extra care and support to access the library facilities. They are provided with remote access, extended reserve period and are given late fine waiver. Books and other e content are sent by mail to these students. The library provides volunteer readers for the visually impaired students and Sign Language Interpreters for Hearing impaired students. Visually impaired students can access the library with the help of JAWS software installed in all the systems in the digital library.





SDG 10 - REDUCED INEQUALITIES

Youth 4 Job- placement and training support for inclusive students

Our institution has the collaboration with Youth 4 Job to support inclusive students with placement and training support for better employment opportunities. Students were oriented about the Youth4Jobs training program, where they were introduced to the various job opportunities available to them and the essential skills required for employment.







Following the orientation, the students were asked to take a skill assessment that included sections on Aptitude, English, and Computers, enabling them to understand their strengths and areas for improvement.

SDG 10 - REDUCED INEQUALITIES









Inclusive Candidates Attending Internship at Barclays

Students attending their first day internship at Barclays, it was an interactive session between trainers and the students.





A Speechand Hearing Impaired Employee interacting with the Students

SDG 10 - REDUCED INEQUALITIES





Speech and Hearing Impaired Employee who is working in Barclays interacting with the Students to give training to disabled students.

ASHI Employee who is workingin Barclays interacted with our students





SDG 10 - REDUCED INEQUALITIES







Sathyabama Institute of Science and Technology organized the event and took the pledge as a part of the National Unity Day celebrations at our campus on October 30th, 2023. to honor the Shri Sardar Vallabhbhai Patel and his principles. It has been emphasized "Unity and Integrity in our nation" Around 100 volunteers have participated successfully.



SDG 10 - REDUCED INEQUALITIES

Facilities at campus for Inclusivity and Accessibility

Sathyabama University further strengthened its commitment to differently-abled students by introducing advanced assistive technologies in classrooms, including screen readers, voice-to-text tools, and AI-based learning aids. The university also launched specialized workshops to train faculty in inclusive teaching practices, ensuring that every student receives personalized attention. Sports and cultural events were expanded with adaptive formats, allowing differently-abled students to showcase their talents on equal footing with peers. Additionally, new collaborations with industry partners were established to create exclusive internship opportunities, reinforcing the university's mission to empower students with dignity, independence, and pride.



Accessible Facility at Sathyabama



Accessible Facility at Sathyabama Centre for Advance Studies

SDG 10 - REDUCED INEQUALITIES



Accessible Facility at Sathyabama Dental College and Hospital



Accessible Facility at Sathyabama Research Park

SDG 10 - REDUCED INEQUALITIES



Accessible Facility at Department of Architecture



Accessible Facility at Sathyabama Indoor Stadium

SDG 10 - REDUCED INEQUALITIES



Accessible Facilities at Central Library



SDG 10 - REDUCED INEQUALITIES

Gender Equality at Our Institution

Sathyabama Institute of Science and Technology is committed to eliminating unlawful discrimination, harassment, victimization, and any conduct that undermines gender equality. The Institute ensures sensitization of all employees and newly admitted students on gender equity by the gender equality policy and consistently follows up with activities that promote fairness and inclusivity.

Institutional Data on % of Male and Femalein 2023-24

Faculty / Students	Female	Male
Faculty	64%	36%
Students	56%	44%

Girl students are actively encouraged to participate in cultural programs, sports, NCC, debates, celebrations, and art performances, thereby ensuring equal opportunities and rights.



The NSS unit of Sathyabama Institute of Science and Technology conducted an Outreach Program on Women Empowerment on 21.07.2023, engaging 100 dedicated volunteers. The program aimed to educate, inspire, and empower rural

women through workshops, awareness sessions, and skill-building activities, fostering positive change in the community.



Women faculty members and staff are provided equal participation in all institutional activities throughout the year, with no trace of gender bias. Every committee formed within the Institute includes women representatives in appropriate numbers, reinforcing inclusivity in decision-making.

Sathyabama Institute of Science and Technology commemorated World Women's Day on March 8th, 2024, with the active participation of around 100 volunteers. The event celebrated the achievements and contributions of women while also raising awareness about gender equality and women's rights. Through various activities such as seminars, panel discussions, and cultural performances, volunteers highlighted the importance of empowering women and promoting gender inclusivity. The event served as a platform to inspire positive change and foster solidarity among participants, reflecting the institute's commitment to promoting gender equity and social justice.

SDG 10 - REDUCED INEQUALITIES





Regular awareness programs on women's safety and security are conducted to instil confidence and preparedness among girl students. To promote physical fitness, a separate gymnasium facility is available for girls, complemented by regular yoga sessions conducted by expert trainers. Additionally, the ladies' hostel is equipped with a variety of sports facilities to encourage active participation and holistic well-being.

SDG 10 - REDUCED INEQUALITIES

Anbu Card for Free Medical Screening

Sathyabama Institute of Science and Technology has launched our chancellor's ANBU Health card on May 5, 2024 which provides free medical screenings for women. The ANBU Health Cards offer essential benefits, including free check-ups for mammograms, blood tests, diabetes screenings, eye care, oral health, abdominal scans, and hemoglobin counts at Sathyabama Hospital. Known for its state-of-the-art facilities and exceptional care across various specialties such as General Medicine, Cardiology, Endocrinology, and Obstetrics & Gynecology. Sathyabama's ANBU initiative is more than a program; it's a promise to empower women and enhance their health.



SDG 10 - REDUCED INEQUALITIES



SDG 10 - REDUCED INEQUALITIES

Inauguration of Women Empowerment Centre

Our institution inaugurated Women Empowerment Centre on 14th September 2023. Sathyabama School Law is the first university on national level to open a center exclusively dedicated to women empowerment. The event was graced by eminent woman achievers from various fields. Ms. A. Arulmozhi, Advocate, Madras High Court, and Propaganda Secretary at Dravidar Kazhagam. Ms. Gomathi, Legal Advisor for N.K.T Educational Institution and ICRC Awardee and Winner of Vijay Television Best Woman Journalist. Ms. Kavitha, an award-winning journalist, and ICRC awardeeand Winner Vijay Television's Best Woman Journalist awards. Ms. Jeyarani, writer, social activist, and journalist. The event was held on 14 September 2023.



SDG 10 - REDUCED INEQUALITIES





SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 11

SUSTAINABLE CITIES AND COMMUNITIES



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SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

Sathyabama Institute of Science and Technology acknowledges that academic institutions are essential to creating sustainable communities and cities. The institution incorporates environmental, social, and economic concepts into campus operations, research, and outreach as part of its sustainability goal. SDG 11, which asks for creating inclusive, secure, resilient, and sustainable cities, is directly aligned with this. Sathyabama's Green Campus & Infrastructure initiatives are backed by clear evidence: the university has implemented renewable energy systems, energy-efficient buildings, rainwater harvesting, and waste management policies, alongside accessibility measures for differently abled students. These efforts directly support SDG 11 (Sustainable Cities and Communities) by creating an inclusive, eco-friendly, and resilient campus environment.



Sustainable Practices within the Campus

- **All students and faculty members use sustainable transport means to commute to college, these are through buses that use Bio-diesel generated from waste oil collected from college kitchen**
- **Pedestrian-friendly and pollution free campus with natural ecosystem of wetlands surrounding the campus, only battery-operated vehicles are mainly used inside the campus**
- **Water treatment plant has been established in the campus that is used for irrigating the landscape in the campus**
- **Renewable resources are utilized in the campus like Solar energy for street lighting, charging points, solar heater for hostels.**
-

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

Eco-Friendly Campus Design

Sathyabama has adopted a Green Campus Policy that emphasizes energy conservation, waste segregation, and eco-friendly infrastructure. Buildings are designed with energy-efficient systems to reduce electricity consumption and environmental impact. The institution also practices rainwater harvesting, ensuring sustainable water use and reducing dependency on municipal supply. Waste segregation and recycling are systematically implemented through the Centre for Waste Management, which provides guidelines for environmentally responsible disposal.

Renewable Energy

Evidence shows that Sathyabama has invested significantly in renewable energy systems. The campus operates rooftop solar installations, which supply electricity and reduce reliance on conventional power. In fact, solar energy has been used innovatively for steam generation in cooking applications, reducing LPG consumption and greenhouse gas emissions. The university's Affordable and Clean Energy initiative highlights its commitment to expanding renewable energy, improving energy efficiency, and mitigating emissions.

Accessibility and Inclusivity

Sathyabama's infrastructure reflects its commitment to equitable urban spaces. The campus is equipped with ramps, tactile pathways, Braille books, and sign-language interpreters, ensuring inclusivity for differently abled students. These measures align with SDG 11's emphasis on making cities and communities inclusive and accessible. By integrating accessibility features into its physical infrastructure, the university demonstrates that sustainability is not only environmental but also social, ensuring that all students can participate fully in academic life.

Contribution to Sustainable development of city

1.Engineer J . Vanjinathan, Assistant Professor in Department of Civil Engineering has been appointed for State Quality Monitor in TUFIDCO (Tamilnadu urban finance Infrastructure development and corporation). He was involved in the project appraisal in TUFIDCO (Tamilnadu urban finance Infrastructure development and corporation) for the following projects;

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

-Development of commercial complex at Thiruvallur theatre under Smart Cities Mission

-Redevelopment of new stand in Vellore City Municipal Corporation under SmartCities Mission

-Convention center at Tamukkan ground Madurai smart city

-Bridge project at Alandurai Town Panchayats

2. School of Building and environment signed a MOU, with ITDP Institute of Transportation and development policy, Chennai, to collaborate in working towards planning Sustainable transportation in Chennai Our students worked for Complete street project and prepared proposals for pedestrian infrastructure in the influence area of schools in Mylapore and Saidapet areas in Chennai.

11.2.1 Public Access to Buildings

Sathyabama Institute of Science and Technology, Chennai, has actively promoted public access to its culturally significant spaces during the 2023–2024 academic year. The institution opened its church buildings and open-air auditoriums for community use, hosting events that celebrated heritage, science, and culture. Notable initiatives included the 11th International Conference on Integration of Science and Technology for Sustainable Development (Feb 2024), focusing on biodiversity and sustainable agriculture, and Silicon 2k24, a national-level technical symposium that drew participants from across India. The campus also welcomed cultural programs, exhibitions, and student-led festivals, reinforcing its role as a hub for both academic and social engagement Sathyabama. By allowing the general public to participate in these events, Sathyabama strengthened community ties and enhanced access to heritage landscapes, aligning with SDG 11.2.1's emphasis on inclusive cultural spaces.



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11.2.2 Public Access to Libraries

During the 2023–2024 academic year, Sathyabama Institute of Science and Technology, Chennai, advanced public access to knowledge through its Central Library initiatives, aligning with THE SDG 11.2.2 indicator. The library, spanning over 13,950 sq. meters, opened its resources to the general public, enabling community members to access books, journals, and digital publications. Events such as public lectures, book exhibitions, and collaborative workshops were hosted in the library premises, encouraging knowledge-sharing beyond the student body. The institution also facilitated access to global e-resources, including Elsevier, Springer, and IEEE databases, ensuring that visitors could benefit from world-class academic content. By welcoming external participants for cultural and academic events in the library space, Sathyabama reinforced its commitment to inclusivity, lifelong learning, and cultural exchange. These initiatives highlight the university's role as a community hub for education and heritage, strengthening ties between academia and society. Sathyabama institute is a member of National Digital Library Entitative and has a dedicated NDLC -club to take care of these initiatives.



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11.2.3 Public Access to Museums, exhibition

Sathyabama Institute of Science and Technology, Chennai, actively promoted inclusive access to its exhibition and gallery spaces during the 2023–2024 academic year. The university hosted major public-facing events such as TechnoSummit 2023, a national-level technical fest held in collaboration with Hewlett-Packard, and Startup Fest 2024, which showcased student innovations and entrepreneurial ventures. These events were open to the general public and held in the institution's library and exhibition halls, transforming academic spaces into vibrant hubs of creativity and knowledge exchange. The science exhibitions featured interactive displays, models, and demonstrations by students and researchers, inviting school groups and community members to engage with scientific concepts and technological advancements. These initiatives not only fostered public engagement but also provided access to works of art, artefacts, and academic showcases, fulfilling the goals of SDG 11.2.3 by making cultural and intellectual resources accessible to all.









SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

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11.2.4 Public Access to Green Spaces

During the 2023–2024 academic year, Sathyabama Institute of Science and Technology, Chennai, demonstrated its commitment to inclusive urban sustainability by opening its lush, landscaped campus for public use. The university host's NEET, UPSC and other National level recruitment exams for Government and NoN-Government Organisations free of cost thereby providing a serene and accessible environment for thousands of candidates. Its green spaces also served as venues for Tamil Nadu Police training programs, leveraging open grounds for physical drills and coordination exercises. Additionally, Village Ticket cultural events were conducted in the open-air auditoriums and gardens, welcoming local communities to engage in art, music, and heritage celebrations. These initiatives reflect Sathyabama's dedication to shared urban greenery, offering its eco-conscious infrastructure for educational, civic, and cultural purposes. By integrating public access into its green campus design, the institution actively supports SDG 11.2.4's goal of equitable access to safe, inclusive, and sustainable public spaces.

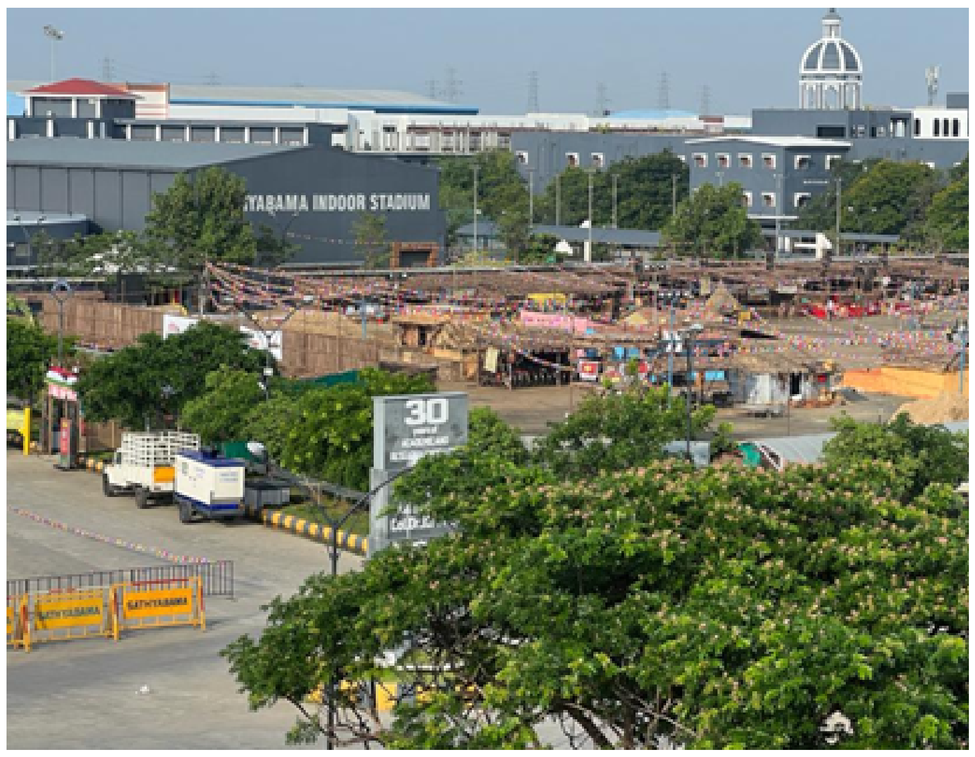








SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES





Centre of Excellence in Urban Climate and Built environment

- **School of Building and environment, Department of Architecture has established Centre of Excellence in Urban Climate and built environment which possesses a well-equipped Climatology lab, with instruments like Thermal imagers, data loggers, outdoor data loggers and simulation software like IESVE, ENVIMET etc. , here simulation studies and research works on Sustainable practices topics like building materials, energy efficiency in the building, urban heat island, sustainable landscape planning are conducted and documented.**

- **Students underwent Internship and collaborated for the following Govt. proposal – Post occupancy evaluation for Zero peak energy design for India during the period.**

Sustainability as an integral part of Academic learning

The Academic learning has been developed with the intent to provide professionals and students with a springboard for invention, knowledge and understanding of the application of an integrated environmental approach in sustainable architecture design. To equip the students with knowledge to respond to a changing world and environmental challenges for best performance in the Industry as Sustainable Architects, Green Auditors, and Green Building Professionals.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

- School of Architecture offers Post graduation program on sustainable architecture and Building Management. The Sustainable goals have been incorporated in the curriculum and students get exposure through various studies and live experiments conducted.

- Students in Master program in Sustainable Architecture and Building Management can cater to sustainable city planning and design through their academic curriculum and studios which prepare them for sustainable design and construction, enhancement of building services, Intelligent building management systems

- Professional Training conducted for Post-graduates and Under-graduate programs enable the students to get exposure by working with renowned Architects, Sustainable Architecture firms, Construction Industry.

- Under Graduate program in Bachelor of Architecture has been structured to include subjects related to Sustainability like Sustainable Architecture, Energy efficient architecture, Vernacular Architecture, Landscape Architecture, Site planning Conservation.

11.2.5 Arts and Heritage Contribution

Sathyabama Institute of Science and Technology advanced SDG 11 – Sustainable Cities and Communities through a drawing competition for school children, promoting arts, culture, and heritage. The initiative sensitized young learners to India's monuments, festivals, folk arts, and landscapes, encouraging creative expression and cultural awareness. Held on campus, the event exposed children to higher education while faculty and volunteers explained the historical and artistic significance of heritage symbols. Outcomes included improved artistic skills, confidence, and sustainability thinking, with children depicting conservation themes and heritage protection. The program strengthened ties with local schools, fostered inclusivity, and bridged academia with society. It stands out among cultural programs for engaging children directly, nurturing future custodians of heritage.

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Evidence includes vibrant artworks and active participation. Future plans involve annual art camps, storytelling sessions, folk-art workshops, and museum visits, reinforcing Sathyabama's commitment to cultural sustainability, community engagement, and heritage preservation. Various events like Drawing Competitions, etc are regularly conducted to reinforce Sathyabama's commitment to cultural sustainability, community engagement, and heritage preservation.







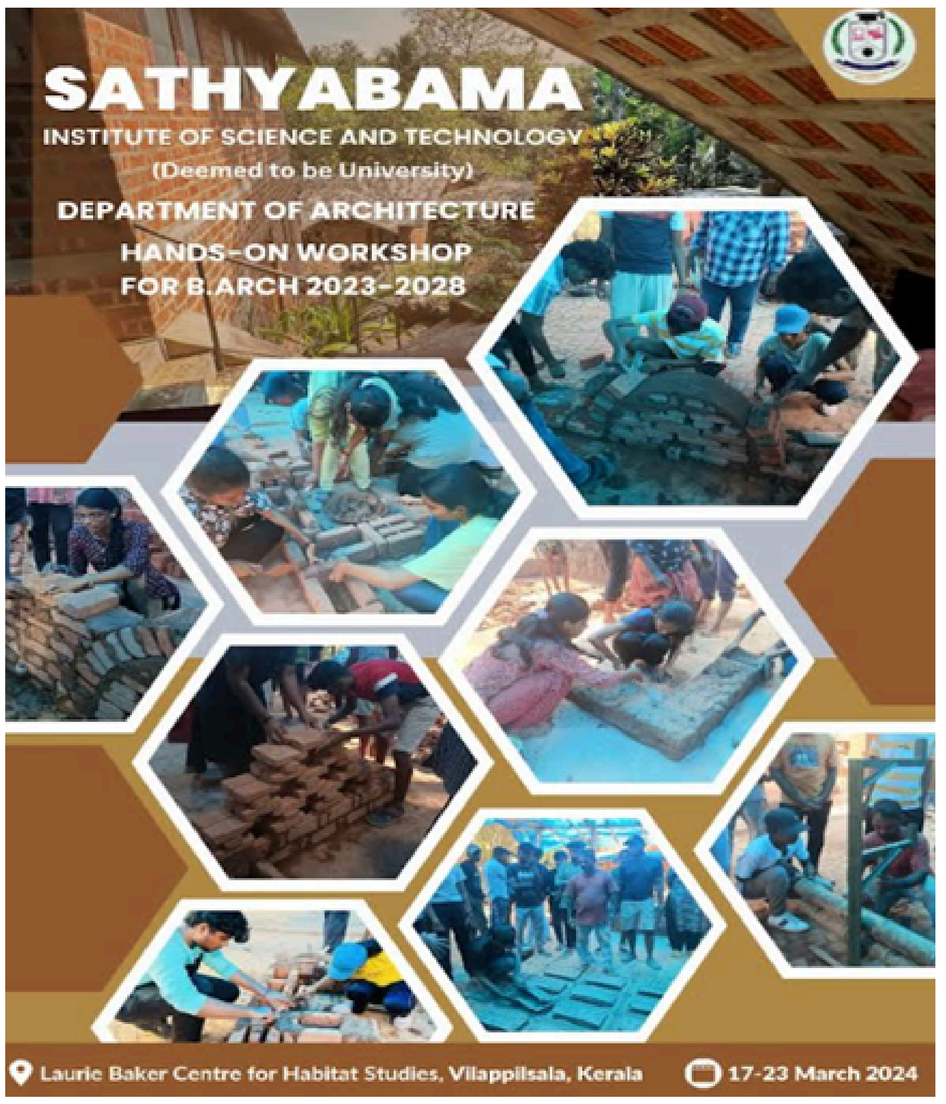
11.2.6 Record and Preserve Cultural heritage

Sathyabama Institute of Science and Technology actively preserves cultural heritage through hands-on architectural workshops and vibrant cultural festivals, aligning with THE SDG 11.2.6 indicator. In March 2023, First Year B.Arch students from Sathyabama Institute of Science and Technology, Chennai, participated in a week-long workshop at the Laurie Baker Centre for Habitat Studies, Trivandrum. This immersive experience introduced students to cost-effective architecture using local materials like mud, bamboo, and bricks. They engaged in hands-on sessions on arch building, wall types, and filler slabs, gaining practical exposure to sustainable construction techniques rooted in regional heritage.

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The Department of Architecture held a one-day workshop on laser cutting, focusing on digital fabrication techniques. Participants learned machine operations, material selection, and design preparation, enhancing their understanding of scale and detailing.





B.Arch students conducted a case study on the Vellore International School, designed by renowned architect Sanjay Mohe. The study analyzed architectural planning, material choices, and passive design strategies to create an environmentally friendly educational environment, enhancing their understanding of contemporary architectural approaches and thoughtful design principles.

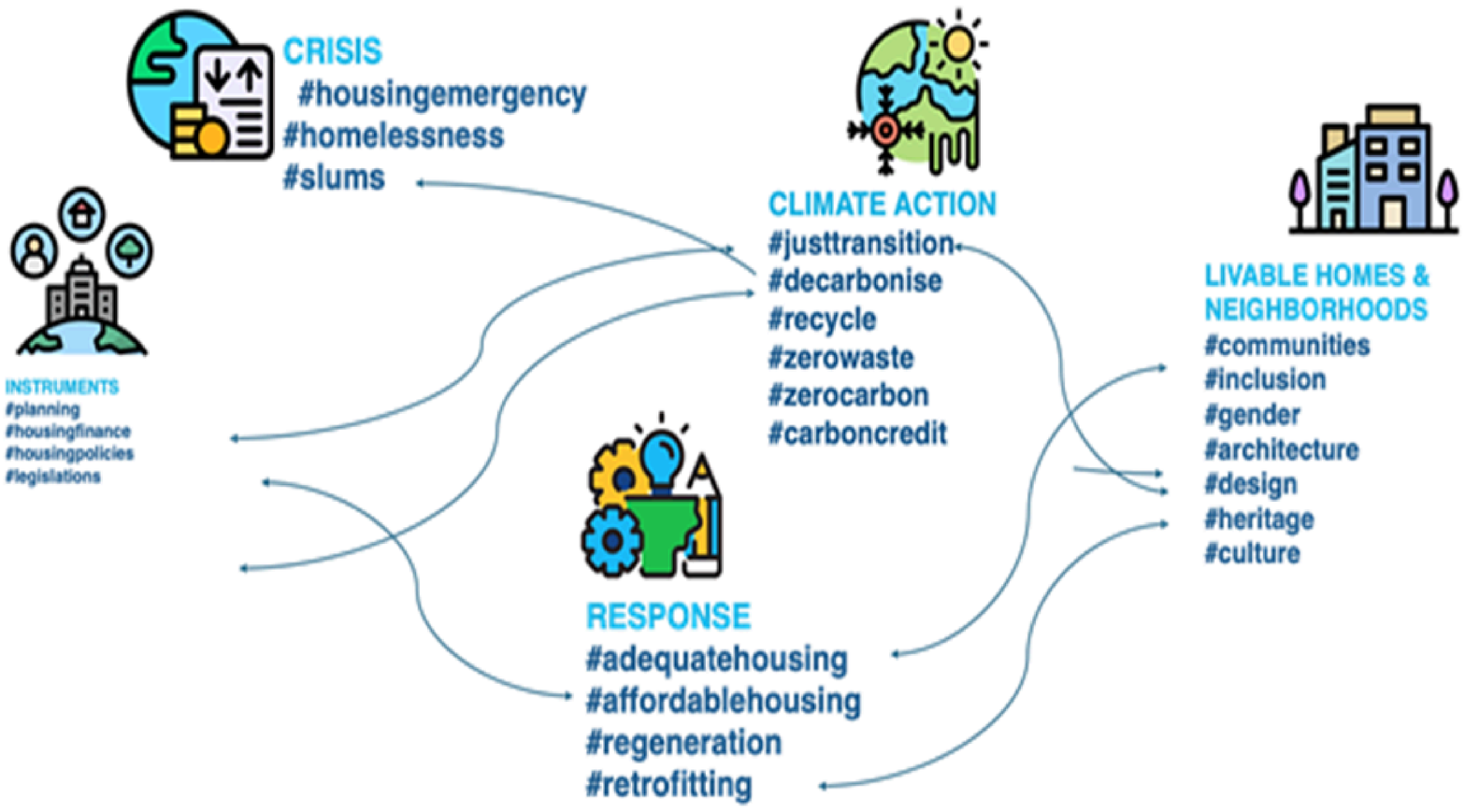


SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

The Department of Architecture hosted an alumni talk by Kiruba Shankari, an architect, for final-year students. The talk emphasized selecting, researching, and developing Campus Design, guiding students through practical tips and challenges, and expressing gratitude for her expertise.



The Urban Thinkers Campus (UTC) 9.0, is conceived as a part of World Urban Campaign (A UN HABITAT Initiative) as an open forum for critical exchange between urban researchers, professionals, and decision-makers who believe that urbanization is an opportunity and can lead to positive urban transformations. It is meant to contribute to the implementation of the New Urban Agenda. The theme for this year's UTC 9.0 is #housingmatters.



SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

An extensive site visit to Signify Innovations India limited was organized to examine and understand various lighting solutions available for a given space.The Final Year, III and II Year B.Des students visited the office and the experiential center in Nungambakkam on 6th March 2024. 30 students along with 3 staff members visited the Centre and the purpose of this visit was to explore and understand types of lighting and various lighting fixtures available for interior and exterior spaces. The expert and other technicians gave detailed information about various products they deal with and also explained their application as well. This site visit was a fascinating and enlightening experience for the students.

11.3.1 Arts and Heritage expenditure

In FY 2024, Sathyabama Institute of Science and Technology, Chennai, reported a total expenditure of about ₹210 crore, of which approximately ₹3.5 crore was directed toward arts, heritage, and cultural preservation. This allocation covered conservation of campus buildings, maintenance of musical instruments, renovations of auditoriums, and upkeep of open green spaces. Around ₹1.2 crore was spent on preserving heritage-style campus buildings, including renovation of the church building and maintenance of auditoriums used for cultural events. Approximately ₹50 lakh was allocated for the purchase, repair, and maintenance of instruments used in cultural festivals, music clubs, and heritage programs. Nearly ₹80 lakh was invested in refurbishing library exhibition halls, art galleries, and open-air auditoriums, ensuring accessibility for public events such as Techno Summit, Startup Fest, and science exhibitions. About ₹1 crore was directed toward landscaping, biodiversity conservation, and upkeep of gardens and open spaces, which also hosted Village Ticket cultural events. By earmarking resources for arts and heritage, Sathyabama reinforced its role as a centre for both academic excellence and cultural preservation, balancing investment in science and technology with support for creative and heritage-based endeavours.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

11.4.1 Sustainable Practices Target

Sathyabama Institute of Science and Technology has set ambitious and measurable sustainability targets for 2023–2024, with a strong focus on sustainable commuting, renewable energy, waste management, biodiversity conservation, and community engagement. These initiatives not only reduce the campus's ecological footprint but also contribute to the broader vision of sustainable cities and communities under SDG 11.4. By integrating sustainability into academics, operations, and outreach, SIST exemplifies how higher education institutions can serve as catalysts for positive environmental and social change. In line with the United Nations Sustainable Development Goals (SDGs), particularly SDG 11.4 – Strengthening efforts to protect and safeguard cultural and natural heritage, SIST has set ambitious targets for the academic year 2023–2024. These targets emphasize sustainable commuting, waste management, renewable energy adoption, biodiversity conservation, and community engagement.

11.4.1 Sustainable Commuting Targets

One of the most pressing challenges for urban campuses is reducing the carbon footprint of daily commuting. Sathyabama Institute of Science and Technology has outlined several initiatives in this context:

·Promotion of Public Transport: The institute encourages students and staff to use sustainable transport means to commute to the institution. Sathyabama also operates buses which run on Bio-diesel generated from waste oil collected from university kitchen is also being used.

·Carpooling Programs: A digital platform is being piloted to connect students and faculty for shared rides, reducing single-occupancy vehicle use.

·Electric Shuttle Services: SIST has introduced intra-campus electric shuttle buses to minimize reliance on fossil fuels.

·Cycling Infrastructure: Dedicated cycle tracks and rental bicycles are being expanded across campus. The target is to increase bicycle usage by 20% in 2023–2024.

·Parking Policy Reform: Preferential parking for electric and hybrid vehicles is being implemented to incentivize sustainable commuting.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



Biodiesel Powered Bus at Sathyabama



11.4.2 Promote Sustainable Commuting

Sathyabama Institute of science and technology is a Pedestrian-friendly and pollution free campus with natural ecosystem of wetlands surrounding the campus, hence only battery-operated vehicles are mainly used inside the campus. Students and staff members are encouraged to use Battery operated E-vehicles, E-bikes etc inside the campus, A separate Pedestrian Walk is provided for easier movement of the stakeholders inside the campus. School of Building and environment had signed a MOU, with ITDP- Institute of Transportation and development policy, Chennai, to collaborate in working towards planning Sustainable transportation in Chennai city.





SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

11.4.4 Affordable housing for employees

The institution ensures staff welfare through multiple initiatives. Employees who prefer to live outside campus are offered House Rent Allowances (HRA) to ease accommodation costs. For those wishing to stay within campus, SIST maintains well-equipped hostels and dormitories, designed with safety, ventilation, and proximity to academic facilities. These hostels include air-conditioned and non-AC rooms with shared amenities, making them cost-effective compared to city rentals.
In addition, SIST operates guest houses for visiting faculty and staff, ensuring short-term housing needs are met conveniently. By combining financial support with on-campus housing infrastructure, the institute reduces the economic burden of living in Chennai's urban environment. This integrated approach reflects SIST's commitment to employee welfare and aligns with broader sustainability goals by fostering a supportive, inclusive campus community.





11.4.5 Affordable housing for students

Sathyabama Institute of Science and Technology ensures affordable and inclusive housing for its diverse student community. The campus hosts well-structured hostels and dormitories designed to accommodate thousands of students, offering both air-conditioned and non-AC options to suit varying budgets. Each hostel is equipped with essential amenities such as Wi-Fi, study halls, dining facilities, and recreational spaces, ensuring a balanced academic and social environment. SIST maintains separate hostels for men and women, with round-the-clock security and wardens to guarantee safety.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES





11.4.6 Pedestrian priority on Campus

Sathyabama Institute of Science and Technology has designed its campus to be pedestrian-friendly, ensuring safe and sustainable mobility for students, faculty, and visitors. Wide, shaded walkways connect academic blocks, hostels, and recreational areas, reducing reliance on vehicles within the campus. Dedicated pedestrian zones are clearly marked, with restricted entry for motorized traffic during peak hours to enhance safety. The institute has invested in green corridors and landscaped pathways, encouraging walking while promoting biodiversity. Accessibility features such as ramps and tactile paving support differently-abled individuals, aligning with inclusive design principles. To further discourage unnecessary vehicular use, SIST provides electric shuttle services only for longer distances, keeping central areas reserved for pedestrians. Regular awareness campaigns highlight the health and environmental benefits of walking. By prioritizing pedestrian access, SIST fosters a sustainable, safe, and inclusive campus environment, consistent with its broader sustainability goals under SDG 11.4.





SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

11.4.7 Local Authority Collaboration regarding planning

School of Building and environment had signed a MOU, with ITDP- Institute of Transportation and development policy, Chennai, to collaborate in working towards planning Sustainable transportation in Chennai city.School of Building and environment – Department of Civil also had been engaged by Tamil Nadu Urban Finance and Infrastructure Development corporation Limited to assist them in planning smart city activities under various state and central government schemes link Singara Chennai, Kalaignar Nagarpura Vazvidha Memppatu Thittham etc to improve the basic amenities, road facilities etc.







Ar Hariesh a product designer had fruitful conversations with students of interior design first year on their product design process. The discussions yielded fine tuned designs and prototypes.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



Ar. Kumaresan from the Indian Institute of Technology, Bombay conducted a Design Thinking Workshop for the first-year students at the Sathyabama - School of Building and Environment. The sessions included hands-on exercises that pushed students to think of alternative design solutions while working on models and sketches. The session was a successful venture where students came out with multiple iterations and had useful dialogues with each other, the design team, and Ar. Kumaresan.



SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

Renowned architect Ar. Kalaivanan Amudhan delivered an inspiring guest lecture on bio-materials, computational design, and robotics fabrication for third-year B.Arch students. Through a captivating presentation, he showcased his innovative works, providing valuable insights into the intersection of architecture and cutting-edge technologies. His expertise and pioneering approach left a lasting impression on the students, serving as a catalyst for their exploration of new possibilities in architectural design and construction.



First year architecture students visited Senganthal poonga on 7 th February 2024 and Semmozhi poonga on 10 February Poonga as part of Design studio II. The students need to understand the context, activities and spatial layout to identify a site to design either an information kiosk and a gazebo or a snack bar and a gazebo. The students visited the Semmozhi poonga during the flower show and were excited to see how the park transformed during special occasions.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



The Department of Architecture proudly launched its newsletter, "Archive," with a ceremony graced by the Vice President of Sathyabama Institute of Science and Technology. The Vice President commended the initiative and appreciated the dedication of both students and staff members who voluntarily contributed to the publication. "Archive" is envisioned as a platform to showcase the department's achievements, research endeavors, and creative outputs, fostering a sense of community and collaboration within the academic environment.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



During a week-long rural documentation program in the village of Chenniyur near Pollachi, second-year architecture students engage in hands-on exploration, surveys, sketches, and interviews. This initiative aims to deepen their understanding of local architectural and cultural aspects, encouraging a socially conscious approach to design that considers the unique context of the People Living there.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES





Ar. Hasti Valipour an Iranian-French architect from the University of Copenhagen was invited by the School of Building and Environment to collaborate with Ar.Esther Kiruba J C and Ar. Ramkumar from the Department of Architecture. She spent two days working closely on eggshell waste being used as a building material. The scope of the material to be used in 3D printing was discussed and various other applications and alternatives were brainstormed with the researchers and interested students who joined the team. An interesting point to note is that all the eggshell waste used has been collected from the main kitchen over the past few months by Ramkumar and Esther and dried, powdered and stored all sustainably with available resources writhing the department itself.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



As another social cause 12 students and 2 faculties from the department of Architecture have done few social awareness painting on the walls of Padur Panchayat, as requested by the president of Padur panchayat and the coordinator of iVolunteer. 4 of our students visited the place where wall painting was requested a week earlier and took measurements and collected requirements from Padur Panchayat. Later a group of students volunteered to design social-awareness concepts to be painted on those walls, for a week at the studios. Finally on the 3rd March 2024, 12 students and 2 faculties went to complete the activity

The officials of the panchayat were thrilled to see the final outcome on their walls. Students participated with enthusiasm and there was cross-batch learning were seniors helped newcomers on how to plan and start such wall painting activities. Overall it was a nice learning experience for few students who were doing any sort of painting activity for the very first time.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



The students of B.Arch. IV year went on an educational tour to Sri Lanka along with three faculty members. The eight-day educational trip was a transformative experience for the students. Immersed in the rich cultural heritage, they explored cities like Colombo, Galle, Sigiria, Bentota and Kandy. They explored the works of eminent architect Geoforry Bawa visiting the New Parliament House, Seema Malaka temple, Lunu Ganga Estate, a number of resorts designed by him. The students were in profound appreciation for Bawa's meticulous creation etched in every detail. Visits to iconic landmarks such as Sigiriya's ancient rock fortress , Dambulla Cave Temple,Temple of the Tooth in Kandy provided invaluable insights into the region's architectural evolution and cultural significance. Engaging with local architects and artisans offered students a hands-on understanding of traditional building techniques and materials, enriching their academic knowledge with practical, real-world applications.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



Resin workshop was conducted by Ar. Divya Murugesan on the 20th and 21st of November 2023, for the first year B.Arch and B.Des students of Sathyabama Institute of Science and Technology. As part of this workshop, the students got to experiment on large panels where they showcased their creativity with resin and expressed it through art. Beautiful seascapes and statement art pieces were made using mix of various colours and techniques.



SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

Ar. Akshaya J and Ar. Prarthana Murali conducted a "Terracotta mural workshop" on the 16th and 17th of November 2023, for the first-year B.Arch and B.Des students of Sathyabama Institute of Science and Technology. The students were able to explore the clay material and got familiarized on how to use it. The students also had the opportunity to explore different tools and techniques for creating different patterns of mural tiles.



Our fourth year student Pramodhnie lead an Art Workshop at the Department of Architecture for the First Years of B.Arch and B.Des students.



First year students of B.Arch and B.Des, Interior Design, visited Dakshina Chitra an exciting cross cultural living museum of art, architecture, lifestyles, crafts and performing arts. This helped students to understand the broader, more inclusive cultures of the states and to introduce arts and crafts to these young minds.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



In a wholehearted volunteering initiative, our 1st year B.Arch and B.Des students created lots of innovative and creative self-help learning aids for special children, residing at Vasantham Special School and Home at Mogappair. About 100 children reside and learn at this school. These learning material created would help these children learn concepts with deeper understanding through visualisation and continuous play-way interaction. We appreciate the social sensitivity of our students, and thank each of them who volunteered today for making a wonderful difference in the way children learn.

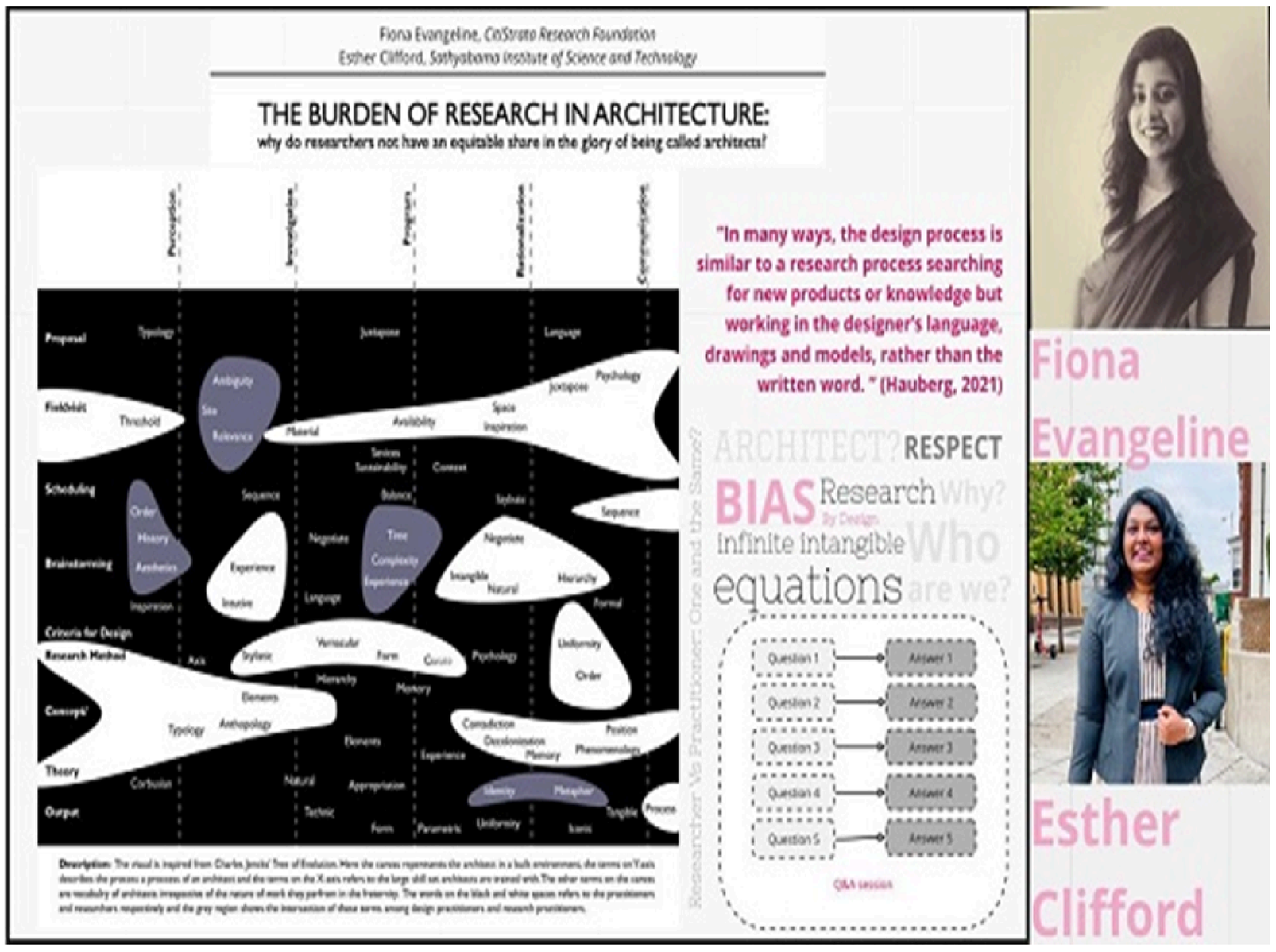


Following the 35th foundation day celebrations held on 5th October 2023, SEED Fund Award Ceremony was conducted today , the 6th of October 2023 at Tmt. Soundarabai Auditorium .Honorable Chancellor Dr.Mariazeena Johnson handed over SEED grant order copies to the Staff and Student Investigators. 49 proposals leading to innovative products, processes and technologies in various domains received the grants worth 55 Lakhs. The Chancellor congratulated each and every one of the Investigators personally and addressed the awardees indicating time management,financial management and commercialization strategies as the key parameters to be kept in mind to meet the objectives of the proposal for which the grant was given. Researchers from the School of Building and Environment received a grant for their team of 3 professors and 2 students.

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES



School of Building and Environment at Sathyabama Institute of Science and Technology, Chennai organized an activity at the Urban Design Collective where the students of M.Arch., Sustainable Architecture played an interactive game with the theme of Sustainable Development Goal 13. The experience included adversities and resistances that are faced while working towards the goal. The activity created feelings of change and reform in the students minds while also urging them to work towards achieving the SDG 13 within the year 2030.



SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

Esther Clifford an Assistant Professor and Fiona Evangeline a former educator from the Department of Architecture presented a poster on, "The burden of research in architecture: why do researchers not have an equitable share in the glory of being called architects?", at the International Research Culture Conference online hosted by the University of Warwick, United Kingdom.

SDG 11 Event Report (2023–2024)

NO	Event / Initiative	Focus Area	Impact
1	Government School Adoption Program	Rural education & infrastructure	Improved facilities, teaching aids, stronger community resilience
2	Solar Lamp Workshops for Women	Renewable energy & empowerment	Promoted clean energy, safer communities, women's skill development
3	Vocational Training for Marginalized Groups	Inclusivity & skills	Supported acid attack survivors, visually impaired students, underprivileged youth
4	Campus Carbon Reduction Drive	Sustainable infrastructure	Reduced emissions, promoted eco-friendly transport, energy efficiency
5	Waste Management Awareness Campaigns	Recycling & disposal	Encouraged sustainable practices, reduced campus waste footprint
6	Biodiversity Enhancement Projects	Green cover & conservation	Tree plantation drives, biodiversity protection on campus
7	Community Outreach via Anbu Foundation	Social infrastructure	Health camps, rural development, inclusive education
8	Sustainability Seminars & Conferences	Academic integration	Research and teaching aligned with SDG 11 themes
9	Student-Led Eco Clubs	Youth engagement	Promoted sustainable living and urban resilience among students

SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES

SDG 11 MoUs (2023–2024)

Sl No	MoU Partner	Focus Area	Purpose / Impact
1	Government School Education Dept. (TN)	Rural education & infrastructure	Adoption of schools, improving facilities, building resilient communities
2	Local NGOs via Anbu Foundation	Community outreach	Health camps, rural development, inclusive education for marginalized groups
3	Renewable Energy Firms	Clean energy	Solar lamp workshops, renewable energy adoption in rural areas
4	Waste Management Agencies	Recycling & disposal	Awareness campaigns, sustainable waste practices on campus and in communities
5	Industry Partners	Sustainable infrastructure	Joint research on carbon reduction, eco-friendly transport, and smart cities
6	Academic Collaborations (SDG Accord)	Global partnerships	Aligning teaching, research, and governance with UN SDGs

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 13
CLIMATE ACTION



WWW.SATHYABAMA.AC.IN

SDG 13 - CLIMATE ACTION



Sathyabama Institute of Science and Technology: Leading the Way in Climate Responsibility and Sustainable Innovation

Climate change is impacting every nation across all continents, disrupting economies and affecting lives. Its consequences are already costing people, communities, and countries heavily — with even greater losses expected in the future. Shifting weather patterns, rising sea levels, and increasingly severe weather events are becoming the new normal, while greenhouse gas emissions have reached record highs. If meaningful action is not taken, the global average temperature could rise by more than 3°C before the end of this century. Those who are poorest and most vulnerable are suffering the greatest burdens.

Sathyabama Institute of Science and Technology reinforced its dedication to comprehensive climate action by embedding sustainability principles into its academic, research, administrative, and community initiatives. In accordance with SDG 13, the institution actively promoted innovative climate-related research and the development of technological solutions supporting both mitigation and adaptation to climate change.

Throughout the year 2023–2024, the institution enhanced policy awareness, capacity building, and environmental literacy among students, faculty, and the wider community. Collaborative engagements were expanded with national and international agencies to improve climate resilience, share knowledge, and mobilize support for sustainable development initiatives. Sathyabama also implemented a range of campus-wide green initiatives aimed at reducing carbon emissions, conserving natural resources, and promoting climate-responsible behaviour. Community outreach programmes were strengthened to support local populations in adopting climate-resilient practices and improving preparedness against climate-related challenges.

Through coordinated efforts across departments, stakeholders, and society, Sathyabama contributed meaningfully to global climate action during the 2023–2024 academic year, reaffirming its commitment to ensuring that present and future generations can adapt, survive, and thrive in a changing climate.

Green Campus at Sathyabama Institute of Science and Technology

Sathyabama Institute of Science and Technology is committed to an environmentally responsible campus with size of 140 acres through its comprehensive Green Campus initiatives. With a focus on sustainability, resource conservation, and ecological stewardship, the institution integrates green practices into every aspect of campus life.

SDG 13 - CLIMATE ACTION



The campus is designed with energy-efficient buildings, abundant green cover, and eco-friendly facilities that reduce environmental impact while creating a healthy learning environment. To minimize reliance on conventional power sources, Sathyabama has incorporated solar energy systems and other low-carbon technologies, contributing significantly to its efforts toward carbon neutrality. Rainwater harvesting, wastewater treatment, and water recycling systems ensure efficient use of water resources and help



maintain ecological balance on campus. Lush gardens, native plant species, and well-maintained landscapes promote biodiversity and enhance the overall environment, making the campus a vibrant, pollution-free space. The institute follows effective waste segregation, recycling, and responsible disposal practices. Efforts are made to reduce single-use plastics and encourage environmentally conscious behavior among students and staff.

Green Audit practices

The Institution has effectively adopted low-carbon usage strategies through its sustainability initiatives and comprehensive Green Audit practices. The primary goal of such practices is to measure the amount of low carbon energy used across the university. Sathyabama has introduced several campus-wide green measures aimed at reducing carbon emissions, conserving natural resources, and promoting climate-responsible behavior. It also takes initiatives to identify, assess, and prioritize actions that enhance environmental sustainability by planting trees across the campus. Our institution has actively worked to reduce its carbon footprint by minimizing the use of non-renewable and fossil fuel–based energy sources. Through various energy saving initiatives and implementation of energy efficient lighting systems our institution strives to work along with the global community to reduce carbon emissions and mitigate the harmful effects of climate change to build a greener environment.
https://sist.sathyabama.ac.in/download/GreenAudit.pdf

SDG 13 - CLIMATE ACTION



Research Centres at Sathyabama & their Climate Action Contributions

Centre for Earth and Atmospheric Sciences

Centre for Earth and Atmospheric Sciences (CEAS) at Sathyabama Institute of Science and Technology is established to initiate quality research for the young minds in Earth, Ocean and Atmospheric Sciences. Centre comprises of multi-disciplinary team of meteorologists, geologists, hydrogeologists, physicists and geochemists who are actively engaged in basic research on Earth Science, Remote Sensing, GIS, Modeling, Agriculture, Environmental and Air Pollution studies. It is an emerging interdisciplinary centre that aims to tackle climate change and work to preserve the natural resources. Advanced GeoEnvironmental Laboratory stands as a beacon of innovation within the Centre, equipped with cutting-edge instruments and technologies that redefine learning and research. This state-of-the-art facility plays a transformative role in honing the practical skills and analytical expertise of students and researchers alike. By immersing them in a hands-on, innovation-driven environment, the lab inspires creativity and empowers learners to tackle the complexities of a rapidly changing world. Bridging the gap between theory and practice, the laboratory ensures students emerge not just as scholars, but as problem-solvers ready to make a tangible impact on real-world challenges.

https://research.sathyabama.ac.in/home/CentreforEarthandAtmosphericSciences

The Centre for Climate Change Studies (CCCS)

The Centre for Climate Change Studies (CCCS), established in 2011 under Sathyabama's Research Centre, focuses on assessing climate change impacts on marine ecosystems such as coral reefs, seagrass meadows, seaweeds, intertidal zones, and mangroves, while conducting research on micro-plankton responses to rising temperature and declining pH, adaptive potential of marine organisms, carbon sequestration ability of macro- and micro-algae, biomineralization under ocean acidification, and coastal biotic–abiotic changes; additionally, through its associated marine station, CCCS contributes to the sustainable management and conservation of coastal ecosystems, which serve as vital carbon sinks and climate buffers, thereby directly supporting SDG 13 by advancing climate-impact assessment, mitigation, and adaptation strategies.

https://www.centreforclimatechangestudies.com/index.html

SDG 13 - CLIMATE ACTION



Centre for Remote Sensing and Geoinformatics (CRSG)

CRSG focuses on the application of remote sensing and geoinformatics to resolve environmental, urban, and agricultural challenges. It combines satellite data, geographic information systems, and spatial analysis techniques to support decision-making and sustainable development. CRSG typically engages in projects related to land use planning, environmental monitoring, disaster management, and resource management providing critical insights for both Government Organisations and Private Sector stakeholders.

https://research.sathyabama.ac.in/home/CentreforRemoteSensingandGeoinformatics

Centre for Waste Management (CWM)

Centre for Waste Management was set up (in 2011) in collaboration with the National Solid Waste Association of India to address environmental pollution and waste management through research, innovation and outreach activities. The centre "investigates the prospects of waste in any form for effective conversion into energy and value-added products."
According to the latest sustainability report of Sathyabama, CWM's initiatives directly contribute to climate action: e-waste is disposed of via authorised recyclers (per E-Waste Management Rules), reducing pollution; waste audits are conducted to track and improve waste management; and importantly, waste cooking oil (WCO) is converted into biodiesel — used in institutional vehicles — thereby reducing reliance on fossil fuels.

https://www.centreforwastemanagement.com/

Centre of Excellence for Energy Research (CEER)

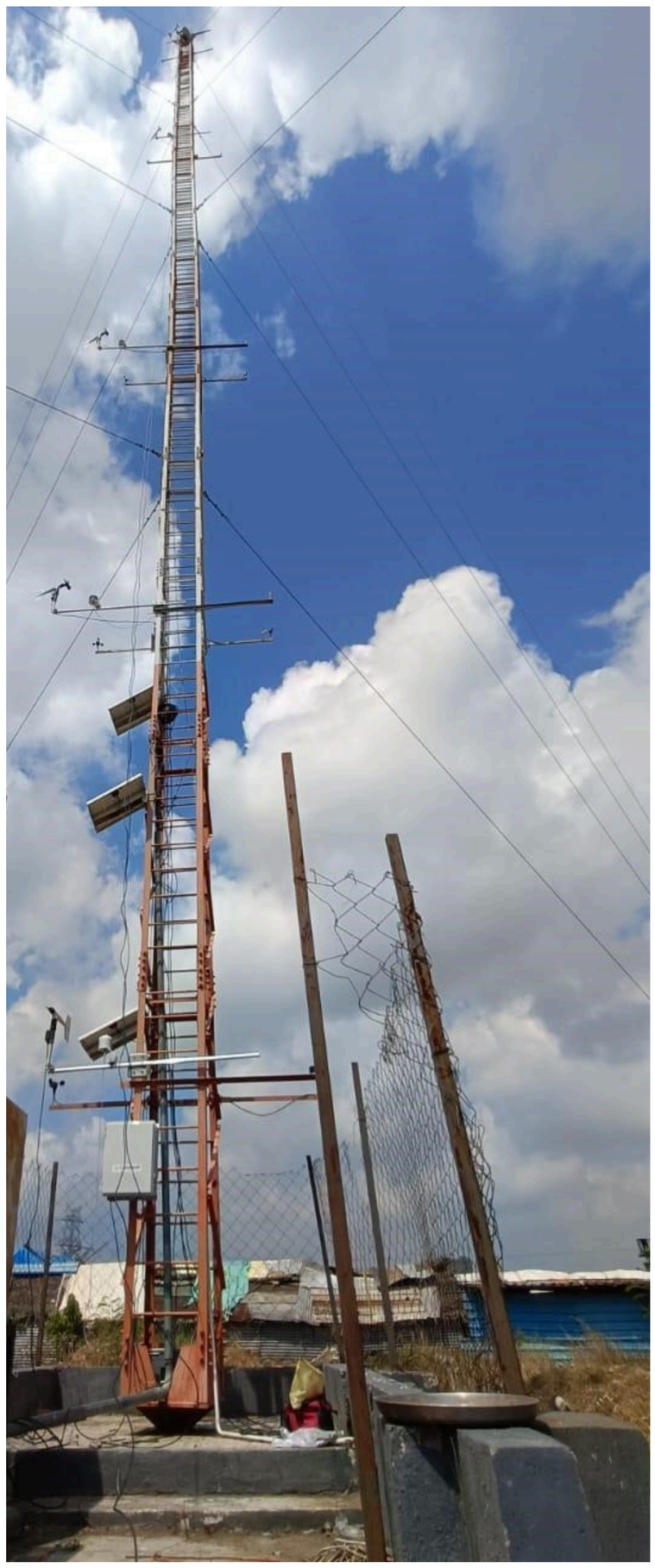
CEER is an official research centre at Sathyabama, established under Government of India's FAST (Frontier Areas of Science & Technology) scheme in 2014. Its focus is on "sustainable energy technologies"— including research on solar photovoltaics, fuel cells, batteries, bioenergy, and other clean-energy solutions. CEER's work supports development and deployment of renewable / clean energy technologies — fundamental for reducing carbon emissions and supporting long-term climate mitigation.

SDG 13 - CLIMATE ACTION



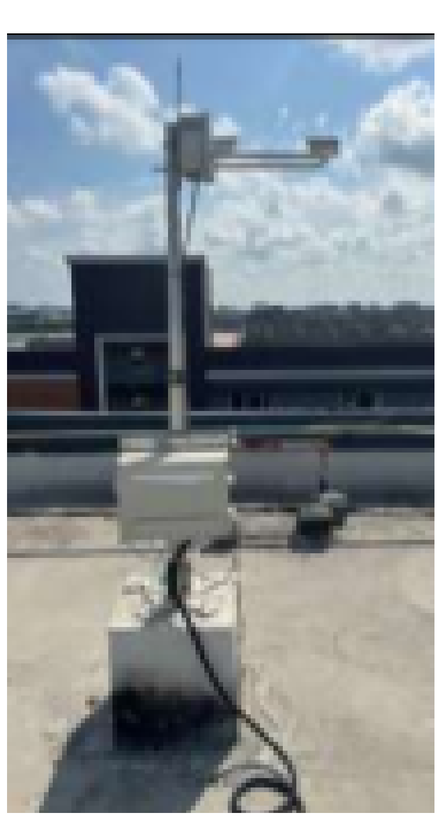
50 Meter Meteorological Tower

The centre has a 50-meter meteorological tower facility that measures temperature, humidity, wind speed, and direction at 2m, 8m, 16m, 32m, and 50m levels, as well as surface pressure and precipitation values. It was established with funding support from the Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam.



Atmospheric Observation Facility

An advanced atmospheric observation facility has been established to enable real-time weather monitoring and research. The setup includes a Laser Precipitation Monitor that measures rainfall intensity and drop size distribution with high precision. A sky imager, developed by IIT Madras, captures hemispheric sky views to estimate cloud fraction. A Lightning Detection Sensor (LDS), installed by NRSC–ISRO, monitors lightning activity within 500 km radius. Additionally, an Advanced Automatic Weather Station continuously records key surface meteorological parameters. Together, these instruments support scientific research, weather forecasting, and collaborative initiatives with national agencies.









SDG 13 - CLIMATE ACTION



Mission Mausam-Urban Testbed Facility-Chennai

"Mission Mausam-Urban Testbed Facility-Chennai" was inaugurated on 13th October 2025 at Centre for Remote Sensing and Geoinformatics (CRSG), Sathyabama Research Park, Sathyabama Institute of Science and Technology (SIST), Chennai by Dr. M. Ravichandran, Hon'ble Secretary, MoES in the presence of Dr. Mariazeena Johnson, Hon'ble Chancellor, SIST and Dr. A. Suryachandra Rao, Director, Indian Institute of Tropical Meteorology (IITM), Pune. The program featured the launch of advanced instruments including SODAR, Ceilometer, and Micro Rain Radar, along with the data recording and processing lab at centre. During the event, "GEOCHRONOS", an information gallery with 20 miniature satellites and Paleo specimens, was inaugurated to promote Earth observation and geoscience education. A formal MoU has been signed and exchanged between Hon'ble Chancellor, Dr. Mariazeena Johnson, SIST and Dr. A. Suryachandra Rao, Director, IITM in the presence of Hon'ble Secretary, MoES for the establishment of the facility and collaborative research and academic activities.



https://www.thehindu.com/news/cities/chennai/tn-to-get-more-weather-radars-new-facility-launched-in-chennai-to-boost-forecasts/article70158878.ece

SDG 13 - CLIMATE ACTION



Sathyabama’s Climate Action Plan

Sathyabama has an overarching Climate Action Plan. Sathyabama’s Climate Action Plan outlines two key goals for achieving climate neutrality. The first is an interim target of reducing emissions by 25% by 2026. The second is to reach full climate neutrality—net zero greenhouse gas emissions—by 2030. Over the next four years, the primary objective is to lower net emissions by 25%, marking a significant step toward long-term sustainability.The Centre for Climate Change Studies, Centre for Earth and Atmospheric Sciences, Centre for Ocean Research, Centre for Remote Sensing Technology and Centre for Waste Management are currently serving as the focal point to resolve environmental, urban, and agricultural challenges. It combines satellite data, geographic information systems, and spatial analysis techniques to support decision-making and sustainability research on campus.

https://sist.sathyabama.ac.in/download/ClimateActionPlan2020-2030.pdf

Sathyabama’s contribution toward climate change and disaster

Sathyabama researcher’s findings in Risk early warning – discussed in the Indian Parliament

One of the scientists from the research centre has contributed to the research, whose findings were recently published in the Science of the Total Environment journal. The research is all about “Aerosols heat up the Himalayan Climate” which is an alarming finding, a study by Isro’s Ahmedabad-based Physical Research Laboratory (PRL). This will remain a key factor driving climate change over the Hindu Kush–Himalaya–Tibetan Plateau (HKHTP) region". It also said “aerosols alone account for over 50% of the total warming (aerosols + greenhouse gases) of the lower atmosphere". This issue of “ALARMING INCREASE IN AEROSOL LEVELS” was discussed in India's Parliament on December 13, 2023.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=1985770



Ministry of Earth Sciences

ALARMING INCREASE IN AEROSOL LEVELS

Posted On: 13 DEC 2023 1:43PM by PIB Delhi

The study by the Indian Space Research Organization's (ISRO) Physical Research Laboratory using the ground-based observations of aerosol characteristics including radiative forcing data suggests that aerosol levels have increased specifically over the Indo-Gangetic Plain (IGP) and the Himalayan foothills and have implication which may lead to increased temperatures, altered rainfall patterns and accelerated melting of glacier ice and snow. The said study reports that the aerosol radiative forcing efficiency (ARFE) in the atmosphere is clearly high over the IGP and the Himalayan foothills (80–135 Wm−2 per unit aerosol optical depth (AOD)), with values being greater at higher elevations. The aerosol-induced atmospheric warming and deposition of light-absorbing carbonaceous aerosols on snow and ice are reported to be the primary reasons for the current and future accelerated glacier and snow melt.

It has been reported that the BC aerosol dominates (≥75 %) the aerosol absorption over the Indo-Gangetic Plain including the Himalayas throughout the year and aerosols alone account for >50 % of the total warming of lower atmosphere.

India represents a unique case for aerosol loading, properties and their effects. Varying aerosol sources get activated at different spatial and temporal scales. This changing nature of aerosols temporally and spatially when coupled with different land use nature across India, produces a very complex aerosol radiation-cloud-precipitation-climate interaction. Over the years several institutes, universities and organizations in India have conducted active research under various government initiatives towards characterizing aerosol properties and their effects over the Indian region.

The Hindu Kush-Himalaya-Tibetan Plateau region consists of the largest ice mass outside the Polar regions. Several Indian institutes/universities/organizations funded by the Government of India through Ministry of Earth Sciences (MoES), Department of Science & Technology (DST), Ministry of Environment Forest and Climate Change (MoEF&CC), Department of Space (DoS), Ministry of Mines (MoM) and Ministry of Jal Shakti (MoJS) monitor Himalayan glaciers for various scientific studies including glacier melting and have reported accelerated heterogeneous mass loss in Himalayan glaciers. The mean retreat rate of Hindu Kush Himalayan glaciers is 14.9 ± 15.1 meter/annum (m/a); which varies from 12.7 ± 13.2 m/a in Indus, 15.5 ± 14.4 m/a in Ganga and 20.2 ± 19.7 m/a in Brahmaputra River basins. However, glaciers in the Karakoram region have shown comparatively minor length change (-1.37 ± 22.8 m/a), indicating the stable conditions.

The melting of glaciers is mostly a natural. The recession or melting of glaciers is also caused by global warming and climate change. Therefore, the rate of melting of glacier can't be prevented or slowed down, unless all the factors responsible for the global warming and climate change can be controlled.

This information was given by the Union Minister of Earth Sciences, Shri Kiren Rijiju in a written reply in the Lok Sabha today.

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SNC/PK/LS1823

(Release ID: 1985770) Visitor Counter : 1414
Read this release in: Urdu , हिन्दी

1st Indian Arctic Winter Expedition

The 1st Indian Arctic Winter Expedition, organized by the National Centre for Polar and Ocean Research (NCPOR) under the Ministry of Earth Sciences (MoES), Vasco da Gama, Goa, included a research project titled "Diversity and distribution of actinobacteria in the Arctic during polar nights and their adaptation properties." This expedition report was submitted by Dr. M. Radhakrishnan, Professor (Research) and Scientific Member (Microbiology), from Centre for Drug Discovery and Development at Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India participated as part of Batch III in February 2024.



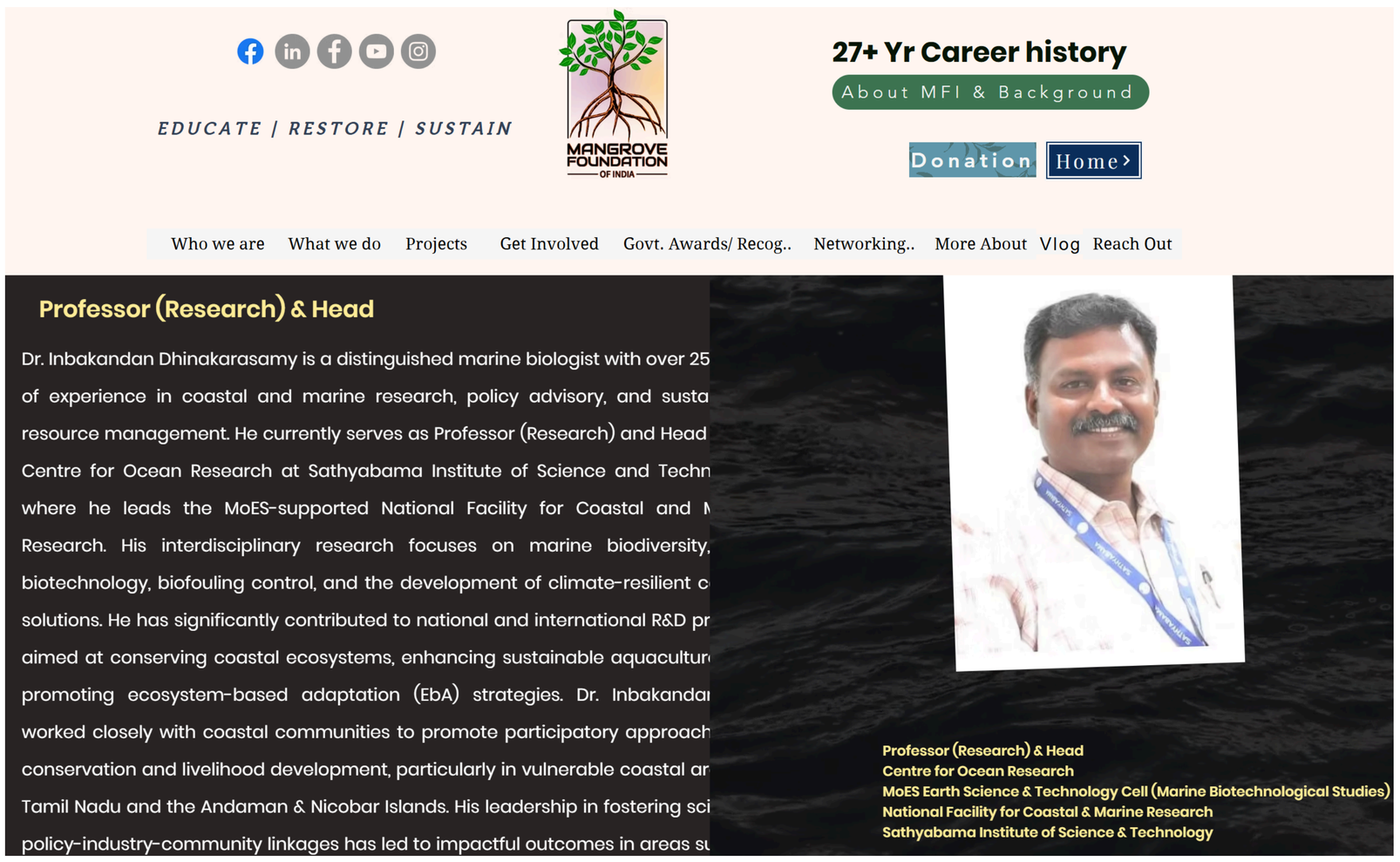
SDG 13 - CLIMATE ACTION



Sathyabama's collaboration with NGO communities to create awareness about climate adaptation

One of the researchers from the Centre for Ocean Research at Sathyabama Institute of Science and Technology contributes to interdisciplinary research which focuses on marine biodiversity, blue biotechnology, biofouling control, and the development of climate-resilient coastal solutions. He has worked closely with coastal communities to promote participatory approaches for conservation and livelihood development, particularly in vulnerable coastal areas of Tamil Nadu and the Andaman & Nicobar Islands and he contributes his valuable expertise and insight to the Advisory Committee of the Mangrove Foundation of India, NGO supporting its mission to protect, conserve, and restore India's vital mangrove ecosystems.

https://www.mangrovefoundationindia.com/copy-of-who-we-are



International Collaboration for studying aerosols

Dr. Mekalathur Rojaraman, Scientist and Assistant Professor at the Centre for Remote Sensing and Geoinformatics at Sathyabama Institute of Science and Technology. participated in training course and field campaign at Research Centre for Environmental Changes, Academia Sinica, Taipei, Taiwan



Outreach on Go Green in Rural Area

The NSS unit of Sathyabama Institute of Science and Technology organized an Outreach Program on Go Green in Rural Areas on 18.08.2023 at Kumizhi Panchayat, Near Guduvanchery, Chennai, with the participation of approximately 100 volunteers. The event aimed to foster community development through various initiatives, including health camps, educational workshops, environmental awareness campaigns, and infrastructure improvement projects. Volunteers engaged with residents, offering support and resources to address their needs. The program exemplified the institute's commitment to social responsibility and fostering positive change in surrounding communities. The event catalysed fostering a culture of environmental stewardship among the youth, aligning with the broader sustainable development goal on climate action.



Outreach on Go Green in Rural Area

Pledge on Lifestyle for the Environment

The NSS unit of Sathyabama Institute of Science and Technology orchestrated a compelling "Lifestyle for the Environment Pledge" event on August 21, 2023, rallying approximately 100 volunteers in a fervent display of eco-conscious commitment. Participants fervently engaged in various activities, from tree planting drives to waste management workshops, fostering a collective sense of environmental stewardship. Through interactive sessions and pledges, attendees pledged to adopt sustainable lifestyles, promising to reduce their carbon footprint and champion environmental preservation. The event served as a potent catalyst for fostering a culture of environmental awareness and action within the university community.

SDG 13 - CLIMATE ACTION



Village rally on plastic-free environment

In align with the sustainable development goal 13 climate action, the NSS unit of Sathyabama Institute of Science and Technology orchestrated a Village Rally on promoting a plastic-free environment on 30.08.2023, rallying 200 volunteers at a special camp in Kumizhi. Participants marched through the village, raising awareness about the detrimental effects of plastic pollution and advocating for sustainable alternatives. Through informative banners, speeches, and community engagement, the event aimed to inspire collective action towards preserving the environment for future generations.



Village rally on plastic-free environment

Meri Maati Mera Desh - Tree Plantation

The NSS unit of Sathyabama Institute of Science and Technology organized the "Meri Maati Mera Desh – Tree Plantation" event on August 28, 2023, with the enthusiastic participation of nearly 100 volunteers. The initiative aimed to contribute to environmental conservation and promote a greener ecosystem. Volunteers actively engaged in planting saplings across designated areas within the campus and surrounding communities.

In alignment with SDG 13 (Climate Action), this collective effort strengthened the institution's commitment to combating climate change through mitigation activities such as afforestation. Beyond enhancing the aesthetic appeal of the surroundings, the event also fostered environmental responsibility and community involvement among participants, reflecting NSS's dedication to building a cleaner and more sustainable future.

SDG 13 - CLIMATE ACTION



International Coastal Clean up Day Drive

The NSS unit of Sathyabama Institute of Science and Technology, in collaboration with the National Institute of Ocean Technology (NIOT), spearheaded a significant International Coastal Cleanup Day Drive on September 16, 2023, mobilizing a dedicated team of 200 volunteers. With a unified commitment to environmental protection, participants carried out an extensive cleanup along coastal stretches, removing debris and supporting marine conservation.

In alignment with SDG 13 (Climate Action), the initiative emphasized proactive measures to address climate-related challenges through the protection of coastal and marine ecosystems. This collective effort not only helped preserve fragile coastal environments but also enhanced public awareness on responsible waste management. The collaboration reflected a strong commitment to safeguarding natural resources and promoting sustainability for future generations.



International Coastal Clean up Day Drive

Beach Cleaning on Shramdan for Swachhata

The NSS Unit of Sathyabama Institute of Science and Technology organized a One Hour Shramdaan for Swachhata in collaboration with the Central Bureau of Communication and the Regional Directorate of NSS as part of its outreach activities on 01.10.2023 at Injambakkam Beach, East Coast Road, Chennai. The initiative included a beach cleaning drive along with a social awareness rally highlighting the importance of a Garbage-Free India for the public. This effort served as an important step toward protecting the coastal zone for the well-being of future generations.

SDG 13 - CLIMATE ACTION



In alignment with SDG 13 (Climate Action), the activity contributed to environmental protection through community-driven action aimed at reducing pollution and strengthening climate resilience. Approximately 100 volunteers participated actively, ensuring the successful completion of the event.



Sitlapakkam Lake Cleaning

The NSS unit of Sathyabama Institute of Science and Technology carried out a significant revitalization effort at Sitlapakkam Lake on March 17, 2024. Although the team comprised around 50 volunteers, the impact of their work was substantial. The cleanup activities centered on removing debris, segregating waste, and promoting community awareness on environmental stewardship. Volunteers worked diligently to restore the lake's natural beauty and ecological balance. In alignment with SDG 13 (Climate Action), the initiative strengthened efforts toward climate resilience by protecting local water bodies and promoting sustainable ecosystem management. The event not only reflected the volunteers' dedication but also underscored the importance of collective action in conserving natural resources. The restoration of Sitalambakam Lake stands as a testament to our commitment to environmental sustainability and meaningful community engagement.



SDG 13 - CLIMATE ACTION



World Forest Day

In alignment with SDG 13 (Climate Action), the NSS unit of Sathyabama Institute of Science and Technology celebrated World Forest Day on March 22, 2024, with great enthusiasm and commitment. More than 100 volunteers actively took part in activities designed to promote awareness of the vital role forests play in environmental protection. The program included tree-planting drives, biodiversity conservation awareness sessions, and clean-up initiatives.

The event emphasized the importance of strengthening climate resilience through afforestation and ecosystem preservation. These efforts aimed to cultivate a sense of responsibility among students and the wider community toward safeguarding the planet's valuable natural resources.

World Meteorological Day

World Meteorological Day was observed at Sathyabama Institute of Science and Technology on March 23, 2024, with the active participation of nearly 100 volunteers. The day's activities focused on enhancing awareness about meteorology and its crucial role in understanding weather patterns and climate change. Volunteers organized educational sessions, interactive workshops, and weather-themed quizzes to engage the community, and collaborated with meteorological experts to highlight the latest advancements in weather forecasting technologies.

In alignment with SDG 13 (Climate Action), the event emphasized the importance of climate literacy and the need for informed action in addressing climate-related challenges. Through these initiatives, the program aimed to promote a deeper understanding of meteorology and its significance in shaping our environment and daily lives.

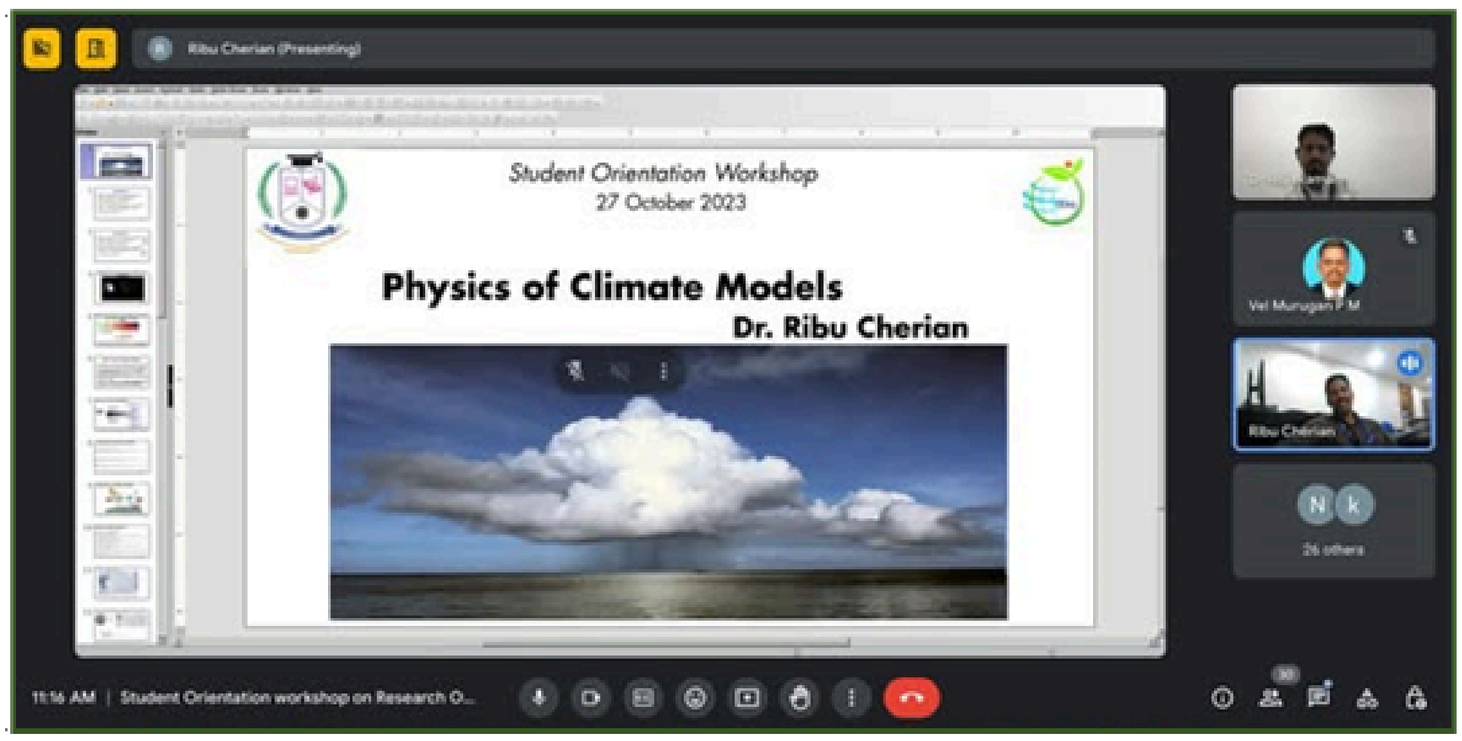
Research Opportunities in atmospheric and Ocean Physics and Numerical modeling

Sathyabama Research Park - Centre for Remote Sensing and Geoinformatics, organized two days orientation workshop on "Research Opportunities in atmospheric and Ocean Physics and Numerical modeling, on 26th and 27th October 2023. Dr. Alok Taori, Scientist -SG & Head, Atmospheric Science Division, ISRO-National Remote Sensing Centre (NRSC) inaugurated the workshop.



He delivered an expert talk on the "Climate Challenges and generation of Opportunities". Dr. G. Kishore Kumar, Assistant Professor, Centre for Earth, Ocean and Atmospheric Sciences, University of Hyderabad delivered a talk on "Why-What-How-Atmospheric Scientist". Prof. Pentakota Sreenivas, Professor, Centre for Earth, Ocean and Atmospheric Sciences, University of Hyderabad gave a lecture on "Ocean observations and modelling". Followed by this, a talk on 'Physics in Climate models' was delivered by Dr.Ribu Cherian, Assistant Professor (Research), Centre for Earth and Atmospheric Sciences, Sathyabama Institute of Science and Technology. Dr. S. Karuna Sagar, Scientist, India Meteorological Department, Amaravati, Andhra Pradesh delivered a lecture on the "Activities and opportunities in IMD" and explained the opportunities for Maths, Physics and Engineering back ground students. Finally the workshop ended with discussion with the participants and speakers.

Link:
https://www.facebook.com/SathyabamaOfficial/posts/pfbid0SDznUipM5nZExH7PDJho6iM1wXPHNRpcFVM6fKTd2RBqbSvT4Y5BSPM8tdtP2r8fl







SDG 13 - CLIMATE ACTION

To engage individuals in mitigating the adverse effects of climate

On mark of Glorious 75 years of Indian Independence, Sathyabama Institute of Science and Technology has celebrated "Azadi Ka Amrit Mahotsav" on the theme LiFE – Lifestyle for Environment on 4.8.23. The celebration aimed at meeting our national mission "To engage individuals in mitigating the adverse effects of climate change". Speech, Drawing and Project demonstration competitions were conducted for school students of Grade 6 to Grade 12 on this theme. Harmful effects of single-use plastic, Sustainable modes of transportation, Consciousness on water wastage, Smart energy consumption, Products from waste, Recycling Clothes, reducing food wastage & Importance of urban farming were the sub themes given under these three competitions. Around 200 students from 21 schools have enthusiastically participated in this event. It was a happy note that younger generation have proved to be very conscious and concerned of environmental impacts and are well aware of preventive measures for protecting mother earth from all sought of pollution.

Link:
https://www.facebook.com/SathyabamaOfficial/posts/pfbid0a3SMKS7hWi8ErEFE5fYgmDHRkyZ38zEskvzFhozPcij2uZUmpmefEHM5y7yEYcKBl





SDG 13 - CLIMATE ACTION



National Level Symposium on Alternate Research Initiatives for Sustainable Environment "ARISE 2023"

Centre for Waste Management, Centre of Excellence in Energy Research and Department of Chemical Engineering, Sathyabama Institute of Science and Technology (Deemed to be University) commemorating World Environment Day organized a National Level Symposium on Alternate Research Initiatives for Sustainable Environment "ARISE 2023" on June 14, 2023. The Environment Day symposium was a thought-provoking event that brought together experts, enthusiasts, and concerned individuals to raise awareness about environmental issues and explore sustainable solutions. The symposium aimed to inspire action and promote a deeper understanding of our collective responsibility towards the sustainable development. Participants were encouraged to adopt eco-friendly practices, promote environmental awareness in their communities, and support organizations working towards sustainable development.

Around 100 participants have participated in the event out of which 50 school students from Government High School, Kumizhi village, Chengelpet. The Scientific team delivered lecture on Waste Audit to create awareness on the different kinds of waste generated and how significant accounting of waste is for valorization into value added products. Poster / model display, environmental awareness quiz and waste audit competitions were conducted. The winners of the event were applauded with prizes and all the participants have provided with participation certificates.

Link:

https://www.facebook.com/SathyabamaOfficial/posts/pfbid02ZMMcvbb9Xp3FHPvYUGKjU4JeX6ay7TiCFcui2azxm9uLXUaXXjhVkBBgi3pqL5Bgl

SDG 13 - CLIMATE ACTION





Students' participation in Workshop on Environmental Awareness

Two NSS Volunteers from our NSS unit of Sathyabama Instituteof Science and Technology have actively participated and benefited from The Three Day State Level Workshop on Environmental Awareness (MeendumManchhapai) for NSS Volunteers & POs was organized by the Tamil Nadu State NSS Cell in collaboration with Manonmaniam Sundarnar University, Tirunelveli, and CSI Jayaraj Annapackiam College, Nallur sponsored by the Youth Welfare and Sports Development Department, Government of TamilNadu at CSI Holy Transfiguration Church Rock Hall, Courtallam, Tenkasi District between 15th and 17th February 2024.

SDG 13 - CLIMATE ACTION





Outreach Tree Plantation Drive

The NSS unit of Sathyabama Institute of Science and Technology spearheaded an Outreach Tree Plantation Drive on 23.02.2024, with 50 volunteers collaborating with EEE Students. Together, they planted saplings in designated areas, aiming to combat deforestation and mitigate environmental degradation. The initiative not only contributed to increasing green cover but also fostered a sense of environmental responsibility among participants, emphasizing the importance of sustainability for a healthier ecosystem.

SDG 13 - CLIMATE ACTION







SDG 13 - CLIMATE ACTION



High End Workshop on Sustainable Water and Energy Solutions Centre for Waste Management Sathyabama Institute of Science and Technology (SIST) Science Sponsored by Science and Engineering Research Board under the Accelerate Vigyan Scheme

Sponsored By
Science and Engineering Research Board
under the Accelerate Vigyan Scheme

24th - 30th June, 2024

High End Workshop on
Sustainable Water and Energy Solutions
Organized by
Centre for Waste Management
Sathyabama Institute of Science and Technology (SIST),
(Deemed to be University)
Chennai, Tamil Nadu

About the University

Sathyabama Institute of Science and Technology is one of South India's premier Academic and Research Institutions that offers multi-disciplinary academic programmes in various fields of Engineering, Science, Technology, Management, Dentistry, Law and Nursing.

It has been Accredited with 'A++' Grade by the National Accreditation and Assessment council and recognized as Category-1 University by UGC. Sathyabama's standing in rankings and ratings are excellent at National and International level. For the year 2023, Sathyabama Institute of Science and Technology has been ranked in 51st position among the Universities in India by the National Institutional Ranking Framework (NIRF), Government of India. NIRF has consistently ranked Sathyabama in the top positions and this is the seventh consecutive year the Institution is receiving this recognition.

About the CWM

To encourage and motivate researchers across the globe, several research centers have been initiated in the institution and are progressively working towards innovation in the field of Science and technology. Sathyabama Institute of Science and Technology with the joint initiative of the National Solid Waste Association of India (NSWAI) has established the Center for Waste Management in 2011. Center was devoted to develop innovative products, patent liable novel ideas in Waste Management, publish experimental outcomes in Q1 journals, train graduate students, offer consultancy services and pursue outreach activities so as to translate the research findings to the society for environmental and economic benefits.

The centre through its innovative technologies would encourage Research and Developmental activities for cleaner and greener environment and will also promote public awareness in waste segregation and management.

About the Workshop

Energy, water and sanitation are some of the most cross-cutting and deeply embedded factors affecting the daily lives of people all over the world. These factors are essential to achieve poverty eradication, social wellbeing, economic growth and global prosperity. Important challenges related to water and energy are faced by many countries in their efforts to achieve sustainable development. Also, water and energy are strongly interlinked to environmental issues including climate change, terrestrial and water ecosystems, and biodiversity. The importance of energy and water is recognized by the 2030 Agenda for Sustainable Development which includes the Sustainable Development Goals 6 on water and 7 on energy. SDG 6 calls for ensuring availability and sustainable management of water and sanitation for all and SDG 7 calls for ensuring universal access to affordable, reliable and modern energy services.

The main objective of this workshop is to enhance the capacities of young researchers including PhD Students and 2nd Year Master's Students from Tier – II & III institutes with Chemical Engineering, Environmental Engineering, and Bio-Engineering background to effectively manage the water-energy nexus and interlinkages with other SDGs covering the social, economic and environmental dimensions of sustainable development. The event will provide a global platform for all stakeholders to disseminate knowledge, exchange experiences and showcase best practices on integrated approaches that support sustainable water and energy solutions. It will also represent an opportunity for dialogue on effective policy, and technical and managerial approaches to water and energy supporting sustainable development. It would be an eminent opportunity for young researchers to bring up to date their knowledge in latest technologies.

Organizing committee

Patrons:

Dr. Mariazeena Johnson,
Chancellor, SIST, Chennai.
Dr. Marie Johnson,
President, SIST, Chennai.
Mr. Arul Selvan,
Vice-President, SIST, Chennai.
Ms. Maria Bernadette Tamilarasi,
Vice-President, SIST, Chennai.
Ms. Maria Catherine Jayapriya,
Vice-President, SIST, Chennai.

Convener:

Dr. T. Sasipraba,
Vice-Chancellor, SIST, Chennai.

Organizing Chair:

Dr. Dawn S. S.
Professor & Head,
Centre for Waste Management, SIST, Chennai.

Organizing Secretary:

Dr. Sathish Kumar Ramachandran.
Associate Professor, Centre for Waste Management, SIST, Chennai.

Target Participants

Motivated Post-Doctoral, Doctoral & Master's students in Material Science, Chemistry, Environmental Engineering, Chemical Engineering, and Bio-Engineering

Important Dates

Last date for registration: 01-06-2023
Notification to selected participants : 15-06-2023

Registration & Guidelines

- The course will be completely free of cost for the shortlisted participants.
- The applicants shall produce an endorsement letter from their Head of the department indicating their enrolment with the institute and 'No Objection Certificate (NOC)' for permitting to undergo training in the workshop, if selected.
- For registration, click here

Contact Us

Centre for Waste Management,
Sathyabama Institute of Science and Technology
(Deemed to be University),
Jeppiaar Nagar, Rajiv Gandhi Road,
Chennai-600119, Tamilnadu, India
Phone: +91-9715270093.
Email:sathishkumar.ramachandran.cwm@sathyabama.ac.in
https://www.centreforwastemanagement.com/contactus.htm



Workshop on Ozonium

Eco club of Sathyabama Institute of Science and Technology conducted a workshop titled "Ozonium" on 13.02.2024. Dr. M. Roja Raman, Scientist explained about the ill effects of ozone layer damage and enlightened student participants about the measures to be taken to avoid such damage. Ozone day is celebrated to raise awareness about the ozone layer's significance and the crucial role it plays in safeguarding life on Earth. The purpose of the event was to educate students and others about ozone layer depletion and the steps that may be taken to safeguard it. Students participated in this awareness activity by making presentations and speeches. They also educate people about mitigation techniques and their individual role in ozone layer conservation and protection. The theme for World Ozone Day 2023 is "Montreal Protocol: fixing the ozone layer and reducing climate change".



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 14
LIFE BELOW WATER





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SDG 14 - LIFE BELOW WATER

Sathyabama Institute of Science and Technology: To Keep Oceans Clean, Safe and Alive for Generations to Thrive

Sathyabama aligns its mission with SDG 14 by embedding marine-conservation and sustainable ocean use into its curriculum, research, and community outreach. It has several dedicated research entities tackling marine and ocean science: Centre for Ocean Research (COR), Centre for Climate Change Studies, Centre for Remote Sensing and Geoinformatics, and Centre for Earth and Atmospheric Sciences — enabling multidisciplinary research that includes marine ecology, oceanography, and conservation. The COR was established in collaboration with National Institute of Ocean Technology (NIOT), Chennai — indicating a serious institutional investment in ocean science.

Sathyabama stands out as a good example among Indian universities of how to embed SDG 14 into core institutional mission — combining education, research, community engagement, and sustainable campus operations. Its marine-research centres, coastal-community outreach (seaweed farming, sustainable fishing), pollution control policies, and capacity building reflect a holistic approach to "life below water."

Sathyabama's Overall Mission in alignment with SDG 14 Life Below Water is integrated into curriculum, research priorities, and community development initiatives. The institution promotes marine conservation, sustainable ocean practices, and scientific innovation through academic programmes, dedicated research centres, and extensive outreach activities. By integrating ocean literacy, advanced marine research, and community-based coastal protection efforts, Sathyabama works to ensure the long-term health of marine ecosystems and contributes to global sustainability goals. The institution aims to create a better world by providing solutions to global challenges through research and innovation.

Centre for Ocean Research (COR)

Centre for Ocean Research (COR) at Sathyabama Institute of Science and Technology is a premier entity in ocean sciences and marine biotechnology, tackling global challenges in sustainable marine Sathyabama's Overall Mission in alignment with SDG 14 Life Below Water is integrated into curriculum, research priorities, and community development initiatives. The institution promotes marine conservation, sustainable ocean practices, and scientific innovation through academic programmes, dedicated research centres, and extensive outreach activities.

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By integrating ocean literacy, advanced marine research, and community-based coastal protection efforts, Sathyabama works to ensure the long-term health of marine ecosystems and contributes to global sustainability goals. The institution aims to create a better world by providing solutions to global challenges through research and innovation management. With cutting-edge infrastructure, a team of expert researchers, and a strong multidisciplinary approach, COR drives innovation in ecosystem management, biodiversity conservation, and marine technology. Backed by national and international funding partners, COR plays a crucial role in advancing scientific research and promoting societal progress.

https://research.sathyabama.ac.in/home/CentreforOceanResearch

Centre for Remote Sensing and Geoinformatics (CRSG)

CRSG focuses on the application of remote sensing and geoinformatics to resolve environmental, urban, and agricultural challenges. It combines satellite data, geographic information systems, and spatial analysis techniques to support decision-making and sustainable development. CRSG typically engages in projects related to land use planning, environmental monitoring, disaster management, and resource management providing critical insights for both Government Organisations and Private Sector stakeholders.

Centre for Remote Sensing and Geoinformatics was established in 2004 at the Sathyabama Institute of Science and Technology in collaboration with the Indian Space Research Organisation (ISRO) to advance research in frontier areas of Science and Technology. It was inaugurated by Dr. Kasturirangan, Former ISRO Chairman and Secretary of the Department of Space, Government of India. The centre undertakes research and consultancy projects funded by National funding agencies such as DST, MoEF, MoES, CSIR, ICMR, and ISRO, along with organisations like NIWE, BHAVINI, and NRSC. As a nodal Centre of IIRS and ISRS, the centre regularly conducts Geospatial Training Programs aimed at educating the next generation of scientists, researchers, and professionals in the field of Remote Sensing and Geographic Information Systems (GIS). The Centre boasts a team of scientists specializing in diverse fields such as Agriculture, Coastal Studies, Environment and Forest, Water Resources, Urban Development, Climate Studies, and Aerial Photogrammetry.

https://research.sathyabama.ac.in/home/CentreforRemoteSensingandGeoinformatics

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National Facility for Coastal and Marine Research (NFCMR)

In line with Centre for Ocean Research's commitment to excellence, it is recognized by the Ministry of Earth Sciences and established the Earth Sciences and Technology Cell (ESTC) for Marine Biotechnological Studies in collaboration with the National Institute of Ocean Technology (NIOT) and the Centre for Marine Living Resources & Ecology (CMLRE). Expanding upon this initiative, Sathyabama has now established an integrated and interdisciplinary facility National Facility for Coastal and Marine Research (NFCMR), which is aimed at benefiting students, researchers, industries, and society at large, with legal and technical support from Ministry of Earth Sciences (MoES) with a National Tag.



Sathyabama Ocean Research Field Station – Jeppiaar Fishing Harbour, Muttom

The Sathyabama Ocean Research Field Station is located at the Jeppiaar Fishing Harbour in Muttom—a private harbour established by our Founder Chancellor, Colonel Dr. Jeppiaar, in his birthplace, a coastal village in the Kanyakumari District. The harbour was created to provide employment opportunities for the local community in this southernmost region of India. The field station extends Sathyabama Institute of Science and Technology's ocean research activities to coastal areas. Functioning under the Centre for Ocean Research, it supports marine research, technology transfer, and hands-on training workshops, enabling practical marine research and community-focused development in the region.

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Sathyabama Ocean Research Field Facility (On-Campus)

Sathyabama has an on-campus Ocean Research Field Facility that provides dedicated space for hands-on oceanographic research, training, and marine studies. It supports activities related to marine science, including the development and maintenance of aquaculture systems, enabling students and researchers to gain practical experience within the university campus.





Sathyabama Marine Research Station (SMRS)

Sathyabama Institute of Science and Technology has established a Marine Research Station at Rameswaram to advance coastal and marine studies. The facility is equipped with SCUBA diving kits, microscopes, underwater cameras, plankton nets, a PAM fluorometer, and other essential tools for field-based marine research.

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The station enables researchers to carry out cutting-edge studies in marine ecology and climate change, supporting efforts to sustainably manage and conserve natural ecosystems in the Gulf of Mannar and Palk Bay regions. Additionally, one of our faculty members is a certified open-water SCUBA diver, enhancing the station's capacity for underwater research and exploration.



Sathyabama works collaboratively with government agencies and industry partners

Sathyabama works directly with government agencies and industries through research to maintain and extend existing ecosystems and their biodiversity of plants, animals and marine species especially ecosystems under threat.

Sathyabama has signed Memorandums of Understanding (MoUs) with government agencies like Bay of Bengal Programme Inter-Governmental Organisation (BOBP_IGO), Ministry of Earth Sciences (MoES)Indian National Centre for Ocean Information Services (INCOIS), ICAR - Central Marine Fisheries Research Institute (CMFRI) for collaborative research work to increase awareness and knowledge of the needs, benefits and practices of marine fisheries management, enhancement skills through training and education, transfer of appropriate technologies and techniques for development of the small-scale fisheries to establish regional information networking and promote women's participation in marine fisheries value chain.

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The institution has also established its relationship with industries such as Seabytes, PrimeGen, Nanovea, Lupex, Labmate, Kanishka, Harris and Menuk, Carl Zeiss, Toshvin and Vetbiotic to collaboratively excel in the areas of research and development, training and other agreed activities.

https://research.sathyabama.ac.in/research/CentreforOceanResearch

Exchange of MoU With BoBP



Sathyabama has also signed MoU with Mangrove Foundation India to take necessary steps to prevent and create awareness on the restoration of mangrove forests. our university collaborates with NGO communities to create awareness about climate adaptation among the people in the locality. Our institution has participated in tree plantation drive and planted thousands of trees. The Centre of Ocean Research (COR) at Sathyabama University signed a Memorandum of Understanding (MoU) with the Mangrove Foundation of India to support community-driven mangrove restoration initiatives. Through the Community-Based Ecological Mangrove Restoration (CBEMR) approach, the collaboration aims to empower local communities to restore and sustainably manage mangrove ecosystems, thereby strengthening their livelihoods and enhancing their capacity to face and adapt to climate change.

Sathyabama's Policies Supporting SDG 14: Life Below Water

Sathyabama Institute of Science and Technology has implemented several policies and practices that directly contribute to the conservation and sustainable use of oceans, seas, and marine resources. These institutional policies reflect a strong commitment to protecting coastal and marine ecosystems.

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Food Policy

Sathyabama has policy to ensure that food on campus that comes from aquatic ecosystems is sustainably harvested. Sathyabama's Food Policy Framework is designed to advance the sustainability of both aquatic and agricultural food systems. The framework promotes responsible production, equitable resource use, and ecosystem stewardship, as outlined in Clause 2 of the Food Protocols Followed in Sathyabama Campus (p. 5). It further supports research and innovation aimed at strengthening sustainable food systems and enabling society to operate within the ecological limits of the natural world.

https://sist.sathyabama.ac.in/download/FoodPolicy.pdf

Sathyabama's responsible practice to efficient water sensitive waste disposal

Sathyabama has established a range of well-designed and effectively implemented practices and policies aimed at preventing potential harm to humans, animals, and the environment. Some of the key policies include adherence to water quality standards and discharge guidelines, the adoption of environment-friendly practices, and measures aimed at reducing marine pollution.

Water Quality Policy

The institution ensures continuous monitoring of water quality, preventing contamination of aquatic ecosystems and safeguarding water-dependent biodiversity. Through its functional Sewage Treatment Plant (STP), treated water is safely reused for gardening and landscaping, significantly reducing the discharge of polluted water into the environment.
Rainwater harvesting systems, flow-regulated taps, aerators, and water conservation structures—such as ponds, percolation pits, and storage tanks—collectively contribute to minimizing freshwater extraction and preventing marine and freshwater pollution. Sathyabama further advances SDG 14 by supporting research in water quality, recycling, reuse, desalination, prevention of salinity ingress, groundwater recharge, and sustainable water management practices. The institution also organizes awareness and outreach programs to foster responsible water use and protection of aquatic ecosystems in surrounding communities.

https://sist.sathyabama.ac.in/download/Water_Quality.pdf

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Sathyabama's Action plan to reducing plastic waste

Sathyabama has adopted best environment friendly practices that contributes to implementing robust systems to prevent land-based pollution from entering aquatic and marine ecosystems. The institution's comprehensive action plan to reduce solid, liquid, plastic, food, biomedical, and e-waste on campus thereby to ensure that harmful waste is segregated, treated, and disposed of responsibly, thereby reducing the risk of contaminants reaching water bodies. Also through Community Outreach activities the institution extends plastic awareness campaigns to nearby communities and schools, organizes beach clean-up, lake clean-up, and neighbourhood waste management drives and collaborate with NGOs, recycling companies, and government bodies for large-scale impact. Plastic pollution—a major global marine threat—is addressed through source segregation, recycling of plastic covers into granules, and repurposing PET bottles for sustainable building research, thereby reducing plastic waste that might otherwise reach landfills and water systems.

https://sist.sathyabama.ac.in/download/EnvironmentFriendly.pdf

Sathyabama's policy to prevent Marine Pollution

Sathyabama advances SDG 14 by implementing strong waste management and pollution-prevention systems that directly reduce the risk of contaminants entering aquatic and marine environments. The institution carries out a comprehensive waste audit to ensure proper segregation and handling of solid, liquid, biomedical, plastic, ritual, and e-waste, thereby preventing harmful materials from reaching water bodies.

Through liquid waste management, Sathyabama operates a 1.5 MLD Sewage Treatment Plant (STP) that treats all campus wastewater, with the treated water reused for gardening and toilet flushing. This minimizes the release of untreated effluents into the environment, significantly contributing to the reduction of water pollution. Storm water is Environment Friendly efficiently managed through rainwater harvesting pits and roof-top harvesting structures, reducing runoff contamination. The institution also converts waste cooking oil into biodiesel, preventing improper disposal that could pollute waterways.

https://sist.sathyabama.ac.in/download/MarinePollution.pdf

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Sathyabama's policy to monitor aquatic ecosystem

Sathyabama university has a plan to minimize physical, chemical and biological alterations of related aquatic ecosystems. The various measures of the plan are detailed in the Monitoring Aquatic System policy of Sathyabama. The institution implements a policy to prevent marine pollution. It uses strong waste-management and pollution-prevention systems to reduce the risk of contaminants entering aquatic and marine environments.

https://sist.sathyabama.ac.in/download/MONITORING_AQUATIC_ECOSYSTEM.pdf

Faculty Involvement in Marine Ecosystem Protection and Restoration (SDG 14)

Sathyabama's faculty actively contribute to the protection and restoration of ecosystems through research, community engagement, and conservation-focused initiatives.

Scientific session (SS054P) at the ASLO Aquatic Sciences Meeting 2023

Sathyabama develops and supports programs, incentives that encourage it to maintain good aquatic stewardship practices. One of our scientists from Centre for Climate Change Studies (CCCS) has contributed as one of co-organizers for scientific session (SS054P) at the ASLO Aquatic Sciences Meeting 2023, Trait Development and Resilience of Aquatic Microbial Communities Under Anthropogenic Stressors in Coastal Ecosystems: A Focus on Coastal Oceans of Global South. It focused on how microbial communities in the coastal oceans of the Global South adapt to human-caused stressors. This research explores the development of microbial traits that enable resilience, with an emphasis on how these communities cope with changes like pollution and climate change.

https://aslo.secure-platform.com/2023/solicitations/12/sessiongallery/1101

Times are displayed in (UTC+01:00) Brussels, Copenhagen, Madrid, Paris Change

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Coastal oceans are key to maintaining of global scale ecosystem processes including biogeochemical cycling and contribute to blue economy. In Global South, coastal oceans are crucial for offering direct livelihood to millions of coastal communities and contributing to pan regional GDPs. Resident aquatic microbial communities are crucial in maintaining health and functioning of coastal oceans. Multiple combinations of interactions and associations between microbes, known as microbial network, aid in the transfer of energy through the marine food web. The importance of development of traits and resulting microbial guilds can vary in coastal oceans across continents including in Asia and Africa. In particular, increasing anthropogenic stressors in a changing climate have led to 'urbanization' of coastal oceans. Coastal oceans are also becoming 'hotspots' of antibiotic-resistant genes (ARGs) and can become significant from the viewpoint of public health in parts of Asia and Africa. The aquatic microbial communities are exhibiting signatures of resilience including plasticity in coastal ocean as a result of metabolic interactions with different types of anthropogenic pollutants. There is an urgent need to understand trait development and resilience of aquatic microbial communities in coastal oceans of South to truly achieve nexus towards understanding of health of global oceans. In this session, contributions are welcome from that focuses on coastal ocean microbiome, functional traits in aquatic microbial communities, resilience of microbial communities and linking with broader ecological processes encompassing Global South. In particular, contributions are most welcome from early career researchers who are using multifaceted approaches ranging from ecophysiology, deep- sequencing to ecological modelling towards understanding of aquatic microbial communities in coastal oceans. Submissions are also welcome from authors who are working on aquatic microbial communities of coastal biotopes including mangroves, lagoons, estuaries, coral reefs, seagrass habitat and salt marsh.

Lead Organizer: Anwesha Ghosh, Indian Institute of Science Education and Research Kolkata, India (anweshag91@gmail.com)

Co-organizers:

Punyasloke Bhadury, Centre for Excellence in Blue Economy, Indian Institute of Science Education and Research Kolkata, India (pbhadury@gmail.com)

Krishna Ray, West Bengal State University, India (krishna@wbsu.ac.in)

Amit Kumar, Sathyabama Institute of Science and Technology, India (amitkumar.cccs@sathyabama.ac.in)

SS054P Trait Development and Resilience of Aquatic Microbial Communities Under Anthropogenic Stressors in Coastal Ecosystems: A Focus on Coastal Oceans of Global South

Time: 6:30 PM
Date: 8/6/2023
Room: Mezzanine

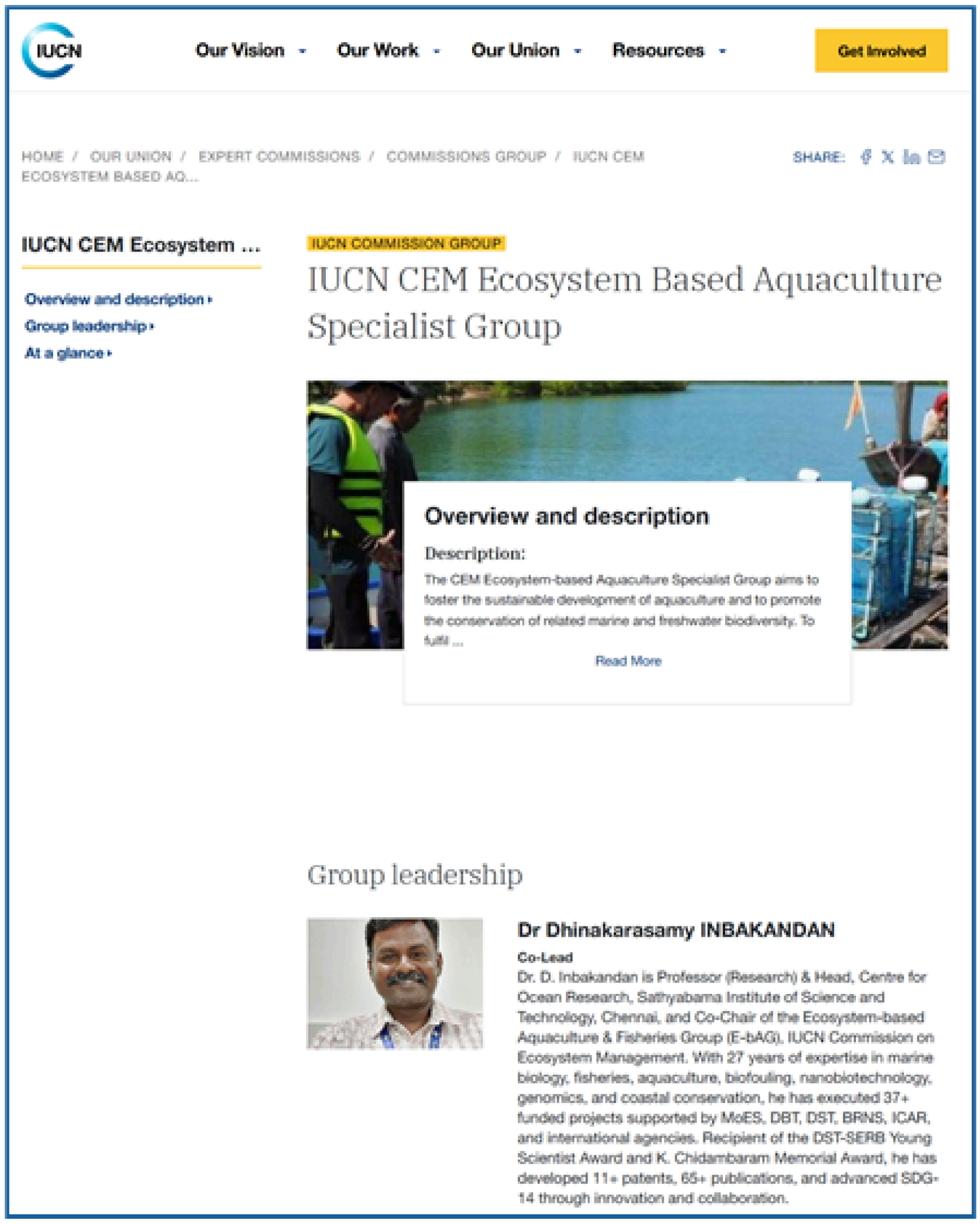
one of our scientists worked closely with coastal communities to promote participatory approaches for conservation and livelihood development, particularly in vulnerable coastal areas of Tamil Nadu and the Andaman & Nicobar Islands. His leadership in fostering science-policy-industry-community linkages has led to impactful outcomes in areas such as mangrove protection, marine bioresource utilization, and restoration planning. A recipient of national-level recognitions for his contribution to education, guidance, and institutional development, he has also served on multiple scientific and advisory committees. He actively mentors students and young researchers and is committed to building local capacities for marine ecosystem sustainability. With his deep knowledge of coastal ecology, community engagement, and environmental governance, he brings valuable expertise and insight to the Advisory Committee of the Mangrove Foundation of India, supporting its mission to protect, conserve, and restore India's vital mangrove ecosystems.

He is Co-Chair, Ecosystem-based Aquaculture & Fisheries Group (E-bAG)

IUCN - Commission on Ecosystem Management (CEM)

https://iucn.org/our-union/commissions/group/iucn-cem-ecosystem-based-aquaculture-task-force

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Joint online-conference with the Indian Institute of Science Education and Research

Sathyabama university as a body works directly for research and engagement with industries to practice technologies that enable marine industry to minimize or prevent damage to aquatic ecosystems. On the 23rd of August, the joint online-conference with the Indian Institute of Science Education and Research, Kolkata (IISER-Kolkata) and Sathyabama Institute of Science and Technology (SIST) was held in A.V. Zhirmunsky National Scientific Center of Marine Biology FEB RAS, Vladivostok, Russia. One of our scientists presented the report “Impact of ocean acidification on seaweed physiology and possible implications on coastal food chain".

http://www.imb.dvo.ru/index.php/en/news-announcements/1704-online-conference-with-the-indian-institute-of-science-education-and-research-kolkata-iiser-kolkata-and-satyabama-institute-of-science-and-technology-sist

SDG 14 - LIFE BELOW WATER

On the 23rd of August, the joint online-conference with the Indian Institute of Science Education and Research, Kolkata (IISER-Kolkata) and Satyabama Institute of Science and Technology (SIST) was held in A.V. Zhirmunsky National Scientific Center of Marine Biology FEB RAS, Vladivostok.

This online-conference was aimed at the mutual familiarization with the activities of these scientific organizations and determination of scientific directions for the further strengthening of cooperation.

From the Russian side, the NSCMB FEB RAS was represented by the Director of **Igor. Yu. Dolmatov**, Corr. Member of RAS, Deputy Director for International Cooperation Ph.D. **Konstantin A. Lutaenko**, the Director of the Scientific-Educational Center "Primorsky Aquarium", Branch of the NSCMB FEB RAS, **Olga G. Shevchenko**, the Scientific Head of the Laboratory of Deep-Sea Research Ph.D. **Tatyana N. Dautova**, the Scientific Head of the Laboratory of Physiology Ph.D. **Igor I. Puschin** and Communication Specialist of International Cooperation Department in "Primorsky Aquarium" **Natalia V. Miroshnikova**.



The Indian side was represented by Prof. **Punyasloke Bhadury**, Dr. **Anwesha Ghosh**, Mr. **Arkaprava Mandal**, Dr. **Amit Kumar**, Mrs. **Nirupama Saini** and Mr. **Yash**.

Sathyabama's contribution towards Sustainable Fishing and Conservation

The university conducts public awareness campaigns for the conservation of endangered species like sharks and rays in Tamil Nadu coastal waters, distributing identification flyers in the local language to fishermen.
It also initiated the cultivation of red seaweed (Kappaphycus alvarezii), providing rigorous entrepreneurship training to fisherwomen as an alternative source of income, thereby promoting sustainable use of marine resources.

Developing Strategies to Support Dugong Conservation in the Palk Bay

Sathyabama university collaborates with the local community through partnerships, in efforts to maintain shared aquatic ecosystems. One of our scientists from the Centre for Climate Change Studies has been part of the Intra-Regional Workshop on Developing strategies to support dugong conservation in the Palk Bay, Tamil Nadu organized by Wildlife Conservation Society –India on 19-20 October 2023. The main aim of the workshop was understanding of the challenges faced by natural resource management agencies with a goal to mainstream dugong and seagrass conservation into the fisheries sector mainstream dugong and seagrass conservation into the fisheries sector.

"DEVELOPING STRATEGIES TO SUPPORT DUGONG CONSERVATION IN THE PALK BAY"



19-20 OCTOBER 2023

MAHABALIPURAM, TAMIL NADU

WCS-India

Dr. S. Prakash, from the Sathyabama Institute of Science and Technology, discussed the diversity of coral reefs in Palk Bay and the collection of live animals for the ornamental trade. Reports indicate the presence of 87 fish species, 21 invertebrate species, and various corals in the area. Additionally, a high incidence of endangered taxa, such as sea horse, sea turtle, skates and rays including in bycatch, has been observed. Dr. Prakash stressed the importance of effectively utilizing Local Ecological Knowledge (LEK) and Citizen Science initiatives to address these concerns.



SDG 14 - LIFE BELOW WATER

Outreach act towards Seagrass ecosystem Services, Conservation and Restoration

Centre for Ocean Research, Sathyabama Research Park, organized DST-SERB sponsored Scientific Social Responsibility (SSR) programme on "Outreach act towards Seagrass ecosystem Services, Conservation and Restoration" for Olaikuda Fisherman Community which was held at Community hall, Rameswaram on 26th August, 2023.

The program was aimed to raise awareness among the fisherman community about the vital importance of Seagrass ecosystems along Tamil Nadu Coasts and to bring attention to the plight of seagrass meadows, encourage people to protect, take action and promote solutions for their sustainable management, conservation and restoration. Many fisher men and women participated in the program.

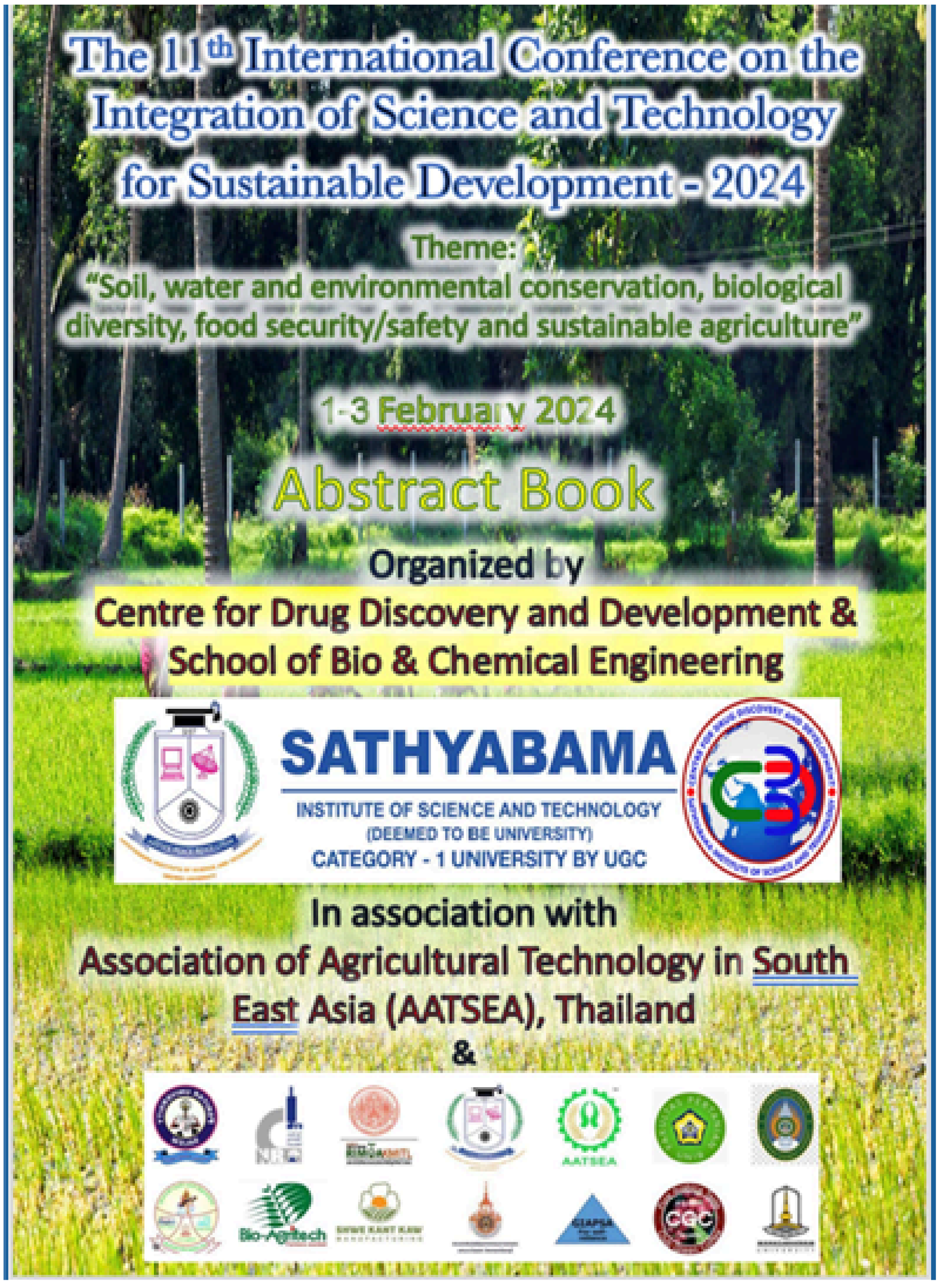
https://www.facebook.com/SathyabamaOfficial/posts/pfbid0ZxeDUGuQZzqbkmP1c25m45uK2d6cWdU4bvbNAB7dkhjXmrxTNvn4xiHVuPX17NGDl



International Conference on the Integration of Science and Technology for Sustainable Development 2024

Sathyabama offers educational programmes on fresh-water ecosystems such as water irrigation practices, water management and conservation for local and national communities through educational programs and outreach activities. Centre for Drug Discovery and Development & School of Bio & Chemical Engineering in Association with Association of Agricultural Technology in South Asia (AATSEA), Thailand has organized 11th International Conference on the Integration of Science and Technology for Sustainable Development 2024 from 1st to 3rd February 2024 on the theme "Soil, water and environmental conservation, biological diversity, food security, safety and sustainable agriculture".
http://www.aatsea.org/icist2023/assets/img/bookofabstract/20240131BookofAbstractICIST2024.pdf

SDG 14 - LIFE BELOW WATER



National Workshop on Blue Biotechnology

our university as a body support and organise events aimed to promote conservation and sustainable utilisation of the oceans, seas, lakes, rivers and marine resources by organizing events and awareness programs. National Facility for Coastal and Marine Research, a centralized hub established in Sathyabama Institute of Science and Technology is a pioneering initiative and a first of its kind in the country for advancing the blue biotechnology research, organized the National Workshop on Blue Biotechnology on 5-6th July 2024, sponsored by MoES which would pave the way for innovative solutions and sustainable practices in blue biotechnology.

https://www.theweek.in/konnect/economy/2024/07/10/a-one-of-a-kind-marine-research-facility-launched-at-sathyabama-university.html

SDG 14 - LIFE BELOW WATER

Swachh Bharat Mission Initiative – students towards societal responsible citizens

The NSS Unit of Sathyabama Institute of Science and Technology has participated in Shramdaan for Swachhata in collaboration with Central Bureau of Communication and Regional directorate of NSS as a part of our outreach activities on 1st October, 2023 at Akkarai Beach, Injambakkam Village, East Coast Road, Chennai. Sathyabama students have done a Beach cleaning drive and conducted a social awareness rally on Essentials of Garbage free India to the public thereby motivating the students to be societal responsible citizens. It is an Initiative to protect the coastal zone for the wellbeing of the upcoming generation. Around 40 volunteers have actively participated to complete this event successfully.

https://www.facebook.com/SathyabamaOfficial/posts/pfbid0Ebqn7wvGjxJcqhE8R9Fh1T2JBAufogumTF9XHsvRcBqs61U3DvXyokw61LW6UqBdl





SDG 14 - LIFE BELOW WATER

Lake cleaning drive

The NSS unit of Sathyabama Institute of Science and Technology led a comprehensive lake cleaning drive in Kumizhi Panchayat, near Guduvanchery, Chennai on August 24, 2023. Over 150 dedicated volunteers actively participated in the initiative. The event encompassed rigorous cleaning efforts, waste segregation, and educational sessions on environmental conservation. Volunteers collaborated with local authorities and residents to restore the lake's ecosystem and promote community involvement in maintaining its cleanliness. Through collective action and commitment, the initiative not only beautified the surroundings but also raised awareness about the significance of preserving water bodies for a sustainable future.





SDG 14 - LIFE BELOW WATER

World Water Day

The NSS unit of Sathyabama Institute of Science and Technology in commemoration of World Water Day on March 22nd 2024, with enthusiastic participation from approximately 100 volunteers. The day's activities highlighted the importance of water conservation and sustainable management practices. Volunteers engaged in various initiatives, including awareness campaigns, clean-up drives along water bodies, and distribution of water-saving tips. Through these endeavors, the NSS unit aimed to foster a greater understanding of the vital role water plays in our lives and inspire collective action toward ensuring its availability for future generations.



Training programme on Advances in Marine Biofilm Biology

Sathyabama Research Park – Centre for Ocean Research, in association with Department of Biotechnology (DBT), Govt. of India organized 5 days "Workshop & Hands on training programme on Advances in Marine Biofilm Biology" from 3rd – 7th October 2023. Students and scholars from various institutes like IIT Delhi, BITS Pilani, KK Birla Goa campus, Nandanam Arts College, Chennai, SIMATS School of Engineering, Chennai were provided with insights and techniques in quantifying the marine microbial biofilms. Participants were also provided with hands-on training on different modules.

https://www.facebook.com/SathyabamaOfficial/posts/pfbid02oY2zipjDG9qZdc2qta7kEC5JS5SgTfd2pc7vZ8evwZ3U3QxAZutVFr8HVAxZVg2sl?rdid=0cbCVrD9nOfFkt0E#

SDG 14 - LIFE BELOW WATER

The World Fisheries Day Celebration

Centre for Ocean Research, Sathyabama Research Park in association with School of Bio and Chemical Engineering, Sathyabama Institute of Science and Technology, commemorated the World Fisheries Day Celebration on 21st November 2023. To emphasize the theme and importance of World Fisheries Day, a competition was organized for school and college students to showcase their models, posters, paintings, and photography. Around 60+ students participated and benefited from various colleges and schools along with the research faculties. Fisheries contest (Posters/Models/Paintings/Photography) was conducted among participants to showcase their talents on the theme of fisheries Conservation and sustainable management.

https://www.facebook.com/SathyabamaOfficial/posts/pfbid02ATaanZXER385BE69moirDyXnyn7cT1cajPr5QQrXFkWrAXucNLtKcZtBvdaYP7a5l



Marine Biology Outreach and Education for School Students

Sathyabama Ocean Research Field Facility, Centre for Ocean Research in association with the Department of Biotechnology and MoES - Earth Science and Technology Cell has jointly organized One day Program for "Marine Biology Outreach and Education for School Students" on 29.09.2023. A total of 43 school student's participants from 11th standard students from Bethel Matriculation Higher Secondary School, Velachery, Chennai, Tamil Nadu. The program fostered a sense of responsibility towards the conservation of our oceans and marine life.

https://www.facebook.com/SathyabamaOfficial/posts/pfbid02nvDS2pTLSFBd4ujWZjvVjwASep4GrHCvTZsXDfKGXssf9gZkWhXHJUNLEV2oZQiMl

SDG 14 - LIFE BELOW WATER







Youth Voices on Fisheries Law

SCIENCE COURT - Youth Voices on Fisheries Law" – an inter departmental initiative is organized by Centre for Ocean Research & Sathyabama School of Law in association with International Union for Conservation of Nature - Commission on Ecosystem Management (IUCN – CEM) on 16th August 2023. The event was conducted as a legal debate in the Moot Court Ecosystem in the witness of Dr. E. Vivekanandan, National Consultant & Fisheries Expert and the Senior Scientific Consultant, ICAR CMFRI and Ms. Abisha Isaac George, the leading Advocate from the Madras High Court.

https://www.facebook.com/SathyabamaOfficial/posts/pfbid0yaZewYfSJ7yURcsYDSz12fsGx97YH83E6Cqa3qPqeJkGosP1Xdh5Q2WUM1tUV1iil

SDG 14 - LIFE BELOW WATER





Educational initiatives targeting local and national communities

Sathyabama is actively engaged in various educational outreach initiatives targeting local and national communities raising awareness about overfishing, illegal, unreported and unregulated fishing and destructive fishing practices. Centre for Climate Change Studies (CCCS) with the support from Ministry of Earth Sciences (MoES) Government of India has organized Marine Biology Research Symposium (MBRS 2024) from 23rd to 25th JAN 2024 to create awareness. It was a platform that brought together marine biologists, researchers, and enthusiasts from across India and around the world to share their ongoing research and innovative ideas. The symposium enabled participants to hear cutting-edge scientific advancements from leading experts.

https://mbrs2023.wordpress.com/wp-content/uploads/2024/01/book-of-abstract_mbrs-2024-final-1-1.pdf

SDG 14 - LIFE BELOW WATER



SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC

MARINE BIOLOGY RESEARCH SYMPOSIUM (MBRS 2024) 23-25 JAN 2024

Organized by
CENTRE FOR CLIMATE CHANGE STUDIES (CCCS)

Supported by
Ministry of Earth Sciences

Ministry of Earth Sciences
Government of India

About the conference

This 3-day Marine Biology Research Symposium (MBRS-2024) aims to bring together marine biologists, researchers and enthusiasts from across India and the rest of the world to facilitate the exchange of their ongoing research and innovative ideas. The symposium will be a platform to hear groundbreaking research advances from leading researchers and an opportunity to build collaborative networks. Theme of the symposium is in line with SDG 14 (Life Below Water) as a major component.

THEMATIC AREAS

- Taxonomy, Biodiversity and Conservation (TBC)
- Blue Carbon and Coastal Ecosystems (BCCE)
- Physiology of Marine Organisms to Climate Change (PMCC)
- Marine Pollution and Impact (MPI)
- Marine Microbial Ecology & Bioprospecting (MMEB)
- Coastal and Ornamental Aquaculture (COA)

International Research Centre
SATHYABAMA

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 15
LIFE ON LAND



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SDG 15 - LIFE ON LAND

Sathyabama Institute of Science and Technology: Nurture the Earth, Sustain the Future

Sathyabama Institute of Science and Technology actively contributes to SDG 15 – Life on Land, which focuses on protecting, restoring, and promoting sustainable use of terrestrial ecosystems, halting biodiversity loss, and ensuring sustainable management of forests and natural resources. The university's initiatives address multiple SDG 15 targets through research, capacity building, workshops, and technological innovations.

Sathyabama demonstrates strong commitment to SDG 15 through extensive green cover enhancement, biodiversity conservation, and environmental restoration initiatives. The institution has significantly expanded its campus greenery by planting a wide variety of trees, shrubs, herbs, palms, aquatic plants, cacti, and grasses, creating a rich and diverse ecosystem. These efforts support habitat creation, carbon sequestration, and ecological balance.

The University promotes sustainable ecosystem management through the establishment of dedicated green zones, botanical collections, and landscaped areas that enhance both environmental quality and biodiversity. Continuous efforts in tree plantation drives, native species promotion, and maintenance of green spaces further strengthen land restoration and conservation practices. Through these initiatives, Sathyabama contributes to reducing land degradation, protecting terrestrial ecosystems, and establishing a climate-resilient and biodiverse campus environment—directly advancing the targets of SDG 15: Life on Land. Sathyabama maintains a strong commitment to preserving and enhancing terrestrial ecosystems through continuous expansion of green cover on campus. The institution nurtures a diverse collection of plant species—trees, shrubs, herbs, palms, aquatic plants, cacti, grasses, and climbers—ensuring rich biodiversity and ecological balance.



SDG 15 - LIFE ON LAND

Research Centres Contribution towards SDG 15

Sathyabama has a well-established research centre which equipped with advanced laboratory tools for animal research, offering valuable resources to benefit scholars and scientists across various disciplines.

Centre for Earth and Atmospheric Sciences

Centre comprises of multi-disciplinary team of meteorologists, geologists, hydrogeologists, physicists and geochemists who are actively engaged in basic research on Earth Science, Remote Sensing, GIS, Modeling, Agriculture, Environmental and Air Pollution studies. It is an emerging interdisciplinary centre that aims to tackle climate change and work to preserve the natural resources. Advanced GeoEnvironmental Laboratory stands as a beacon of innovation within the Centre, equipped with cutting-edge instruments and technologies that redefine learning and research.

Centre for Laboratory Animal Technology and Research

Centre for Laboratory Animal Technology and Research (CLATR) marks a significant milestone for Sathyabama Institute of Science and Technology. This cutting-edge, CCSEA-approved laboratory animal facility adheres to Good Laboratory Practice (GLP) standards and meets international benchmarks. Crafted with global expertise, the centre is positioned to make a major impact on the worldwide research community.

It provides a controlled and sterile environment for housing animals, with specialized equipment to monitor their health and well-being. The facility plays a crucial role in bridging the gap between basic research and clinical trials, ensuring the safety and efficacy of potential treatments before human testing.



SDG 15 - LIFE ON LAND

Tree Plantation Drives - a sustainable approach towards green campus approach

The NSS unit of Sathyabama Institute of Science and Technology conducted a Tree Plantation Drive on 27.03.2024 to promote the significance of strengthening our ecosystem. This is an attempt to encourage the concept of Natural Regeneration and planted 100 saplings in our campus. Around 80 NSS Volunteers have participated and made the event successful.



Foreign delegates who visited our university as a part of the International Conference ICIST 2024, have also taken part in the Tree plantation drive that was organised near Sathyabama on 2nd February 2024.



SDG 15 - LIFE ON LAND

Sathyabama's policies to ensure sustainability

Sathyabama supports SDG 15 through biodiversity-rich green campus policies, environment friendly practices, food policy, afforestation drives, sustainable landscaping, soil and water conservation practices, responsible waste management systems, and consistent awareness programmes aimed at protecting and restoring terrestrial ecosystems.

Sathyabama has various policies tonsure the Conservation, Restoration and Sustainable use of Terrestrial Ecosystems, Conservation of Endangered Species, Waste Management, Water Quality, food policy to ensure that food on campus is sustainably farmed, Marine pollution policy and policy to reduce the impact of alien species on campus.

Sathyabama has a policy to ensure that food on campus is sustainably farmed. Sathyabama's Food Policy Framework is designed to advance the sustainability of both aquatic and agricultural food systems. The framework promotes responsible production, equitable resource use, and ecosystem stewardship, as outlined in Clause 3 of the Food Protocols Followed in Sathyabama Campus (p. 5).

https://sist.sathyabama.ac.in/download/FoodPolicy.pdf

The Institution has water quality standards and guidelines for water discharges to uphold water quality in order to protect ecosystems, wildlife, and human health and welfare. The institution is actively working toward enhancing water sustainability, as evidenced by the initiatives outlined on page 4 of the Water Quality Standards and Guidelines for Water Discharge. This has been achieved with the use of water efficient fixtures, waste water treatment technologies, rain water harvesting and other initiatives. Reducing water consumption and protecting water quality shall be the key objectives of sustainable policy of our Institute. The Institute views water from the three interrelated dimensions of efficient conservation, responsible consumption and restoring surface and groundwater.

https://sist.sathyabama.ac.in/download/Water_Quality.pdf

Sathyabama university has a comprehensive waste-management policy that explicitly mandates the avoidance of plastic items on campus. The policy is detailed in Clause 3.2, Plastic Waste Management, on page 7 of Environment Friendly Practices. The Institution does not recommend the use of plastic items like milk packets, plastic covers, PET bottles, plastic bags, food packaging and containers inside the campus. If such materials are used, they shall be segregated from other waste streams and disposed of in designated separate bins.

https://sist.sathyabama.ac.in/download/EnvironmentFriendly.pdf

SDG 15 - LIFE ON LAND

Sathyabama has a policy on waste management that aims to promote responsible waste production and disposal practices on campus. This policy ensures that generation of all types of waste viz., liquid waste, solid waste, plastic waste, e-waste, food waste etc. are minimized and disposed of in a responsible manner without affecting the land and aquatic ecosystem. The policy is outlined in clause 2.5 of waste management policy.

https://sist.sathyabama.ac.in/download/WasteManagementPolicy.pdf

Sathyabama has a policy to reduce the impact of alien species on campus. It is available in clause 2.2 , Step 2 available on page 14 of Terrestrial Ecosystem Policy.
Sathyabama university also has a policy to ensure the conservation, restoration and sustainable use of terrestrial ecosystems associated with the university, in particular forests, mountains and drylands. The strategies are detailed in Terrestrial Ecosystems policy of sathyabama.

https://sist.sathyabama.ac.in/download/TerrestrialEcosystemPolicy.pdf

Sathyabama has policy to identify, monitor and protect any IUCN Red Listed species and national conservation list species with habitats in areas affected by the operation of our university. Outcomes of the research projects from Centre for Laboratory Animal Technology and Research contributes in framing policies to support government for monitoring and protecting any IUCN Red Listed species.

https://research.sathyabama.ac.in/research/CentreforLaboratoryAnimalTechnologyandResearch

Institutional Animal Ethics Committee (IAEC)

Centre for Laboratory Animal Technology and Research, Sathyabama Research Park, Sathyabama Institute of Science and Technology (SIST), Chennai, conducted "21st Institutional Animal Ethics Committee (IAEC) on 22nd July, 2023. A 8 member team appointed by the Committee for Control and Supervision on Experiments in Animals (CCSEA), Ministry of Fisheries, Animal husbandry and Dairy screened the proposals. 14 researchers, 4 from SIST and 10 from various institutes and industry such as Vel's Institute of Science, Technology and Advanced Studies, SDNB Vaishnav College, Tagore Dental College and Hospital, SRM Institute of Science and Technology, Affyclone Laboratories Pvt. Ltd. participated in the IAEC meeting.

SDG 15 - LIFE ON LAND

Sathyabama's contribution towards events and outreach activities

Sathyabama supports and organises events aimed to promote conservation and sustainable utilisation of the land, including forests and wild land. Sathyabama's commitment to integrating local biodiversity into planning and development is demonstrated through multiple campus initiatives and documented activities. In commemoration of International Day for Disaster Risk Reduction, Centre for Remote Sensing and Geoinformatics, Sathyabama Institute of Science and technology in association with Department of Geography, Bharathi Women's College and Department of Civil Engineering, SRM Institute of Science and Technology and Indian Society of Remote Sensing (ISRS) organized a workshop on Fighting inequality for a resilient future Water Resources Management in a Changing Environment.



INTERNATIONAL DAY FOR DISASTER RISK REDUCTION
Two days online workshop on
WATER RESOURCES MANAGEMENT IN A CHANGING ENVIRONMENT

About Workshop:
Join us for a transformative experience at the Two-Day Online Workshop on Water Resources Management in a Changing Environment, hosted by the Centre for Remote Sensing and Geoinformatics at Sathyabama Institute of Science and Technology in Chennai and In collaboration with the Department of Geography at Bharathi Women's College (BWC), Chennai, this workshop aims to explore innovative approaches to address the evolving challenges in water resource management. As our World faces increasing environmental changes, understanding and effectively managing water resources are critical. This workshop offers a unique platform to engage with experts, share insights, and gain valuable knowledge in remote sensing, Geoinformatics, and geography. Together, let's harness technology and expertise to safeguard our precious water resources for a sustainable future. Don't miss this opportunity to be part of a collaborative effort that will shape the future of water resource management. Register now and join us on this enlightening journey towards a more resilient and sustainable world.

Workshop Outcomes:
- Participants will learn about water resource management in a changing environment. Hands-on practice will help them implement these abilities in real life.
- Participants can network and cooperate with professionals, researchers, and peers at the workshop. Future research collaborations and partnerships may result.
- Participants will receive interdisciplinary water resource management insights. Holistic approaches can yield better results.
- Participants will be better able to promote sustainable water resource management in their communities and organizations.
- The workshop can help to create and implement sustainable water resource management..

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Asst. Professor/Head
Centre for Remote Sensing and Geoinformatics
Sathyabama Institute of Science and Technology

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Department of Geography
Bharathi Women's college (BWC), Chennai

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SRM Institute of Science and Technology,KTR,Chennai

Registratation Link
https://forms.gle/gCKhRQ3qFUoMKh8j7
Registration Fees: Rs.100/-
(Last date of Registratation : 12th October 2023)

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Account holder: Director Research-
Sathyabama Institute of Science and Technology
Note:It is mandatory to include candidate name, center, and purpose (Name of the Program)
Mode of payment - Google pay, Phone Pay, Online transaction.

For Further Details Contact : Dr.K.Nagamani
Email: nagamani@sathyabama.ac.in
Mobile: 8939267132

Who can Apply:
Faculty members, researchers, UG and PG students from academia, and others government departments are eligible to apply.

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
Accredited "A++" Grade by NAAC 12B Status by UGC Approved by AICTE

International Day for Disaster Risk Reduction
Theme: Fighting inequality for a resilient future Water Resources Management in a Changing Environment

Date for Programme
13th to 14th October 2023

Organized by
Centre for Remote Sensing and Geoinformatics
Sathyabama Institute of Science and Technology Chennai, 600119

In association with
Department of Geography
Bharathi Women's College , Chennai
&
Department of Civil Engineering
SRM Institute of Science and Technology,KTR, Chennai &
Indian Society of Remote Sensing (ISRS-Chennai Chapter)

Sathyabama's collaboration with International Institute for Agriculture Research

Sathyabama offers educational programme and outreach for local and national communities on sustainable management of land for agriculture. Scientists from Centre for Drug Discovery and Development and Centre of Modern Organic Agriculture (C-MOAR), Sathyabama Institute of Science and Technology, Chennai, India has visited Research Institute of Modern Organic Agriculture - King Mongkut's Institute of Technology Ladkrabang ((RIMOA-KMITL), Association of Agricultural Technology in Southeast Asia (AATSEA), NC Organic Coconut Farm, Kings Former Fertilizer Company, Institute of Molecular Bioscience, Mahidol University, Mahidol Hospital; Research Centre, Superior ART Bangkok, Thailand during 3 – 6, April 2024. This visit significantly expanded the research in terms of joint projects for collaborative research work on sustainable management of land for agriculture.

SDG 15 - LIFE ON LAND



Hands on Training on Preclinical animals and its Research”

Centre for Laboratory Animal Technology and Research, Sathyabama Research Park, Sathyabama Institute of Science and Technology, Chennai conducted “Hands on Training on Preclinical animals and its Research” from 30th January to 1st February 2024. Participants were from Tamil Nadu Government Siddha Medical College, Chennai and Anna University, Chennai and acquired knowledge on lab animal handling and research from basics. The three days’ program was organized with the objective of, Hands on experience in handling of various lab animals with the basics of laboratory animal maintenance, and ethics in order to carry out the most basic experiments on lab animals. The participants were educated on CCSEA guidelines and the Institutional Animal Ethics Committee constitution. The participants visited the lab animal facility, where the structure and function of the facility were explained to them.

SDG 15 - LIFE ON LAND



Workshop on " Basic Techniques in Small Animal Research"

Sathyabama works directly to maintain and extend existing ecosystems and their biodiversity, of both plants and animals, especially ecosystems under threat. Sathyabama Research Park - Centre for Laboratory Animal Technology and Research, Sathyabama Institute of Science and Technology, conducted a Workshop on " Basic Techniques in Small Animal Research" during 16-18th October, 2023. Participants were from Tamil Nadu Government Siddha Medical College, Schieffelin Institute of Health – Research & Leprosy Centre of Leprosy, AVVM Islamiah College (Autonomous) Vaniyambadi and Sathyabama Institute of Science and Technology. The three days program was organized with the objective of, Hands on experience in handling various lab animals with the basics of laboratory animal maintenance, and ethics in order to carry out the most basic experiments on lab animals. The participants were educated on CCSEA guidelines and the Institutional Animal Ethics Committee constitution.

Hands on training in Biomedical research in Small animals

The Centre for Laboratory Animal Technology and Research, Sathyabama Institute of Science and Technology, Chennai conducted Summer Internship Program on "Hands on training in Biomedical research in Small animals from 13th to 15th May 2024. A total of 10 participants, from Government Siddha Medical College, Vellore Institute of Technology participated in the program and gained knowledge with the basics of animal research.

SDG 15 - LIFE ON LAND

The three days' program was organized with the objectives of basic research in small animals, the basics of laboratory animal maintenance, and ethics in order to carry out the most basic experiments on lab animals, maintenance, and toxicity analysis. They were taught with brief lectures. The participants were sensitised about the proper use of animals, laboratory maintenance, adherence to CCSEA guidelines and Institutional Animal Ethics Committee regulations, drug administration techniques, necropsy procedures, blood collection methods, behavioural studies. The program emphasized the humane treatment of animals throughout the research process.



Institutional Animal Ethics Committee (IAEC)

Centre for Laboratory Animal Technology and Research, Sathyabama Research Park, Sathyabama Institute of Science and Technology (SIST), Chennai, conducted "21st Institutional Animal Ethics Committee (IAEC) on 22nd July, 2023. Dr.D.Saravanan Convened the Program. A 8 member team appointed by the Committee for Control and Supervision on Experiments in Animals (CCSEA), Ministry of Fisheries, Animal husbandry and Dairy screened the proposals. 14 researchers, 4 from SIST and 10 from various institutes and industry such as Vel's Institute of Science, Technology and Advanced Studies, SDNB Vaishnav College, Tagore Dental College and Hospital, SRM Institute of Science and Technology, Affyclone Laboratories Pvt. Ltd. participated in the IAEC meeting.

SDG 15 - LIFE ON LAND



Pre-Clinical Animal Models and its Research

Centre for Laboratory Animal Technology and Research, Sathyabama Institute of Science and Technology, Chennai conducted Hands on Training on " Pre-Clinical Animal Models and its Research " during 13-15th September, 2023. A total of twelve participants, from Tamil Nadu Government Siddha Medical College, AVVM Sri Pushpam Womens College and Justice Basheer Ahmed Sayeed College for Women, participated in the program and gained knowledge with the basics of lab animal handling and research.

The participants were educated on CCSEA guidelines and the Institutional Animal Ethics Committee constitution. They were taught with brief lectures and hands on training on the routes of administration of drugs, necropsy, and collection of blood, behavioural study of lab animals, sampling, biochemical analysis, and microscopy techniques. The participants were sensitised about the proper use of animals for research and the humane use of animals before, during, and after animal experiments. The participants visited the lab animal facility, where the structure and function of the facility were explained to them.

SDG 15 - LIFE ON LAND



One-day hands-on training with Next-Generation Surveying Tools like DGPS, DRONE and LIDAR

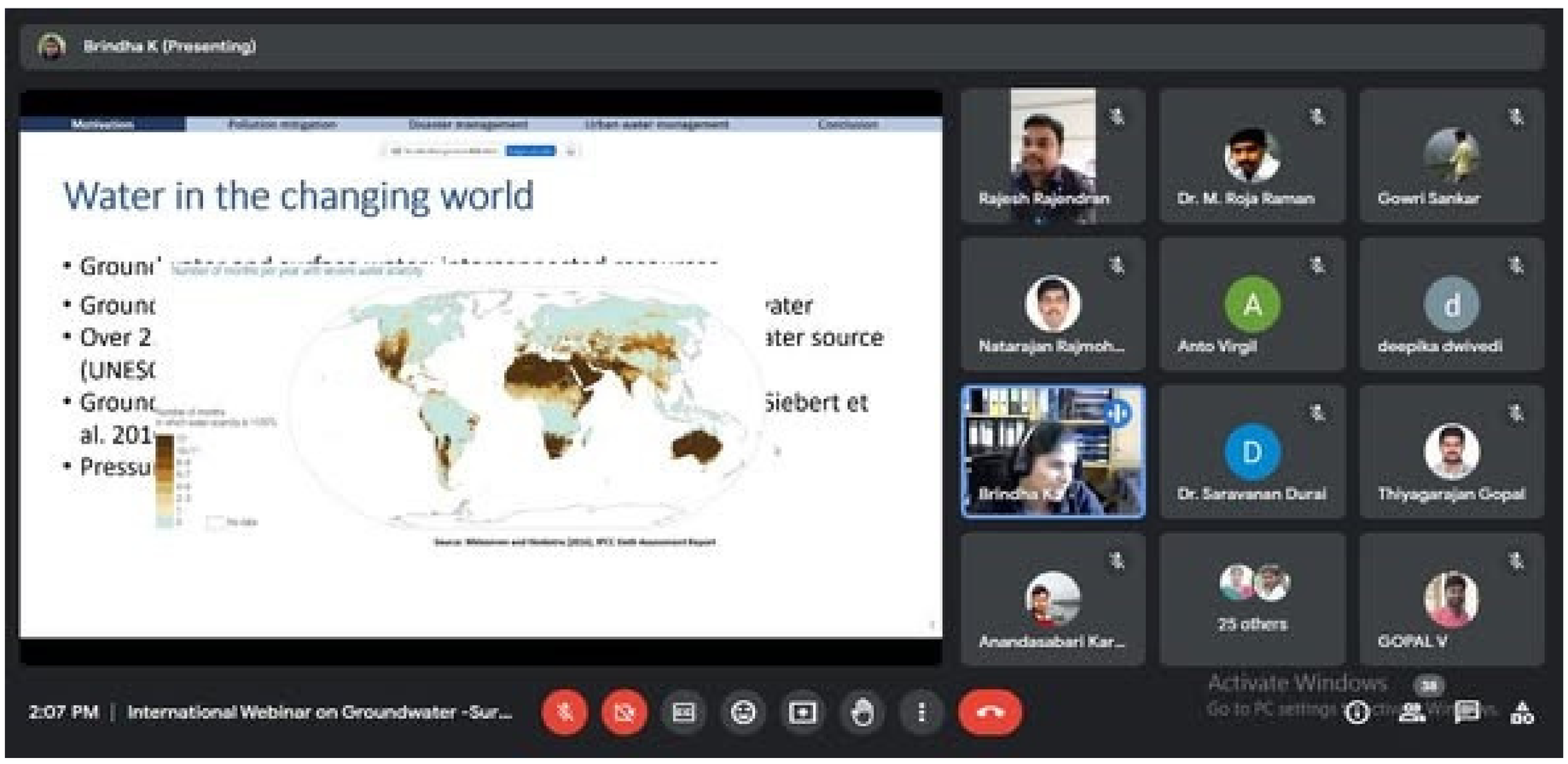
The Centre for Earth and Atmospheric Sciences, Sathyabama Research Park, SIST and Land Coordinates Technology, Chennai organized One-day hands-on training with Next-Generation Surveying Tools like DGPS, DRONE and LIDAR on 25th September, 2023. Mr. Selvam Arul, Managing Director, Land Coordinates Technology, was the Chief Guest of the program and delivered the Special Address. During his speech, he emphasized the significance of Next-Generation Geo-Spatial Surveying Tools like DGPS, DRONE & LIDAR. Mr. Selvam Arul and his team presented theoretical aspects followed by hands-on training.

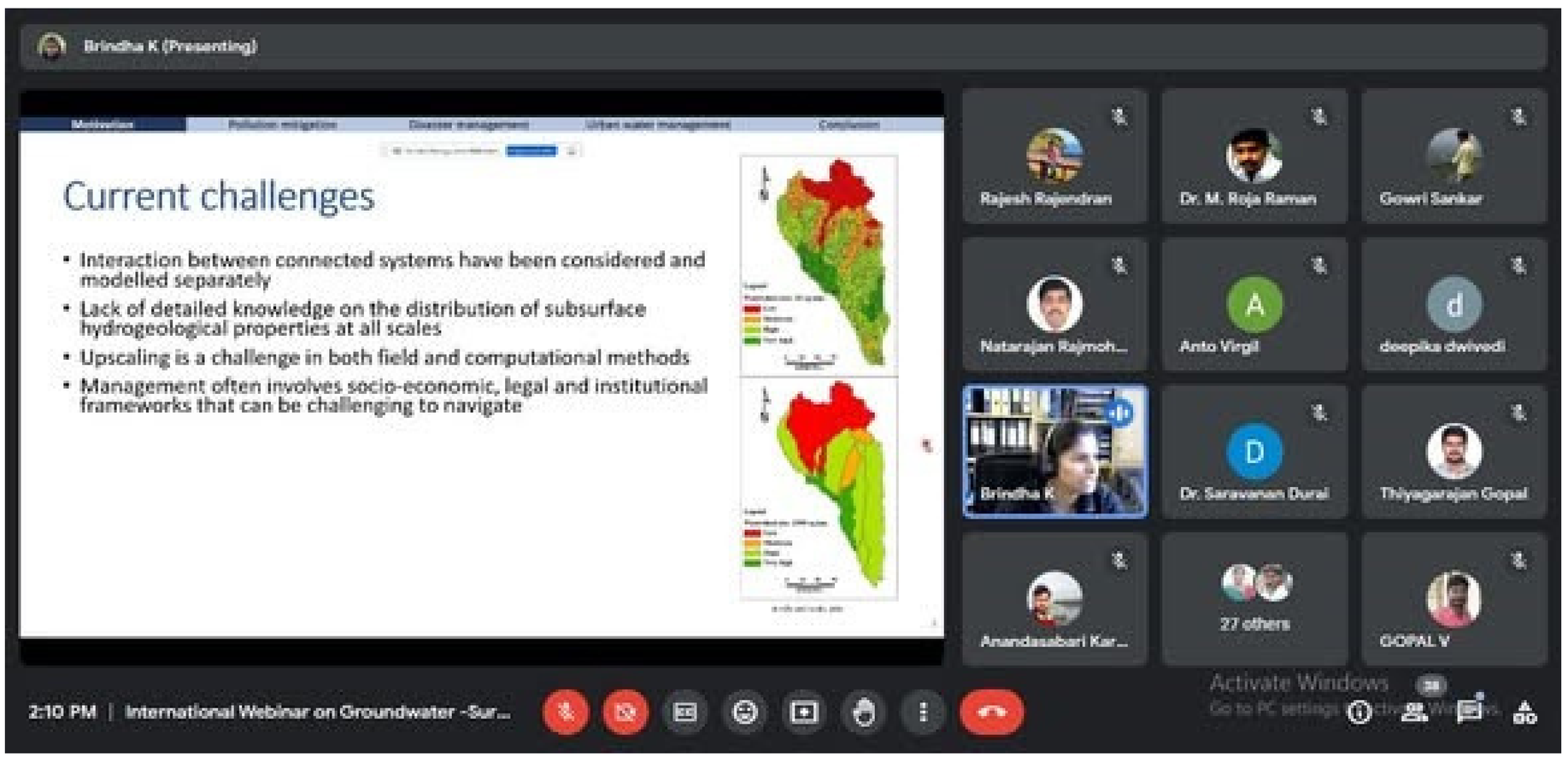


SDG 15 - LIFE ON LAND

Groundwater-Surface water Interaction

Sathyabama Research Park - Centre for Earth and Atmospheric Sciences, Sathyabama Institute of Science and Technology and Freie University, Berlin, Germany jointly organized International Webinar on "Groundwater-Surface water Interaction: Insights from Modelling and Field Applications. The Special guest speaker Dr Brindha Karthikeyan presented the groundwater- surface interaction significance and detailed about aquifer recharge techniques and how to reduce the pollution from groundwater- surface water and also to find out the impact of MAR structures on the local community and agricultural activities. Participants from various universities, colleges and government organizations (Indian Institute of Science, NIT Calicut, NIOT, Anna University, University of Madras, VOC College, AMET University, Tamil Nadu Water Resources Department, King Abdulaziz University, Geological Survey of India) participated.





SDG 15 - LIFE ON LAND

INDO-UK expert lecture series-1 "Exploring Human Tissue Culture”

Centre for Drug Discovery and Development, Department of Biotechnology and Department of Biomedical Engineering in association with international relations organized INDO-UK expert lecture series- "Exploring Human Tissue Culture” on 25th August 2023Dr. Kalpana Delivered an eminent lecture on Cell culture- Basics to Frontiers and Dr. Kanagaraj delivered an eminent lecture on Genome Instability. In addition to this Dr. Soytong Kasem, President, Association of Agricultural Technology in Southeast Asia (AATSEA) from, Thailand delivered a special lecture on Sustainable Agriculture and Organic Farming. The joint initiatives of SIST and University of Westminster was explained by Dr. Ramesh, Associate Professor & Head, Department of Biotechnology, Felicitation address was given by Eminent speakers Dr. Kanagaraj Radhakrishnan and Dr. Kalpana Surendranath, from University of Westminster, London, UK and vote of thanks was given by Dr. Radhakrishnan, Professor, CDDD.





SDG 15 - LIFE ON LAND

Village Outreach on Community Development

The NSS unit of Sathyabama Institute of Science and Technology orchestrated a Village Outreach on Community Development on 28.07.2023, involving 100 enthusiastic volunteers. Through various initiatives like awareness campaigns, skill training, and infrastructure development, the program aimed to uplift rural communities in agriculture, fostering sustainable growth and empowerment.



World Tourism Day 2023 on the theme: Tourism and Green Investments

Sathyabama university offers educational programme and outreach for local or national communities on sustainable management of land for tourism. Centre for remote sensing and Geoinformatics organized "World Tourism Day 2023 on the theme: Tourism and Green Investments" on 27th September 2023 to create awareness on the sustainable management of land for tourism.

Centre for Remote Sensing and Geoinformatics organized
" World Tourism Day 2023 – Theme: Tourism and Green Investments "
on 27th September , 2023



Outreach on Go Green in Rural Area

The NSS unit of Sathyabama Institute of Science and Technology organized an Outreach Program on Go Green in Rural Areas on 18.08.2023 at Kumizhi Panchayat, Near Guduvanchery, Chennai, with the participation of approximately 100 volunteers. The event aimed to foster community development through various initiatives, including health camps, educational workshops, environmental awareness campaigns, and infrastructure improvement projects. Volunteers engaged with residents, offering support and resources to address their needs. The program exemplified the institute's commitment to social responsibility and fostering positive change in surrounding communities. The event catalysed fostering a culture of environmental stewardship among the youth, aligning with the broader sustainable development goal on life on land.

SDG 15 - LIFE ON LAND



Sea Shore- Mangrove Associated Fauna along Chennai Coast: From Basic Taxonomy to Recent Trends

Sathyabama offers educational programmes on ecosystems looking at wild flora and fauna for local or national communities. Centre for Ocean Research, Col. Dr. Jeppiaar Research Park in association with "Earth Science and Technology Cell, Ministry of Earth Sciences" organized Three Days Training programme on "Sea Shore- Mangrove Associated Fauna along Chennai Coast: From Basic Taxonomy to Recent Trends" from 1st March – 3rd March 2023. In this training programme practical knowledge in collecting, processing and identifying the marine samples specific to Corals and Brachyuran crabs was delivered to the participants. The participants of the training programme include Faculty, Research scholars and Students from various universities and colleges across India.



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 16

PEACE, JUSTICE AND STRONG INSTITUTIONS



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SDG 16 - PEACE, JUSTICE AND STRONG INSTITUTIONS



By promoting participatory governance, open academic methods, and community-driven projects that bolster social equity, Sathyabama Institute of Science and Technology actively advances SDG 16: Peace, Justice, and Strong Institutions. During the academic year 2023-2024, there were 15 outreach initiatives carried Out on out on rural and underserved communities to raise awareness of rights and justice, and over 1,200 students attended workshops on legal literacy and civic engagement. In order to promote policy discussions and accountability frameworks, the organization has also formed five official partnerships with governmental and non-governmental groups. Through these quantifiable initiatives—student involvement, outreach initiatives, and institutional partnerships—Sathyabama exhibits its dedication to institutional integrity, justice, and the creation of societies that are resilient, peaceful, and sustainable.

SDG 16 Dashboard – Peace, Justice & Strong Institutions (AY 2023-24)

1. LEGAL LITERACY & EDUCATION

Legal Literacy Workshops Conducted

50

Category: Access to Justice
Definition: Workshops on constitutional rights, legal systems, and civic duties.

Students Attending Legal Programs

2,000+

Category: Legal Education
Definition: Learners trained in law awareness and civic understanding.

2. PUBLIC RIGHTS & AWARENESS

Citizens Reached Through Rights Awareness

5,000+

Category: Public Information
Definition: Outreach beneficiaries through community education programs.

Rights Awareness Camps

25

Category: Public Access
Definition: Programs on RTI, legal aid, public rights, and civic knowledge.

3. CIVIC ENGAGEMENT & GOVERNANCE

Student Participation in Civic Engagement (NSS)

500+

Category: Civic Participation
Definition: Students involved in voter awareness, civic drives, and governance dialogue.

Policy Initiatives & Capacity Building Events (RTI, Cyber Safety, Justice)

Multiple

Category: Outreach & Governance
Definition: Campaigns on public rights, transparency, and digital trust.

Promoting Peace, Justice, and Strong Institutions through Holistic Engagement

SDG 16 - PEACE, JUSTICE AND STRONG INSTITUTIONS

1. Detailed Academic & Student-Centric Contributions to SDG 16

Based on the academic curriculum Sathyabama Institute of Science and Technology, offers the following programs and initiatives align with Sustainable Development Goal 16 (Peace, Justice, and Strong Institutions).

- **Reduce violence everywhere (Addressed by Criminal Law & Psychology).**
- **Promote the rule of law and equal access to justice (Addressed by B.A. LL.B, Legal Aid Clinics).**
- **Substantially reduce corruption and bribery (Addressed by Corporate Law & Governance courses).**
- **Ensure public access to information (Addressed by Right to Information coursework).**

1.1. Core Academic Programs

These degrees directly educate students on the rule of law, access to justice, and effective governance.

Program Level	Degree	SDG 16 Focus Areas
Undergraduate	B.A. LL.B. (Hons.)	Constitutional law, human rights, and civil justice systems.
	B.B.A. LL.B. (Hons.)	Corporate governance (Anti-corruption), labor laws, and ethics.
	B.Com. LL.B. (Hons.)	Financial regulations, combatting illicit financial flows
	LL.B.	Three-year intensive law course focusing on criminal and civil justice.
Postgraduate	LL.M. (Constitutional Law)	Directly addresses "Strong Institutions" by studying the framework of governance.
	LL.M. (Criminal Law)	Focuses on reducing violence and fair judicial processes.
	LL.M. (Intellectual Property)	Relates to legal identity and protection of innovation rights.

1.2. Interdisciplinary & Supportive Programs

These programs support the "Inclusive Societies" aspect of SDG 16 by training professionals who work with vulnerable populations and community conflict.

- **Bachelor of Social Work (B.SW): Prepares students to work with marginalized communities, ensuring social inclusion and protection of fundamental rights.**
- **B.Sc. Psychology: Includes coursework on Social Psychology and Conflict Resolution, relevant for understanding violence reduction and promoting peaceful community dynamics.**
- **M.A. English / B.A. English: Often includes electives on Human Rights Literature and Post-Colonial Studies, fostering critical thinking about justice and equality.**

1.3. Specific Course Modules & Research Alignment

Within these programs, Sathyabama offers specific subjects that directly tackle SDG 16 targets:

- **Cyber Law & Cyber Crime: (Combat organized crime) taught in the Law school to address digital justice.**
- **Right to Information (RTI): (Public access to information) A dedicated subject in the LL.M curriculum.**
- **Alternative Dispute Resolution (ADR): Courses that teach mediation and arbitration to resolve conflicts outside of court, promoting peaceful resolutions.**
- **Women & Criminal Law: Addresses violence against women and gender-based justice.**

1.4. Institutional Initiatives & Clinics

Beyond the classroom, the university has established specific centers that operationalize SDG 16:

- **Legal Aid Clinic / Pro Bono Services: Provides free legal assistance to the poor, (Promote the rule of law and ensure equal access to justice for all).**
- **Cyber Crime Clinic: A specialized center associated with the School of Law to research and combat digital offenses.**
- **Partnerships: The university collaborates with organizations like the International Justice Mission and Kovise Foundation Conflict Resolution International, providing students with real-world experience in fighting injustice.**

2. Institutional Actions Aligned with SDG 16

2.1 Governance, Transparency & Accountability

Sathyabama demonstrates strong governance practices through:

- **Open grievance redressal platforms, handling 70+ cases with a 99% resolution rate.**
- **Annual transparency reporting, with publicly accessible financial, academic, and policy disclosures.**
- **Anti-discrimination audits covering admissions, faculty hiring, and campus processes.**
- **Digital trust-building measures, including data protection training and blockchain-based pilots for tamper-proof academic records.**

These practices reinforce the institution's commitment to fairness, ethical conduct, and responsible information management.

2.2 Inclusive & Participatory Decision-Making

The university fosters participatory leadership through:

- **Student Councils and Youth Parliaments, maintaining 30% representation of women, rural, and marginalized groups.**
- **NSS civic engagement, where 500+ students were active in voter awareness drives, civic education, and governance dialogues.**
- **Policy feedback loops where student council recommendations influence curriculum updates and institutional policies.**

These platforms enable representation, inclusivity, and active citizenship among youth.

2.3 Legal Empowerment & Access to Justice

The School of Law plays a central role in advancing legal empowerment by offering:

- **50 legal literacy workshops on constitutional rights, grievance mechanisms, RTI, and justice systems.**
- **Student Legal Aid Clinics, providing free consultations, document guidance, and dispute facilitation.**
- **Rights awareness programs, reaching 5,000+ citizens across rural and urban communities.**
- **Grievance portals enabling faster and structured resolution of student and staff issues.**
- **Human rights awareness, including programs on POCSO, domestic violence, juvenile justice, and community mediation.**

Through these initiatives, the university supports equal access to justice and strengthens the rule of law.

2.4 Anti-Discrimination & Equity Measures

Sathyabama enforces a strong institutional framework to promote non-discrimination and equal opportunity:

- **Inclusive Admissions Policy, with reserved seats and relaxed criteria for SC/ST, EWS, and rural students.**

- 20% of the student were provided full Scholarships support for underprivileged, children of Indian Defense Personnel, destitute women, war-widows, prison inmates and meritorious wards of non-teaching staff
- Accessibility improvements such as barrier-free infrastructure and assistive technologies.
- Sensitization programs for faculty and staff on harassment, bias, and inclusive pedagogy.
- Zero reported discrimination cases in 2023–24.

These outcomes underscore the university's commitment to fairness and equal access.

2.5 Community Outreach for Peace & Justice

A major component of SDG 16 implementation is community interaction. Key actions include:

- 25 rights-awareness camps in villages, schools, and underserved urban areas.
- Radio talks, webinars, and community workshops on civic rights and governance.
- Workshops on digital security, cybercrime reporting, and privacy.
- Community-based dispute mediation labs, led by law faculty and students.
- Collaborations with NGOs and government departments, including Department of Science & Technology (DST), Ministry of Earth Sciences, ICWO, and NGOs involved in anti-human trafficking.

These engagements expand public access to justice, information, and institutional support.

3. Major Events & Programs

3.1 Odyssey – Mooting Skills Workshop

The School of Law conducted Odyssey, a specialized workshop designed to train students in courtroom etiquettes, legal drafting, articulation, argument structure, and research methods essential for successful mooting. The program helped nurture advocacy skills and introduced students to professional expectations in litigation and legal practice.

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3.2 Constitution Day Celebrations – 74th Anniversary

To mark the 74th Constitution Day, the School of Law organized a series of interactive competitions such as Justice Journeys, Justice Jeopardy, and Clash of the Unprepared. These sessions encouraged students to engage with constitutional values, fundamental rights, and the spirit of democratic participation.



3.3 Intra Moot Court Competition

The SSL Moot Society hosted an intellectually intensive Intra Moot Court Competition, bringing together student advocates from multiple universities. The event simulated realistic courtroom procedures, enabling participants to develop strong argumentation skills before panels comprising judges, legal experts, and senior faculty members.



3.4 Inauguration of the Centre for Intellectual Property Rights (IPR)

The School of Law inaugurated the Centre for Intellectual Property Rights, graced by Hon'ble Justice B. Rajendran (Retd.) and IP Attorney Mr. Rohit Magesh. The centre aims to promote innovation, research, and awareness on patents, trademarks, copyrights, and trade secrets, fostering a culture of responsible innovation among students.



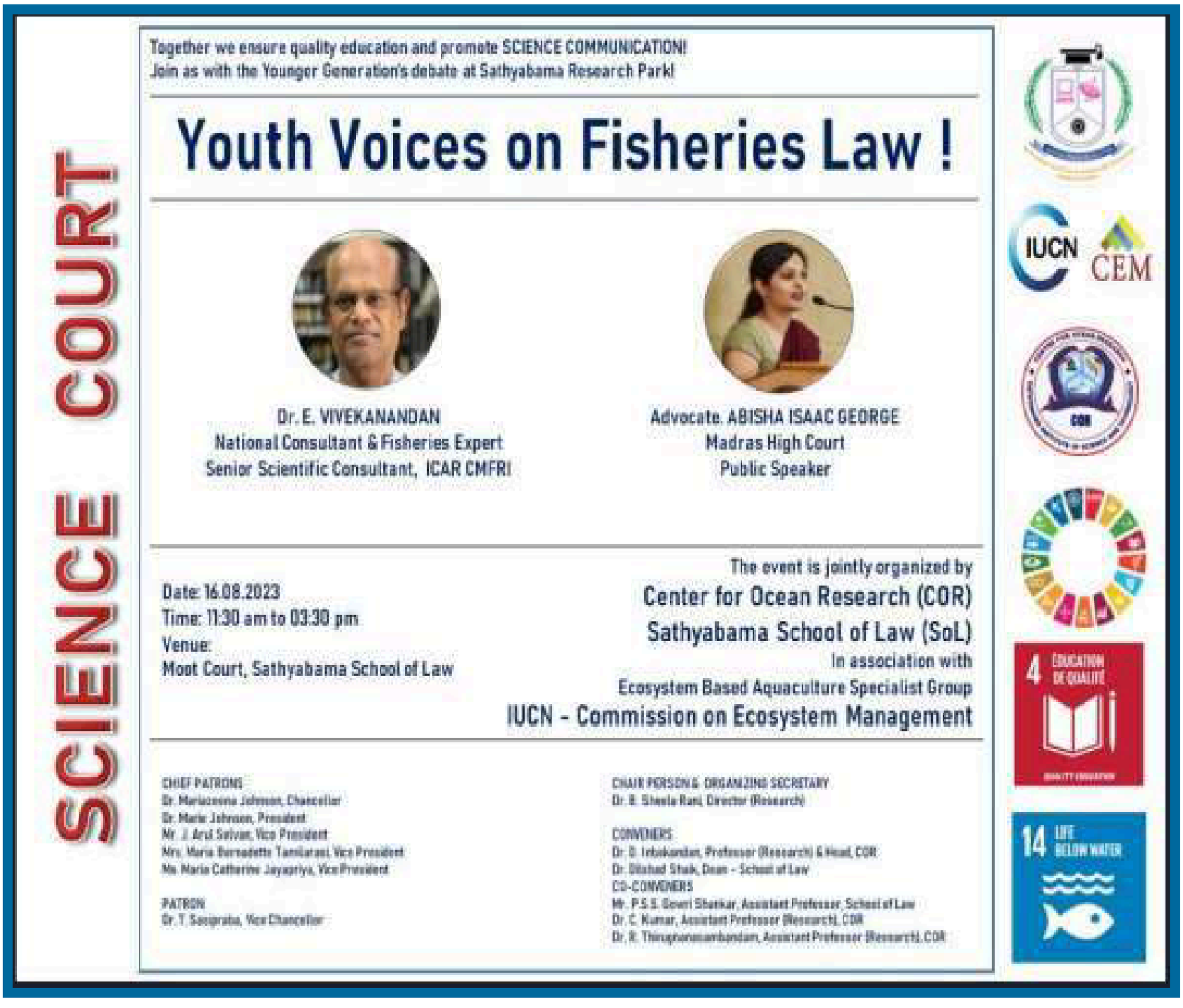
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3.5 Anti-Human Trafficking Club – Launch of Study Report

The School of Law's Anti-Human Trafficking Club, in partnership with International Justice Mission (IJM), released a significant study titled "Implementation of the Bonded Labour System Act in Tamil Nadu." The initiative aims to raise awareness on trafficking, support survivor pathways, and strengthen legal responses in addressing organized exploitation.

3.6 Youth Voices on Fisheries Law

The Centre for Ocean Research and School of Law jointly conducted Youth Voices on Fisheries Law, featuring experts like Dr. E. Vivekanandan (ICAR-CMFRI) and Advocate Abisha Isaac George. Discussions centered on sustainable fishing, marine biodiversity, illegal fishing, and legal protections for fishermen, connecting environmental law with SDG commitments.



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3.7 Femme Fiesta – Women's Day Celebrations

The "Femme Fiesta" celebration opened with a Tamil poetry event "அவள் வசனத்தின் எதிரொலி," followed by a week-long festival of panel sessions, student competitions, and empowerment activities. The program highlighted themes of gender rights, equality, leadership, and inclusion.



3.8 Technical Discussions & Student Panels

Students of the School of Law participated in technical discussions on fisheries law, exploring policy gaps, enforcement challenges, and the intersection of science and legal frameworks. Distinguished panelists recognized the students' analytical insights and legal approach.



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3.9 Crime Scene Investigation Competition

Sathyabama hosted the 1st National Crime Scene Investigation Competition, attracting participants nationwide. Students engaged with forensic science, evidence handling, legal admissibility, and investigative protocol in a simulated real-world crime scene environment.





3.10 Legal Aid Camp on Consumer Protection

A Legal Aid Camp was organized at Kundrathur to educate citizens on consumer rights, grievance procedures, documentation, and legal remedies. A panel of advocates from the Madras High Court offered guidance and on-site assistance.

3.11 RTI & Anti-Corruption Awareness Program

The School of Law, in association with Naattu Nadappu YouTube Channel, conducted a public awareness session on the Right to Information Act and anti-corruption strategies, encouraging transparency and accountability in public institutions.

3.12 Workshop on Drug Abuse Prevention

An awareness workshop was conducted to educate students on drug abuse, health consequences, and preventive approaches. Experts emphasized community vigilance, legal penalties, and early intervention methods.



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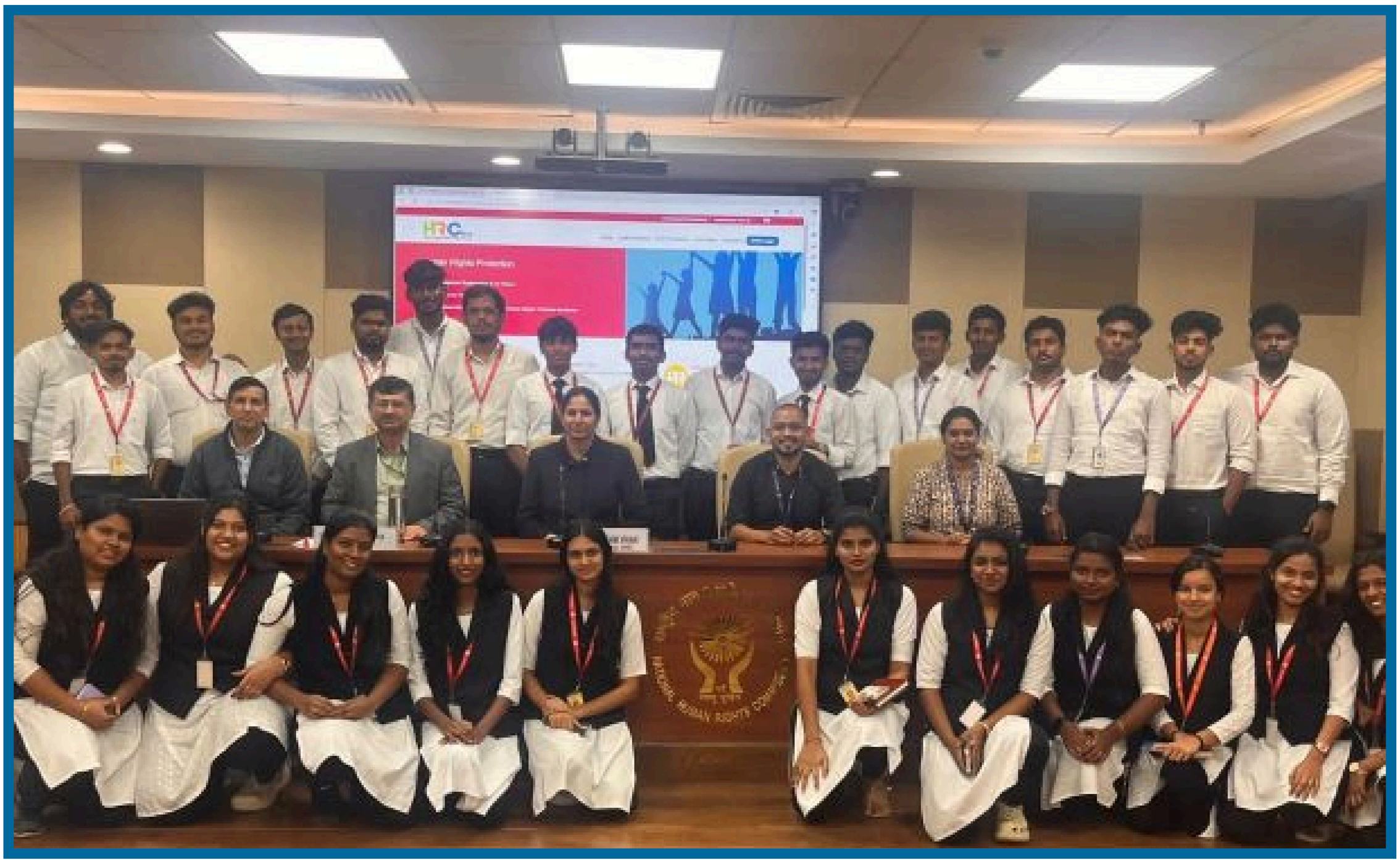
3.13 Regional Symposium on Anti–Human Trafficking

A symposium was held in collaboration with ICWO and Bachpan Bachao Andolan, focusing on trafficking prevention, victim rehabilitation, law enforcement coordination, and community-level vigilance.



3.14 Field Visit to Juvenile Justice Board & Observation Home

LL.B. students visited the Juvenile Justice Board and State Observation Home to understand juvenile rehabilitation systems, procedural safeguards, and child rights protection mechanisms.



4. Institutional Social Responsibility (ISR)

4.1 Anbu Scholarship – Education for All

The Anbu Foundation, established by the Chancellor, provides full scholarships to students from economically marginalized communities.

- **Over 3,000+ students have benefitted since inception.**
- **Around 500 students are currently supported each year.**
- **NGO partnerships help verify applicants and ensure genuine beneficiaries.**



Opening Doors to Higher Learning: Sathyabama Chancellor Supports the Needy

4.2 Women Empowerment Bureau

The Bureau undertakes:

- **vocational training (mushroom cultivation, seaweed farming, tailoring, baking, solar lamp making, sanitary napkin production, beauty & wellness)**
- **gender sensitization**
- **leadership development**
- **community empowerment through partnerships with NGOs**

Over 350 women were trained in 2023–24.



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4.3 Embedding Social Responsibility in Students

Students engage in:

- **social internships**
- **NGO collaborations**
- **research projects addressing societal issues**
- **work with Centers for Waste Management, Climate Change Studies, and Ocean Research**

These experiences build ethical responsibility and civic consciousness.

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Empowering Every Voice: Sathyabama's Inclusivity Driving SDG 16 for Justice and Strong Institutions:

Campus administration and inclusivity:

Anti-discrimination policy: Regular audits and compliance checks; no tolerance for discrimination based on caste, gender, handicap, or socioeconomic status. Scholarships and financial help for first-generation students, students from rural areas, and members of underprivileged groups are examples of inclusive admissions. Improvements to accessibility include barrier-free campus amenities, assistive technology, and exam modifications for students with impairments.



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SDG 17
PARTNERSHIPS FOR THE GOALS



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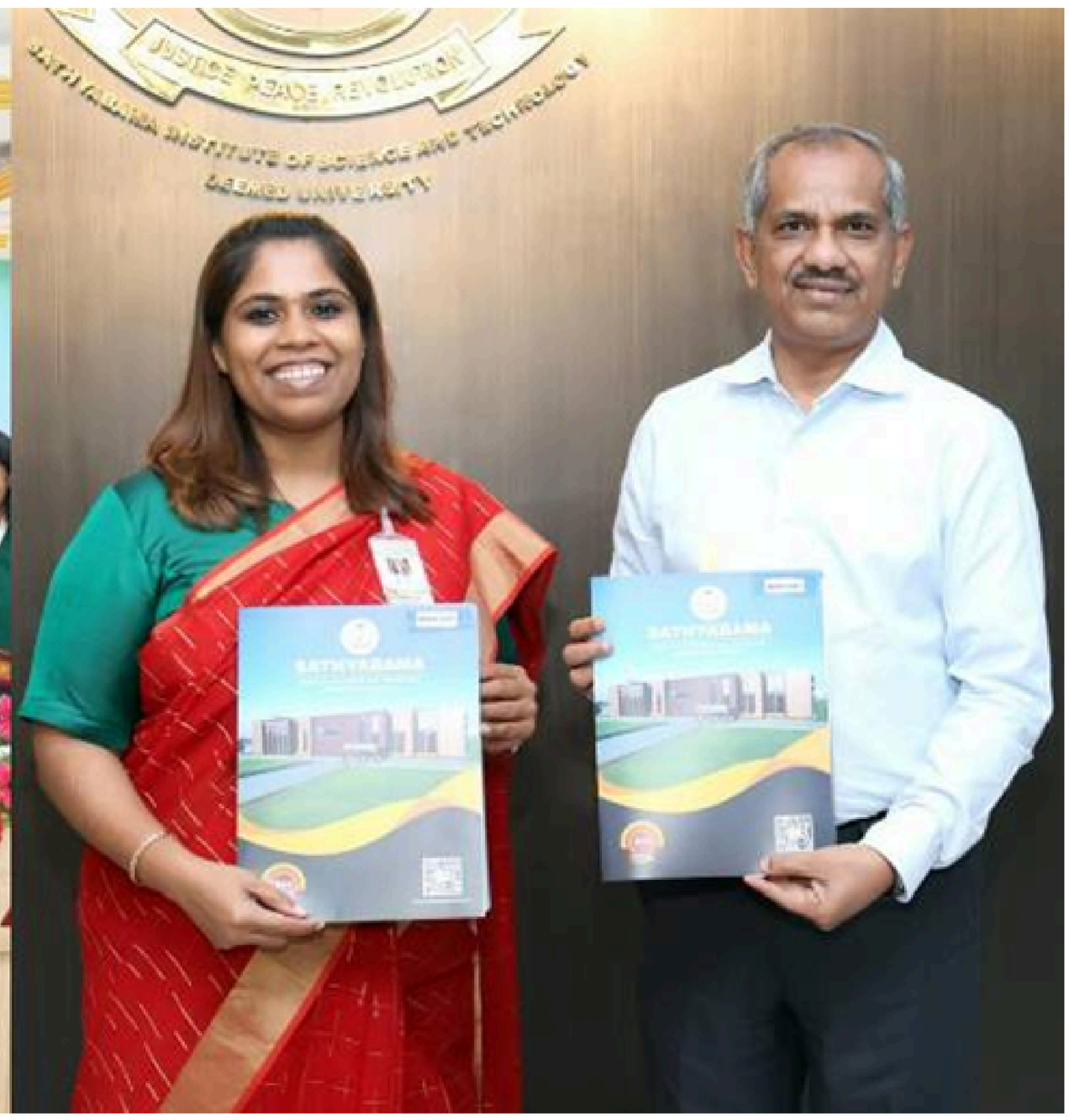
Collaborations and Institutional Impact

Sathyabama Institute of Science and Technology has built a robust network of collaborations across government, NGOs, industry, academia, and international organizations. These partnerships strengthen education, research, innovation, community development, and environmental stewardship, ensuring that initiatives are inclusive, impactful, and globally relevant.

Government Partnerships

The institution works closely with national and state agencies to expand access and drive innovation. Government scholarship schemes supported hundreds of students from marginalized backgrounds. Collaborations with the Ministry of Earth Sciences, Department of Science & Technology, and NITI Aayog have enabled renewable energy projects, waste-to-energy research, and school adoption under the Atal Tinkering Lab initiative. The National Centre for Polar and Ocean Research facilitated faculty participation in India's Arctic Winter Expedition, while ISRO's Physical Research Laboratory partnered on aerosol research that was discussed in Parliament.





NGO and Community Collaborations

NGOs such as Agaram Foundation, Maatram Foundation, and Ability Foundation help identify deserving scholarship beneficiaries. Partnerships with the Mangrove Foundation of India support community-based mangrove restoration, while International Justice Mission and Indian Community Welfare Organization collaborate on anti-trafficking and civic rights awareness. Local NGOs and community groups have joined in health camps, dental outreach, and livelihood training, including fisherwomen self-help groups for seaweed farming and women empowerment programmes in tailoring, baking, solar lamp making, and sanitary napkin production.

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Industry Collaborations

Sathyabama has signed over 70 MoUs with industry leaders to strengthen research, technology transfer, and skill development. Partners include HitoTech – Japan,Oracle Corporation, Space Zone India, ExcelR Solutions, Medway Hospital, Biopol Bioscience, AVN Ayurveda, Surana&Surana, Selvam&Selvam, and Jet Aerospace Aviation. In the energy sector, collaborations with WasmanPro Environmental Solutions LLP, NIN Energy India Pvt. Ltd., and CLRI have advanced biodiesel production, energy audits, and waste-to-energy solutions. VANS Chemistry Pvt. Ltd. supports safe e-waste recycling and awareness programmes. Industry partners such as Seabytes, PrimeGen, Nanovea, Carl Zeiss, and Vetbiotic contribute to marine biotechnology and aquaculture research.



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Academic and International Collaborations

Global and academic partnerships expand the institution's research and innovation footprint. Collaborations include NITTR, Gulf Medical University, Nottingham Trent University (UK), University Technology Malaysia, Transilvania University of Brasov (Romania), Cukurova University (Turkey), LeTourneau University (USA), and Powiślański University (Poland). Participation in the EU-funded ERASMUS project has positioned Sathyabama among 14 coordinating institutions worldwide. Centres of excellence such as the Research Park, Technology Business Incubator, Makerspace, Centre for Ocean Research, Centre for Climate Change Studies, Centre for Waste Management, and Centre of Excellence for Energy Research anchor these collaborations, linking faculty, students, and international networks.





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Major Outcomes of Collaborations

Scholarships: 1,863 students supported in 2023–24 through government, NGO, and institutional schemes.
Research & Innovation: 82 funded projects (~₹20 crore), 97 startups incubated, and 237 patents filed.
Community Outreach: Thousands of citizens engaged through health camps, legal literacy workshops, climate awareness drives, and livelihood training.
Global Engagement: Active roles in IUCN, ERASMUS, AGU conferences, Arctic expeditions, and collaborations with international universities.

Programmes / Courses contributing to SDG

Sathyabama Institute offers M.Arch in Sustainable architecture https://www.sathyabama.ac.in/academics/schools/school-building-and-environmentand the in other programmes the following courses are delivered during 2023-24 contributing to different SDGs

Engineering and Technology

Course Name	SDG Number(s)
Principles of Management and	SDG 4, SDG 16
Cyber Physical Systems	SDG 9
Artificial Intelligence	SDG 9, SDG 11
Data Science	SDG 9
Business Analytics	SDG 8, SDG 9
Blockchain& Cryptocurrency	SDG 9, SDG 16
Real Time System Design	SDG 9
Wind and Solar Energy	SDG 7, SDG 13
5G Networks	SDG 9
Mobile Application Development	SDG 9
Industrial Safety and Hazard Analysis	SDG 8, SDG 11
Disaster Management	SDG 11, SDG 13
Electric Vehicles	SDG 7, SDG 13
Internet of Things	SDG 9, SDG 11
Industrial Robotics & Expert Systems	SDG 9
Green Computing	SDG 12, SDG 13
Intelligent Robots & Drone	SDG 9, SDG 11
Machine Learning	SDG 9
Augmented & Virtual Reality	SDG 9, SDG 11
Quantum Computing	SDG 9
Cyber Security / Ethical Hacking	SDG 16

SDG 17 - PARTNERSHIPS FOR THE GOALS

Health, Medicine & Biotechnology

Biology for Engineers	SDG 3, SDG 15
Medical Optics & Laser Application	SDG 3
Public Health Engineering	SDG 3, SDG 6
e-Health	SDG 3
Rehabilitation Engineering	SDG 3
Food Technology	SDG 2, SDG 12
Environmental Biotechnology	SDG 13, SDG 15
Cancer & Stem Cell Biology	SDG 3
Pharmaceutical Biotechnology	SDG 3
Community Nutrition	SDG 2, SDG 3
Food Processing Technology	SDG 2, SDG 12
Pharmacy Practice	SDG 3
Hospital & Clinical Pharmacy	SDG 3
Drug Delivery Systems	SDG 3
Regulatory Affairs	SDG 16
Bioethics, Biosafety & IPR	SDG 16

Law, Governance & Social Sciences

Constitutional Law	SDG 16
Human Rights Law & Practice	SDG 16
Information Technology Law	SDG 16
Right to Information	SDG 16
Labour Law	SDG 8, SDG 16
Public International Law	SDG 16, SDG 17
Private International Law	SDG 16, SDG 17
International Humanitarian &	SDG 16
Family Law	SDG 5, SDG 16
Legal Language & Drafting	SDG 16
Social Welfare & Legislation	SDG 1, SDG 10
Political Science / Indian	SDG 16

SDG 17 - PARTNERSHIPS FOR THE GOALS

Business & Management

Business Ethics & CSR	SDG 8, SDG 12, SDG 16
Corporate Governance	SDG 16
Global Business Management	SDG 8, SDG 9, SDG 17
Consumer Behaviour	SDG 12
Supply Chain Management	SDG 9, SDG 12
Treasury & Capital Markets	SDG 8
Insurance Management	SDG 8
Investment Analysis	SDG 8
Human Capital Management	SDG 8
Strategic HRM	SDG 8
International Business	SDG 17

Architecture & Built Environment

Urban & Regional Planning	SDG 11
Sustainable Urban Planning	SDG 11
Green Building Rating Systems	SDG 11, SDG 13
Sustainable Waste Management	SDG 12, SDG 13
Sustainable Landscape Planning	SDG 11, SDG 15
Building Energy Codes & Standards	SDG 7, SDG 13
Climate & Architecture in Tropics	SDG 13
Alternative Building Technology	SDG 11, SDG 12

SDG 17 - PARTNERSHIPS FOR THE GOALS

Sciences

Green Technology	SDG 12, SDG 13
Environmental Science	SDG 13, SDG 15
Physics (Renewable Energy & Energy Harvesting)	SDG 7, SDG 13
Chemistry (Polymer / Industrial Chemistry)	SDG 9, SDG 12
Biochemistry & Microbiology	SDG 3
Psychology of Wellbeing	SDG 3
Positive Psychology	SDG 3
Social Psychology	SDG 3, SDG 10

Media, Arts & Fashion

Media Law & Ethics	SDG 16
Communication Research	SDG 9, SDG 16
Eco Fashion	SDG 12
Fashion Brand Management	SDG 12
Traditional Textiles of India	SDG 11
Visual Identity & Branding	SDG 12



Sathyabama Institute of Science and Technology
(Deemed to be University)

Jeppiaar Nagar, SH 49A, Chennai, Tamil Nadu 600119, India.

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