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.

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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

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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

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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.

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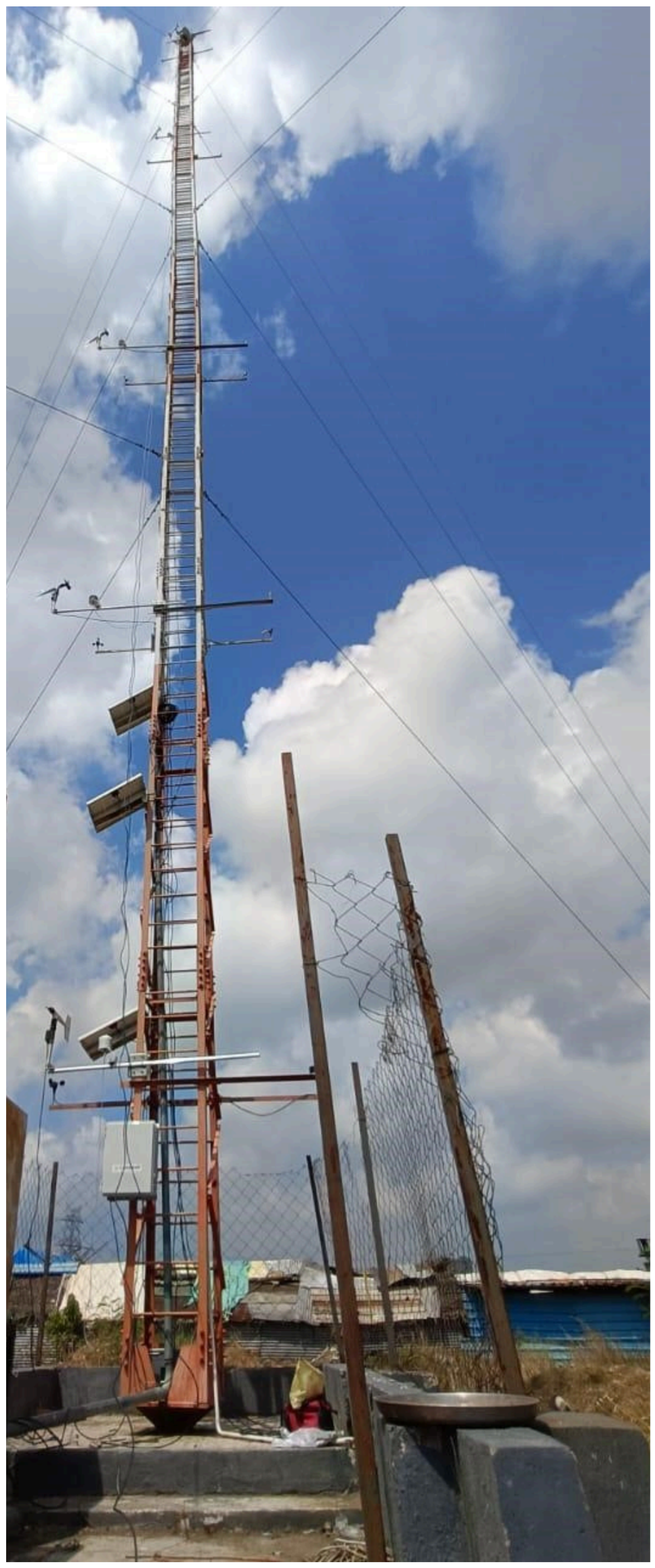
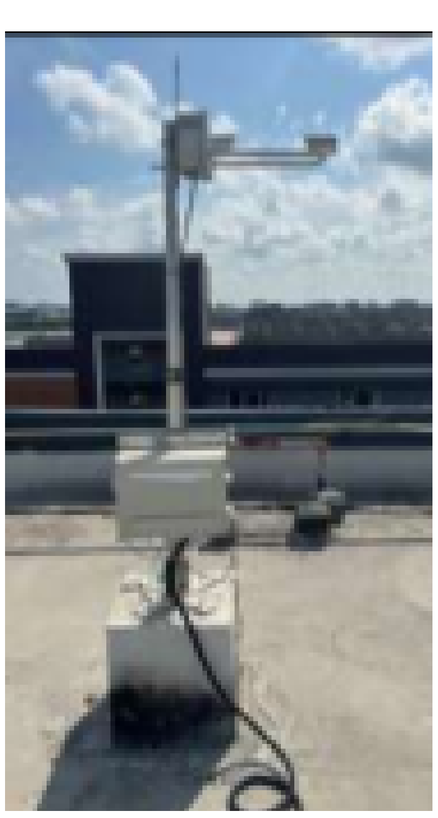
50 Meter Meteorological Tower

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.



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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

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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

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.

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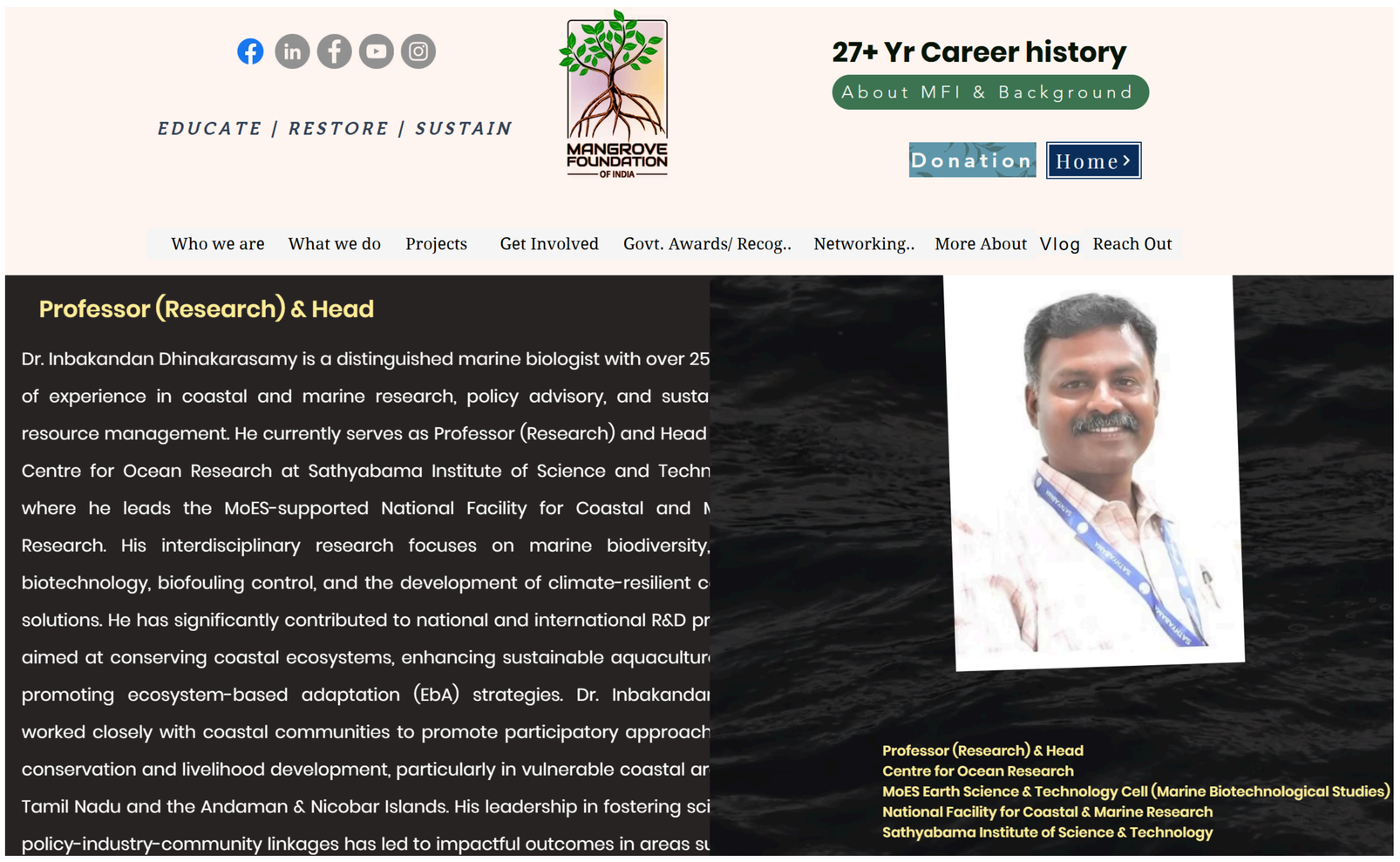
Sathyabama's collaboration with NGO communities to create awareness about climate adaptation

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

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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.

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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.

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.

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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.

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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

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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

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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

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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.

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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.

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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

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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".