

Key note speakers

Dr. N. Stalin, Assistant Professor
Department of Petrochemical Technology,
Anna University, BIT Campus, Tiruchirappalli.

Dr. M. Jerold, Assistant Professor
Department of Biotechnology,
National Institute of Technology, Warangal.

Dr. Dawn S S, Professor (Research) and Head
Centre for Waste Management
Sathyabama Institute of Science and Technology, Chennai.

Dr. Venkatesh Subramanian, Assistant Professor
Department of Biotechnology
Manonmaniam Sundaranar University, Tirunelveli.

Dr. S. Angayarkanny, Assistant Professor
Department of Chemistry,
Anna University, Chennai.

Dr.S. Karthika, Assistant Professor
Department of Chemical Engineering
Anna University, Chennai.

Dr. A. Selvam, Associate Professor & Head
Department of Plant Science,
Manonmaniam Sundaranar University, Tirunelveli.

Dr. P. Nagaraj, Assistant Professor
Department of Chemistry
Anna University, Chennai.

Dr. M. Pramila, Assistant Professor,
Department of Biotechnology
SRM Institute of Science and Technology, Tiruchirappalli.

Dr. D. Navamani Kartic, Assistant Professor
Department of Biotechnology
Vel Tech High Tech Engineering College, Chennai.

About STEM - 2026

The Faculty Development Programme on “Sustainable Technologies for Waste Valorization, Resource Recovery, and Material Characterization” aims to explore cutting-edge research and innovations in solid waste and wastewater treatment for a sustainable future. The programme emphasizes eco-friendly technologies that convert waste into valuable materials, fuels, and energy while ensuring effective water reclamation. It bridges diverse disciplines including nanotechnology, biotechnology, and materials science to address environmental and industrial challenges. Participants will gain exposure to advanced treatment methods, analytical techniques, and resource recovery strategies within the circular economy framework. The FDP also promotes collaboration among researchers, industry experts, and policymakers to achieve sustainable development goals by advancing clean water and sanitation, promoting innovation and sustainable industrial practices, supporting responsible consumption and climate action, fostering sustainable communities, and strengthening partnerships among academia, industry, and policymakers.

Key topics

- Emerging Technologies for Solid and Liquid Waste Valorization and Resource Recovery
- Nanotechnology-Enabled Approaches for Wastewater Treatment and Pollutant Removal
- Biotechnological and Bio electrochemical Methods for Waste and Wastewater Management
- Advanced Oxidation, Membrane, and Adsorption Techniques in Wastewater Treatment
- Material Characterization and Analytical Techniques for Recovered Products
- Circular Economy Models and Sustainable Waste-to-Resource Pathways
- Industrial and Municipal Waste & Wastewater Management: Challenges and Case Studies
- Environmental Impact Assessment, Life Cycle Analysis, and Policy Frameworks
- AI and Data-Driven Decision Tools for Waste and Resource Management
- Thermochemical and Hydrothermal Conversion Technologies for Waste-to-Energy
- Green Catalysis and Sustainable Reaction Engineering for Waste Upcycling



Centre for Waste Management
Centre of Excellence for Energy Research (Bioenergy
division)

in association with

Department of Biotechnology
Anna University, BIT Campus
Tiruchirappalli
&
Department of Biotechnology
Manonmaniam Sundaranar University
Tirunelveli

Organizes

**Five- Day Online
Faculty Development Programme on
Sustainable Technologies for
Waste Valorization, Energy Recovery,
and Material Characterization
STEM-2026**

**January 5th to 9th, 2026
Time: 12.45 PM to 3.00 PM**



About the Institute and Centre for Waste Management

Sathyabama is a prestigious institution with over three decades of excellence in Engineering, Science, and Technology. It offers multidisciplinary programmes across Engineering, Science and technology like Chemical Engineering, Computer science engineering with specialization in Artificial Intelligence, Data Science, Internet of Things, Robotics, Electronics and communication Engineering, Mechanical Engineering, Civil Engineering, Biotechnology, Biomedical Engineering, Medical Instrumentation etc., Law, Dental Science, Pharmacy, Nursing, Management, Arts and Science, and Allied Health Sciences. Established under Sec. 3 of the UGC Act, 1956, the Institution is accredited with an 'A++' Grade by NAAC.

With dynamic faculty, innovative teaching practices, modern infrastructure, and world-class research facilities, Sathyabama consistently adapts to global advancements in higher education and has achieved international standards in research and academics. The Centre since its inception in 2011 has been involved in research leading to innovative products, developing patent liable novel ideas in Waste Management, publishing the experimental outcomes in indexed/peer reviewed journals, training graduate students, offering consultancy services and involves in several outreach activities in transferring the research findings for societal benefit.

About Anna University Tiruchirappalli & Department of Biotechnology

Anna University, Tiruchirappalli (Anna University Trichy) is a premier technical university in Tamil Nadu. It was established in 2007 as a constituent college of Anna University. The university offers undergraduate, postgraduate, and doctoral programs in engineering, technology, architecture, and management. It serves as a hub for technical education and research in central Tamil Nadu. Anna University Trichy is known for its strong academic curriculum and experienced faculty. The campus is equipped with modern laboratories, libraries, and research facilities. It promotes innovation, entrepreneurship, and industry-academia collaboration. The university emphasizes quality education, ethics, and professional skills.

About Manonmaniam Sundaranar University & Department of Biotechnology

Manonmaniam Sundaranar University, located in Tirunelveli, Tamil Nadu, is a well-known state university established in 1990. The university offers diverse undergraduate, postgraduate, and research programs across science, arts, and technology disciplines. The Department of Biotechnology is recognized for its strong teaching and research in modern biological sciences. It focuses on areas such as molecular biology, environmental biotechnology, and industrial biotechnology. The department actively promotes research, innovation, and collaborations for societal and industrial applications.

Chief Patrons

Dr. Mariazeena Johnson, Chancellor

Dr. Marie Johnson, President

Mr. J. Arul Selvan, Vice President

Mrs. Maria Bernadette Tamilarasi, Vice President

Ms. Maria Catherina Jayapriya, Vice President

Mr. R. Akash, Vice President

Patron

Dr. B. Bharathi, Director (Innovation).

Organizing Chair

Dr. Dawn S S, Professor (Research) & Head, CWM.

Convenors

Dr. P. Priyadharsini, Assistant Professor (Research),
Sathyabama Institute of Science and Technology, Chennai

Dr. T. Gajendran, Assistant Professor,
Anna University, Tiruchirappalli.

Dr. S. Venkatesh Subramanian, Assistant Professor
Manonmaniam Sundaranar University, Tirunelveli.

Dr. S. Sujithra, Assistant Professor (Research),
Sathyabama Institute of Science and Technology,
Sathyabama University, Chennai.

Co-ordinators

Dr. J Arun, Assistant Professor (Research),

Dr. N Nirmala, Assistant Professor (Research)

Dr. A. Santhosh, Assistant Professor (Research)

Organising Committee Members

Ms Bhuvaneshwari, Scientific Assistant

Ms S. V. Siva Shankari, Scientific Assistant

Mr. J. Jayakanth, Scientific Assistant

Mr. A. Silambarasan, Technical Assistant

Mr. K. Alagar, Project Associate-I (DST-SYST)

Ms. J. Merlin, Research Scholar

Ms. P. Divya, Research Scholar

Contact details

Dr. P. Priyadharsini - Assistant Professor (Research)

Contact: 9442435421

Dr. S. Sujithra - Assistant Professor (Research)

Contact: 7406028650

Training, workshops, Internship and consultancy services are provided.

Who Can Attend

Faculty members

Research scholars

Post graduate students

For registration: [Click Here](#)

Registration Fee: Rs. 300

Account number: 891734627

IFSC Code: IDIB000S201

Bank name: Indian bank

Account name: Director Innovation

Sathyabama Institute of Science and Technology

Major Facilities Present in CWM

Biofuel Production Units

Biodiesel plant – 50 L

Biogas plant – 1-tonne capacity

Bioethanol plant – 22 L

Hydrothermal reactor – 5 L

Analytical Instruments

CHNSO analyser

Atomic Absorption Spectroscopy (AAS)

Gas Chromatography-Flame Ionization Detector (GC-FID)

Surface area analyser (BET)

Water Analysis Facilities

25 parameters of water and wastewater can be analyzed

Biofuel Properties Measurement Instruments

Bomb calorimeter

Viscosity bath

Cloud and pour point apparatus

Flash and fire point apparatus

Copper strip corrosion test

Muffle furnace

Bulk density apparatus



**Know more
about the centre**