

# About SATHYABAMA

**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. 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 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

## About Conference

**ICWEE-2024** promotes the major themes of sustainable waste utilization, energy and environmental engineering. Waste is a valuable resource for recovery of various value added products. Energy engineering is the emerging discipline for acheiving negative carbon emission. Environmental engineering aims to provide clean water, air and land for better living as per sustainable development goals (SDGs). This forum will be a platform for researchers, scientists, academicians, etc to share their research ideas in acheiving SDG goals.



# Organising committee

## Patrons

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

## Organising Chair

- Dr. Dawn S S**, Professor (Research), CWM

## Conveners

- Dr. J. Arun**, Assistant Professor (Research), CWM
- Dr. N. Nirmala**, Assistant Professor (Research), CWM

## Co-conveners

- Dr. Sathish S**, Associate Prof & Head, Chemical
- Dr. Prabu D**, Associate Prof, Chemical
- Dr. Sathish Kumar R**, Associate Professor (Research), CWM
- Dr. M. Sivasakthi** Assistant Professor (Research), CWM
- Dr. P. Priyadarsini**, Scientific Assistant, CWM

## Organising Committee

- Mr. Santhosh A**, Project Coordinator (STI-HUB), CWM
- Ms. S.V. Sivashankari**, Project Associate-I (SERB POWER Grant)
- Ms. A. Bhuvaneswari**, Project Assistant (STI-HUB), CWM
- Mr. J. Jayakanth**, Project Assistant (STI-HUB), CWM
- Mr. S. Sanjay Kumar**, Project Assistant (STI-HUB), CWM
- Mr. P. Mazhalaiselvan**, Project Assistant (STI-HUB), CWM
- Ms. J. Merlin**, PhD student



# Sathyabama

Institute of Science and Technology  
(Deemed to be University)



Centre for Waste Management

&



Centre of Excellence for Energy Research

jointly with

Department of Chemical Engineering

Organize

4th International Conference  
on  
Waste, Energy and  
Environment

# ICWEE-2024

03-07-2024 TO 05-07-2024



# Topics to be covered

The topics which are covered are

## Energy Engineering (SDG 7, 15)

- Renewable energy - Biofuels
- Applied Catalysis in Energy Engineering
- Thermo-chemical Conversion of Biomass into Fuel
- Energy Storage, Conservation and Conversion
- Energy from Biomass, Water, Waste
- Alternative fuels Strategies for India
- Engine performance and Emission Studies
- Sustainability and Clean Energy
- Fuel Cell Technologies
- Energy Materials and Devices
- Solar cells and Energy
- Nano-technology in Energy and Environment
- Biomass and Bio-energy
- Process Modelling, Simulation and Chemical Reaction Engineering

## Waste Processing (SDG 1, 2, 7, 15)

- Waste to Bio-energy (Bio-gas, Bio-oil, Bio-diesel, Bio-hydrogen, Bio-ethanol, Bio-methanol, etc)
- Biomass and Feedstock Utilization
- Biopolymer and Bio-plastics
- Bioprocesses and Bioproducts from Waste
- Waste Valorisation for Sustainable Development and Green Engineering
- Solid waste and Hazardous Waste Management
- Resource recovery from E-Waste
- Sustainable Processing of Plastic Waste, Sludge, Bio-medical waste, Biomass, etc
- Waste Processing via Artificial Intelligence and IoT, etc
- Safety Engineering and Occupational Health
- Labor Safety and Sanitation
- Workplace Risk Management
- Public Health and Environment
- Waste Minimization and Pollution Prevention

## Environment and Water Quality (SDG 6, 13, 14)

- Water Management for Sustainable Cities
- Wastewater Discharge Processing
- GIS Application for Water Management
- Removal and Degradation Strategies for Organic pollutants and other Emerging Pollutants

Contd.....

- Biochar based materials in water and environment
- Water Purification
- Adsorption, Bio-Remediation, Advanced Oxidation Process, Other Techniques, etc
- Nano-materials and Nano-Composites in Water Treatment
- Industrial Wastewater Treatment
- Water Pollution and Water Quality Control
- Sludge Management in Treatment Regimes
- Marine, Terrestrial and Freshwater Ecosystems
- Resource Recovery from Wastewater

## Environmental Engineering (SDG 3, 6, 13, 14)

- Climate Change and Global Warming
- Air, Soil, Water Pollution and Modelling
- Air Quality Control
- Carbon Capture, Storage and Utilization
- Resource Recovery During Pollution Control
- GIS Application for Air Pollution Modelling
- Soil Health Assessment
- GIS Application for Land Use
- Environmental Risk Assessment
- Ecology and Mitigation Engineering
- Environmental Fate Studies (Transport, Bio-accumulation, Bio-degradation, etc)
- Environmental System Modelling and Optimization
- Economic, Social and Policy towards Environmental Management

## Important dates

**Abstract submission deadline : 15-06-2024**

**Notification of acceptance : 17-06-2024**

**Early bird registration : 20-06-2024**

**Registration with late fees : 25-06-2024**

## Registration fees

	Before 20-06-2024	After
Students (UG & PG)	: Rs. 2000	:Rs. 2500
Scholars & Faculty	: Rs. 3000	:Rs. 3500
Industrial persons	: Rs. 4000	:Rs. 4500
Foreign Delegates	: 75 USD	:100 USD
Participation	: Rs. 1500	:Rs. 2000

**Call us for fees concession (For UG & PG students)**

**Hostel Accommodation is free of cost if approached early**

## Advisory committee

### INTERNATIONAL

**Dr. Eldon Rene**, IHE-Delft, Netherlands

**Dr. Ajay Shah**, Ohio State University, United States

**Dr. Jorge Beltramini**, Queensland University of Technology, Australia

**Dr. Saravanamuthu Vigneshwaran**, University of Technology, Sydney, Australia

**Dr. Tjandra Setiadi**, Institute of Technology, Bandung, Indonesia

**Dr. Anteneh Mesfin Yeneneh**, International Maritime College, Oman

**Dr. Ayushi Agarwal**, University of Toronto, Canada

### NATIONAL

**Dr. V. Sivasubramanian**, NIT Calicut, Kerala

**Dr. Saravanathamizhan R**, A C Tech Campus, Chennai

**Dr. Babuponnusami A**, VIT Vellore

**Dr. Kannan Pakshirajan** - IIT Guwahati

**Dr. L. Ragupathi** - NIT, Surathkal

**Dr. G. Arthanareeswaran**, NIT Trichy

**Dr. Deepak Kumar Ojha** - IIT Roorkee

**Dr. S. Karthikeyan**, Chikkanna Government Arts College

**Dr. Ashima Bagaria**, Manipal University, Jaipur

## Technical committee

**Dr. Karthikeyan K**, Former Member Secretary, TNPCCB.

**Dr. A. Annam Renita**, Professor, Chemical

**Dr. D. Venkatesan**, Associate Professor, Chemical

**Dr. M. Karthikeyan**, Assistant professor, Chemical

**Mr. Michael Rahul Soosai**, Assistant professor, Chemical

## About Chennai

Chennai, capital city of Tamil Nadu is a historical city of India, residing on the coromandel coast of Bay of Bengal. It serves as a major cultural, economical, educational and commercial center of south India. It has numerous UNESCO heritage sites in Mahabalipuram, Marina beach, theme parks, Arignar Anna Zoological park, etc.



**Valluvar kottam**



**Marina beach**



**Santhome church**



**Mahabalipuram**



**Vandalur zoo**



**Muttukadu**



## Speakers



**Dr. Eldon R Rene**  
IHE-Delft, Netherlands



**Dr. V. Sivasubramanian**  
NIT Calicut



**Dr. M. Chandra Shekhar Nayak**  
CSIR - Bhopal



**Dr. T. Mathimani**  
NIT Trichy

## Publications

- For instructions visit conference website

**Conference website** [CLICK HERE](#)

## Books



## Journals



1. Journal of the Taiwan institute of chemical engineers
2. Journal of environmental nanotechnology
3. Book of abstract with ISBN number

## Facilities at CWM



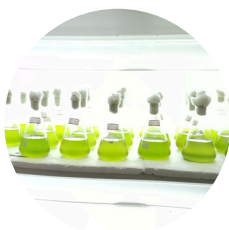
**Biogas plant**  
1 Tonne Capacity



**Hydrothermal Reactor**



**Atomic absorption spectrophotometer (AAS)**



**Microalgae cultivation**



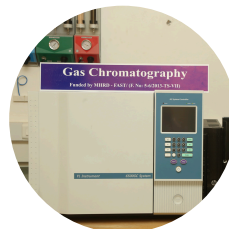
**Bomb Calorimeter**  
Bio-diesel property testing



**Bio-diesel plant**  
50 L Capacity



**Photo bio-reactor**



**Gas Chromatography**



**Cloud, Pour, Flash & Fire point**



**Turbidity meter**

## Registration details

**Payment can be done through Gpay, Phonepe, Netbanking**

### 1. Account details

Account Name : "Dean (Publications & Conferences), Sathyabama Institute of Science and Technology (Deemed to be University) "

Account Number : 891734627

IFSC Code : IDIB000T020

SWIFT Code : IDIBINBBTLT

Branch code : 098

Bank & Branch : Indian Bank, Thousand lights branch, Chennai - 600 006, India.

## To Register

**Registration link** [CLICK HERE](#)

**Conference website** [CLICK HERE](#)

## Contact us

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Tamil Nadu, India.

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+91 9840996791

**Centre Website** : [CLICK HERE](#)

**Centre Youtube channel** : [CLICK HERE](#)