### **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**

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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

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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, Research Scholar







# Sathyabama

Institute of Science and Technology
(Deemed to be University)









# **Centre for Waste Management**

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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, Biohydrogen, 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, Biomedical 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**

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

**Before** 

After

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

## 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, Bangdung, Indonesia

Dr. Anteneh Mesfin Yeneneh, International Maritime College, Oman

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#### **NATIONAL**

Dr. V. Sivasubramanian, NIT Calicut, Kerala

Dr. Saravanathamizhan R, A C Tech Campus, Chennai

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Dr. Ashima Bagaria, Manipal University, Jaipur

### Technical committee

Dr. Karthikeyan K, Former Member Secretary, TNPCB.

Dr. A. Annam Renita, Professor, Chemical

Dr. D. Venkatesan, Associate Professor, Chemical

Dr. M. Karthikevan, 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, therme parks, Arignar Anna Zoological park, etc.



Valluvar kottam



Mahabalipuram



Marina beach



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**

- As per journal guidelines
- Author needs to take care of APC or open access charges if applicable
- For complete publication guidelines visit conference website

### **Books**





Journals supporting the conference for publications will be updated shortly in Website

Conference website CLICK HERE

### **Facilities at CWM**



**Biogas plant**1 Tonne Capacity



**Hydrothermal Reactor** 



Atomic absorption spectrophotometer (AAS)



Microalgae cultivation



**Gas Chromatography** 

**Bio-diesel plant** 50 L Capacity

Photo bio-reactor

Cloud, Pour, Flash & Fire point



Bomb Calorimeter Bio-diesel property testing



**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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Centre Youtube channel: CLICK HERE