



## IMPORTANT DATES

- Final paper submission- 31st August 2024
- Intimation of acceptance- 15th September 2024
- Early bird registration- 30th September 2024
- Camera ready paper submission- 15th October 2024
- Last date of registration- 15th November 2024

The papers after a thorough scrutiny process will be selected for publication in **SPRINGER NATURE**

## REGISTRATION DETAILS

Category	Early bird registration	Regular Registrations
Students	Rs 1500/-	Rs 2000/-
Participants from academic institutions, industry	Rs 3000/-	Rs 3500/-
Participants outside India	USD 200	USD 250

\*Early bird registration closes on 30th September 2024

● For registration, log on to [www.icmsc.org.in](http://www.icmsc.org.in)

## TKM College of Engineering Kollam India

Thangal Kunju Musaliar (TKM) College of Engineering is one of the premier institutions of national importance in higher technical education, basic and industrial research. It was established in 1958 as the first grant-in-aid engineering college in the state of Kerala by the late Janab Thangal Kunju Musaliar, an industrialist, philanthropist and a great visionary. Started with three branches, the college now offers eight under graduate programs and 12 post graduate programs. The College was accredited by National Assessment and Accreditation Council (NAAC) with an A grade in 2017 and bagged 6 year NBA accreditation for Civil and Mechanical Engineering departments. The institution has bagged the autonomous status in the year 2022 and is currently following its own industry-research focused curriculum.

### Department of Civil Engineering

The Department of Civil Engineering, which started in the year 1958 along with the inception of the institution, today offers an under graduate, two post graduate (Structural Engineering and Construction Management, Transportation Engineering) and doctoral programmes. It is a Centre for Quality Improvement Programme (QIP) of All India Council for Technical Education (AICTE) and also offers doctoral programmes under APJ Abdul Kalam Technological University and the University of Kerala. The main research and developmental activities are funded by the AICTE, TEQIP, the Institution of Engineers (India), the Kerala State Council for Science, Technology and Environment (KSCSTE) and the Centre for Engineering Research and Development (CERD). The department, in addition to the academic activities, serves as an authorized testing and consultancy centre for industries and the general public.

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# ICMSC

INTERNATIONAL CONFERENCE ON MODELING & SIMULATION IN CIVIL ENGINEERING

**7<sup>TH</sup>** INTERNATIONAL CONFERENCE ON MODELLING AND SIMULATION IN CIVIL ENGINEERING

# ICMSC 2024

*Focusing on global partnership for sustainable development and circular economy through technology, infrastructure and research*

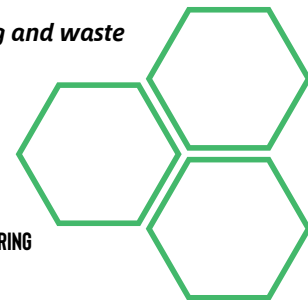


**DATE** **05-07**  
**DECEMBER**  
**2024**

**Preconference workshop:**  
*"Strategies for effective recycling and waste management practices" on*

**4<sup>TH</sup> DECEMBER 2024**

ORGANISED BY  
 DEPARTMENT OF CIVIL ENGINEERING  
 THANGAL KUNJU MUSALIAR COLLEGE OF ENGINEERING  
 KOLLAM-691005, KERALA, INDIA.



## Main theme

- ✔ Focusing on global partnership for sustainable development and circular economy through technology, infrastructure and research

## Objectives of ICMSC 2024

- ✔ To create a platform for global partnership by bringing together a diverse group of individuals, including students, academicians, scientists, professionals, practitioners and various stakeholders for promoting sustainable development.
- ✔ To achieve the various Sustainable Development Goals (SDG) through a detailed evaluation and analysis of the current trends, advancements, and new developments across different countries.
- ✔ To encourage collaboration between industry and academia, thereby bridging the gap between theory and practice.
- ✔ To provide opportunities for publication of original research papers, review papers, surveys, case studies, technical and management reports, viewpoints in the conference publications.

## SUB THEMES

*(aligned with Sustainable Development Goals- SDGs of the United Nations)*

## SDG 6: Clean water and sanitation

- ✔ Water policies and governance
- ✔ Pollutant dynamics and transport
- ✔ Water treatment
- ✔ Wastewater treatment
- ✔ Applications of AI and ML
- ✔ Persistent organic pollutants
- ✔ Microplastics
- ✔ Design of environmental systems
- ✔ Community initiatives and sanitation

## SDG 9: Industry, Innovation and Infrastructure

- ✔ Retrofitting
- ✔ Environmental Geotechnics
- ✔ Advanced characterization techniques
- ✔ Forensic geotechnical engineering
- ✔ Reinforced soil and geosynthetics
- ✔ Sustainable foundation
- ✔ Earthquake resistant structures
- ✔ Advances in materials and concrete
- ✔ Clean technologies
- ✔ BIM(Building Information Modelling)
- ✔ AI and ML in infrastructure
- ✔ Safety of engineered structures
- ✔ Construction risk management
- ✔ Construction simulation
- ✔ GIS and remote sensing applications
- ✔ Advanced Pavement Materials and construction techniques
- ✔ Rehabilitation of pavement structures

## SDG 11: Sustainable cities and Communities

- ✔ Urban planning
- ✔ Road safety
- ✔ IoT in infrastructure
- ✔ Transportation planning: optimizing mobility and infrastructure
- ✔ Intelligent transport systems
- ✔ Green buildings
- ✔ Modular construction
- ✔ Construction productivity and economics
- ✔ Construction dispute resolution
- ✔ Disaster preparedness and Management
- ✔ Resilient infrastructure
- ✔ Sustainable water resource management
- ✔ Indoor and outdoor air quality
- ✔ Solid waste and hazardous waste management

## SDG 12: Responsible consumption and production

- ✔ Resource management
- ✔ Resource recovery
- ✔ Circular economy
- ✔ Waste to resource
- ✔ Lean construction
- ✔ Recycled aggregate/concrete
- ✔ Construction supply chain management
- ✔ Recycled pavement management
- ✔ C&D waste management

## SDG 13: Climate Action

- ✔ Hydro climatology
- ✔ Climate modelling
- ✔ Hydrologic impacts of climate change
- ✔ Climate smart agriculture and irrigation
- ✔ Carbon capture
- ✔ Carbon sequestration
- ✔ Greenhouse gas reduction
- ✔ Carbon neutral transport sector
- ✔ LCA/carbon footprint evaluation
- ✔ Embodied energy of building materials
- ✔ Infrastructure adapting to climate change.

*\*Keywords are not limited to the above mentioned*

## The Locale

The college is situated in a serene atmosphere at Karikode, 6 km from Kollam city, along the Kollam-Madurai National Highway 744. Kollam is well connected to all cities in India by road as well as rail. The nearest airport is Trivandrum International Airport, which is 65 km along the National Highway 66. Cochin International Airport is 150 km from the college. Places of tourist interest near Kollam are the famous Jatayu Earth's Centre (35 km), Kovalam beach (70 km), Varkala beach (40 km), Ponnudi Hill Resort (95 km), Palaruvi waterfalls (70 km), Thenmala ecotourism area (60 km) and Kanyakumari (150 km). Climate in Kollam during the month of December is very pleasant with temperature ranging from 24 to 30 degree Celsius with occasional showers.