



# ICTACEM-2025

9th International Conference on Theoretical,  
Applied, Computational and Experimental  
Mechanics



**Department of Aerospace Engineering,**  
Indian Institute of Technology Kharagpur,  
West Bengal, India



**15<sup>th</sup> – 17<sup>th</sup>**  
December, 2025





# ABOUT ICTACEM

The International Conference on Theoretical Applied Computational and Experimental Mechanics is organized every three years by the Department of Aerospace Engineering IIT Kharagpur. The conference is devoted to providing a platform for scientists and engineers to exchange their views on the latest developments in Mechanics since 1998. ICTACEM Conference is aimed at bringing together academicians and researchers working in various disciplines of mechanics to exchange views as well as to share knowledge between people from different parts of the globe. The 9th ICTACEM will be held from December 15-17, 2025 at the Indian Institute of Technology, Kharagpur.

## CALL FOR PAPERS

Authors are invited to **SUBMIT** extended abstracts (maximum two pages) **ONLINE**, clearly indicating the summary of the aims, methods of analysis, results, and conclusions. Three categories of submissions are available: **Oral presentation**, **Poster presentation**, and **Galleries of Videos** of ICTACEM-2025. Submission of the **extended abstract** is mandatory for all categories. Final acceptance for conference oral/poster/video presentation and book of abstracts will be based on review of the extended abstract. Accepted abstracts will also be published on the conference website. Formats for the preparation of the extended abstract and full-length paper are available as separate links on the conference website. Full-length papers of accepted abstracts will be further reviewed and selected for the conference proceedings by an internationally recognized publisher with DOI.



# THEME

## 1. Aerodynamics and Fluid Mechanics

Experimental and Computational Aerodynamics, Computational Fluid Dynamics, Shock wave- Boundary Layer Interactions, Active and Passive Flow Controls, Fluid-structure interaction, High Enthalpy Flows and Hypersonic Aerodynamics, Bio-inspired Fluid Dynamic applications, Aeroacoustics, Hydrodynamics, Turbulence, LES, etc.

## 2. Flight Mechanics, Control and Navigation

Space/Orbital Mechanics, UAV, MAV, AI and Expert Systems, Fuzzy Logic, Genetic Algorithms and Neural Networks, Satellite-Based Navigation Systems, Optimal, Nonlinear and Robust control, etc.

## 3. Propulsion and Combustion

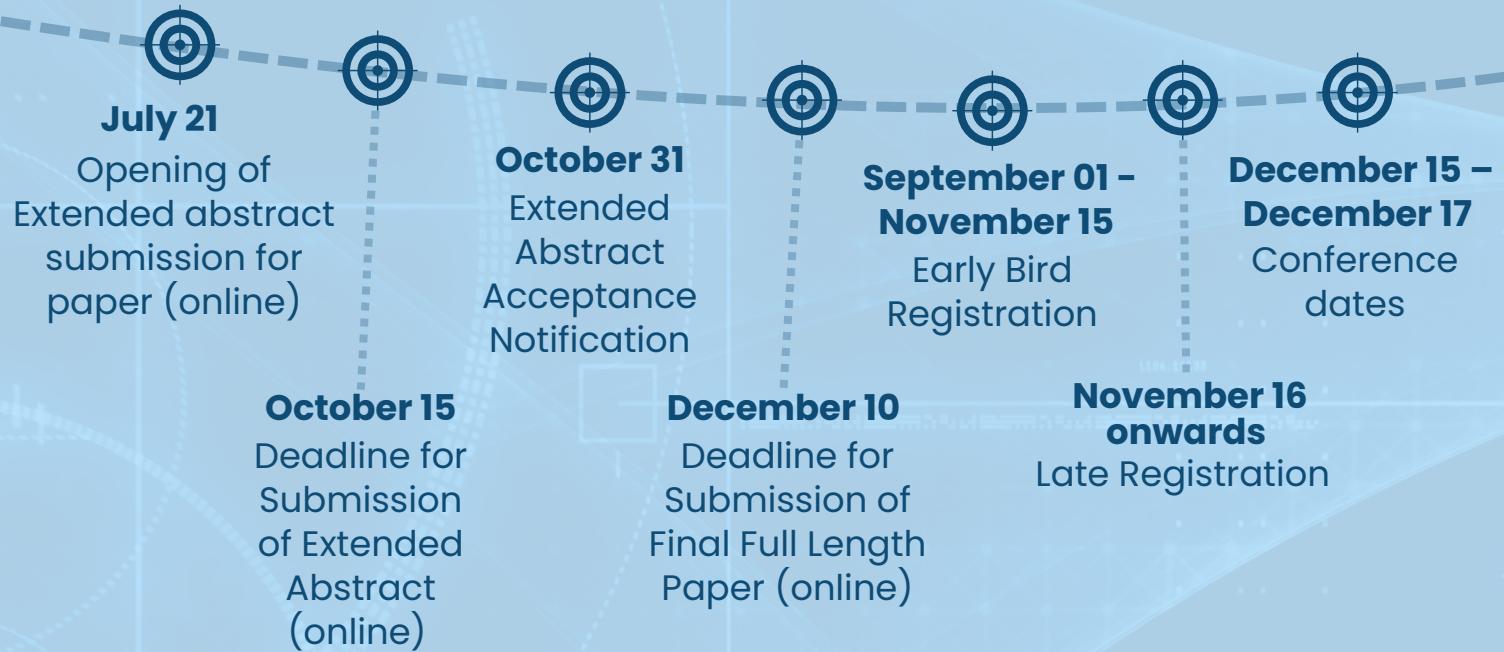
Turbomachinery, Aerodynamics of gas turbine components, Development and Testing of Gas Turbine Systems, Heat transfer, Gas turbine blade cooling, rotor dynamics, Performance Analysis and Advanced Cycles, Droplet and spray combustion, Laser ignition, Combustion spectroscopy, LES of combustion, Alternative fuels, Nonconventional energy, Nano-fuels, Technology Development in Solid/Liquid/Hybrid Rockets, etc. Statistical Thermodynamics, Uncertainty Quantification.

## 4. Solid Mechanics and Dynamics

AI and Expert Systems, Classical Mechanics, Composite Materials and Structure, Computational Mechanics, Computational Methods, Damage Mechanics, Fracture Mechanics, Functionally Graded Materials, Fuzzy Logic, Genetic Algorithms and Neural Networks, Modelling and Simulation, Nano mechanics, Nonlinear Mechanics, Optimization, Smart Materials, Structures and Systems, Structural Dynamics, Aeroelasticity, Terramechanics, Uncertainty Quantification, etc.



# IMPORTANT DATES



## ACCOMMODATION

Accommodation on a payment basis will be arranged upon request by the conference organizing committee within and around the IIT Kharagpur campus. Hostel accommodation at an affordable price for the students will be arranged based on availability.

**Note: No accommodation is guaranteed for requests received after November 15, 2025.**

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Website





# REGISTRATION FEES

Delegates from SAARC countries:		
	On or before November 15, 2025	After November 15, 2025
Regular Registration (Academia, R&D and Industry)	INR 10000	INR 15000
Student's Registration	INR 5000	INR 7500
Delegates from other countries:		
Regular Registration (Academia, R&D and Industry)	US\$ 500	US\$ 600
Student's Registration	US\$ 100	US\$ 120

The registration fee includes a copy of the conference kit, book of abstracts, breakfasts, lunches, tea/ coffee services during session breaks, and conference banquet.

## SPONSORSHIP

Details of the sponsorship modes are available on the ICTACEM 2025 website.

## MODE OF PAYMENT

Once the abstract is accepted for presentation in the conference, the corresponding author will be notified for the fee payment through the Continuing Education Programme webpage under the ERP website of IIT Kharagpur.

Kindly use the link <https://erp.iitkgp.ac.in/CEP/courses.htm>, to create a login for fee payment with respect to the programme id for ICTACEM 2025: IIT/CEP/CON/CON/2024-25/AE/156



# THANK YOU!

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