



Scheme for Promotion of Academic and Research Collaboration

ICFTE 2026



Information Brochure

**International Conference on
Fluid and Thermal Engineering**
January 19-21, 2026

**Department of Mechanical Engineering
Birla Institute of Technology and Science
Pilani, Pilani Campus
Rajasthan-333031, India.**

In Collaboration with



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Welcome to ICFTE -2026:

As one of India's premier institutions of higher learning, BITS Pilani has consistently championed excellence in engineering, science, and innovation. Continuing this tradition, the Institute is proud to host the International Conference on Fluid and Thermal Engineering (ICFTE), a distinguished global forum dedicated to advancing knowledge in fluid mechanics and thermal sciences and engineering. This conference will bring together leading researchers, scientists, engineers, and scholars from around the world to present pioneering research, exchange innovative ideas, and explore emerging trends shaping the future of fluid and thermal engineering.

ICFTE provides a unique opportunity to foster meaningful academic and industry collaborations, offering participants a platform to engage in stimulating discussions, share best practices, and address critical challenges in the field. With its emphasis on both fundamental research and industrial applications, the conference promises to be a vibrant exchange of knowledge and innovation.

The event will be held from January 19–21, 2026 at Department of Mechanical Engineering, BITS Pilani, Pilani Campus, Rajasthan, India.



*Organizing Institute: BITS Pilani
Pilani Campus, RJ, India.*

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Instruction for Author:

❖ Call for Abstracts

Extended abstracts for original research articles broadly within the scope of the conference topics, written in English language are, solicited. The topics/tracks of the conference are as follows:

Track – 01: Advanced Topics in Aerodynamics and Engine Propulsion

- Subsonic, supersonic, and hypersonic flow analysis
- Aeroacoustics and noise reduction
- Turbomachinery and jet propulsion
- Flow control and optimization
- UAV and aerospace vehicle aerodynamics

Track – 02: Design and Optimization of Thermal and Mass Transfer Systems

- Heat exchangers: design and performance
- Cooling towers and condensers
- Industrial furnaces and boilers
- Evaporators and dryers
- Compact and microchannel heat exchangers

Track – 03: Innovative Techniques for Enhancing Heat Transfer

- Passive and active enhancement techniques
- Nanofluids and phase change materials
- Surface modification and coatings
- Vortex generators and turbulators
- Heat transfer in micro and mini channels

Track – 04: Computational Approaches to Fluid Flow and Thermal Analysis

- Finite element and finite volume methods
- Lattice Boltzmann and meshless methods
- Multiscale and multiphysics modeling
- High-performance computing and parallelization
- Validation and benchmarking of numerical models

Track – 05: Combustion Science and Automotive Engineering Applications

- Internal combustion engine modeling
- Alternative fuels and biofuels
- Emission control and after-treatment
- Flame dynamics and ignition systems
- Thermal management in vehicles

Track – 06: Energy Conversion Devices and Integrated Systems

- Solar thermal and photovoltaic systems
- Fuel cells and batteries
- Thermoelectric and piezoelectric devices
- Smart grids and energy storage
- Waste heat recovery systems

Track – 07: Transport Processes in Biological and Biomedical Systems

- Blood flow and cardiovascular modeling
- Heat transfer in tissues and organs
- Drug delivery and diffusion
- Biofluid mechanics in microcirculation
- Biomedical device thermal analysis

Track – 08: Flow Instabilities, Transition Mechanisms, and Turbulent Dynamics

- Laminar-turbulent transition
- Turbulence modeling and simulation
- Flow instabilities in ducts and jets
- Vortex dynamics and coherent structures
- Experimental studies of turbulent flow

Track – 09: Thermal Transport Phenomena at the Nanoscale

- Phonon and electron transport
- Thermal conductivity in nanostructures
- Molecular dynamics simulations
- Nanoelectronics cooling
- Thermophysical properties at nanoscale

Track – 10: Instrumentation and Experimental Methods in Thermal Sciences

- Laser diagnostics and PIV
- Infrared thermography and heat flux sensors
- Micro and nanoscale measurement tools
- Uncertainty analysis and calibration
- Data acquisition and signal processing

Track – 11: AI and Machine Learning Applications in Heat and Fluid Flow

- Surrogate modeling and reduced-order models
- Data-driven turbulence modeling
- AI for experimental data analysis
- Predictive maintenance in thermal systems
- Neural networks and deep learning applications

Track – 12: Thermal Engineering for Nuclear and Aerospace Technologies

- Thermal management in nuclear reactors
- Cryogenic systems and insulation
- Spacecraft propulsion and re-entry heating
- Radiation heat transfer
- Safety and reliability in extreme environments

Track – 13: Heat and Mass Transfer in Porous Structures and Materials

- Flow through porous structures
- Drying and filtration processes
- Geothermal and soil heat transfer
- Porous media combustion
- Modeling and simulation techniques

Track – 14: Experimental Investigations in Heat and Mass Transfer

- Flow visualization methods
- Transient and steady-state measurements
- Microfluidic experimental setups
- Calibration and error analysis
- Innovative sensor technologies

Track – 15: Multi-phase Fluid Dynamics and Thermal Interactions

- Boiling and condensation
- Droplet and bubble dynamics
- Slurry and particulate flows
- Phase change materials and melting
- Cavitation and flow instabilities

❖ Extended Abstract Submissions:

- The maximum page limit for the extended abstract - **1 page**.
- The official language of the ICFTE 2026 is English (Plagiarism: Less than 5%).
- The author(s) will directly present their work at the conference as per the format recommended by the committee (oral presentation or in the form of a poster).
- At least one of the authors must register per extended abstract.

❖ **Extended Abstract Submission Link:** <https://forms.gle/FUFpRxK1UQgkMkn96>

Registration:

Indian and SAARC participants:

Registration Fee	Academic Institute (Rs.)	Industry/R&D Organization (Rs.)	Students/ Research Scholar (Rs.)	Attendee (Rs.)
Early bird registration (20 th Nov, 2025)	3,500/- + 18% GST	4,500/- + 18% GST	2,000/- + 18% GST	2,000/- + 18% GST
Late Registration (after 20 th Nov, 2025)	4,500/- + 18% GST	5,500/- + 18% GST	3,000/- + 18% GST	3,000/- + 18% GST

Non-SAARC participants:

Registration Fee	Academic Institute (US\$)	Industry/R&D Organization (US\$)	Students/ Research Scholar (US\$)	Attendee (US\$)
Early bird registration (20 th Nov, 2025)	100	150	75	75
Late Registration (after 20 th Nov, 2025)	120	170	90	75

Non-SAARC participants: (Online mode presentation is permitted for foreign participants only):

Registration Fee	Academic Institute (US\$)	Industry/R&D Organization (US\$)	Students/ Research Scholar (US\$)	Attendee (US\$)
Early bird registration (20 th Nov, 2025)	80	120	60	60
Late Registration (after 20 th Nov, 2025)	100	130	80	80

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Email Id: c.ranganayakulu@pilani.bits-pilani.ac.in, biswadip.shome@pilani.bits-pilani.ac.in

Important Dates:

Submission of extended abstract:	31 st October, 2025
Authors (s) notification after review:	10 th November, 2025
Final extended abstract submission:	15 th November, 2025
Notification of final acceptance:	20 th November, 2025
Early bird registration:	20 th November, 2025
Last Date of Registration:	15 th December, 2025
Date of Conference:	19th – 21st January, 2026

Publication:

LIST OF JOURNALS:

Selected papers presented in the conference will be published in the following journals

- **Heat Transfer Engineering**, Taylor & Francis:
- **Progress in Computational Fluid Dynamics**, Inderscience:
- **Journal of Thermal Analysis and Calorimetry**, Springer:

More journals will be updated soon. Selected and presented works may be considered for Journal publication.

CONFERENCE PROCEEDINGS:

All papers presented at the conference will be published in the **Conference Proceedings (Scopus Index)**.

Contact Details:



**FOR GENERAL QUERIES
ORGANIZING SECRETARY**

Dr. Suvanjan Bhattacharyya

Assistant Professor

Department of Mechanical Engineering,
Birla Institute of Technology and Science, Pilani, Pilani Campus, Rajasthan, India.
suvanjan.bhattacharyya@pilani.bits-pilani.ac.in



**FOR PAPER SUBMISSION
STUDENT CO-ORDINATOR**

Mr. Sri Harsha Dannana

Research Scholar

Department of Mechanical Engineering,
Birla Institute of Technology and Science, Pilani, Pilani Campus, Rajasthan, India.

icfte2026@gmail.com

FOR REGISTRATION



Prof. Yogesh Singh

Assistant Professor

Department of Mechanical Engineering,
Birla Institute of Technology and Science, Pilani, Pilani Campus, Rajasthan, India.

saket.verma@pilani.bits-pilani.ac.in

**DEPARTMENT OF MECHANICAL ENGINEERING
BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI,
PILANI CAMPUS, RAJASTHAN, INDIA
Email: icfte2026@gmail.com**