



### ABOUT BITS PILANI

Birla Institute of Technology and Science (BITS) Pilani is an all-India Institute for higher education. Founded with strong technical collaboration with MIT (USA) under the Ford Foundation Grant, BITS Pilani has evolved into India's leading institute of higher education, distinguished by its illustrious legacy, modern campuses, and exceptional placement records. The institute's commitment to excellence, adherence to merit, transparency, innovation, and enterprise has been the hallmark of its journey. BITS Pilani has got campuses in Dubai, Hyderabad, Goa and Mumbai in addition to Pilani. These expansions have solidified BITS Pilani's reputation as a premier educational institution. The past six decades have been exceptional for BITS Pilani, marked groundbreaking achievements in research, teaching, and fostering entrepreneurship. Some of the milestones and key achievements include:

- Institute of Eminence
- BITS BioCyTiH Foundation
- BITS-Technology Enabling Centres (TEC)
- Center for Research Excellence in Semiconductor Technologies
- Center for Research Excellence in National Security (CRENS)
- BITS GATI (Gender Advancement for Transforming Institutions)
- SATHI Project Award

### ABOUT MECHANICAL ENGINEERING DEPARTMENT

The Mechanical Engineering Department at BITS Pilani is spread across its four campuses of Pilani, Dubai, Goa and Hyderabad. It offers undergraduate, postgraduate and Ph.D. programs and focuses on theoretical learning and hands-on experience. Established as early as 1946, the department is known for research in fields like Design, Manufacturing, Thermo-fluids, Engineering Management, etc. Our students explore specialized area such as Robotics, Mechatronics, Energy Management, 3D Printing, Battery Technology etc. and are trained in software tools like ANSYS, AutoCAD, CATIA, COMSOL Multiphysics, MATLAB, Fusion 360, etc. Faculty members are deeply involved in cutting edge research, addressing both fundamental and applied problems, with strong links and industry. We aim to produce skilled graduates ready for impactful careers in industry, academia and research. With a focus on critical thinking, innovation and problem-solving. We contribute to technological advancement while real-world challenges through innovative pedagogy.

### VENUE

Department of Mechanical Engineering, BITS Pilani, Pilani Campus, Rajasthan - 333031, India.

### REGISTRATION FEES

Registration fee can be paid through Bank transfer/Online. Access the conference website <https://www.bits-pilani.ac.in/icgtme-2025/> for registrations. Fee details are given as (inclusive of GST):

Industry/R&D Organization (Rs.)	Faculty From Academic Institute (Rs.)	Research Scholars/Students (Rs.)
<b>4,000/-</b>	<b>3,000/-</b>	<b>2,000/-</b>

#### Bank details:

Beneficiary Name : Birla Institute of Technology & Science, Pilani;  
Bank Account (Saving): 918010089946355; Bank: AXIS BANK LTD (Pilani Branch); IFSC CODE No.: UTIB0001188

Click Here to Register : <https://forms.gle/5RKuvnfpQsTtid357>



### ABOUT PRE-CONFERENCE WORKSHOP

Facility	Details
Solar PV assisted fluidized bed dryer.	The DST ASACODER-supported research facility integrates solar photovoltaic technology for drying diverse grains ensuring uniform heat distribution for efficient moisture removal.
Cooling of EV batteries.	The cooling of EV batteries experimental setup is designed for research purposes, allowing us to investigate the performance of EV batteries under varying environmental conditions.
Measurement of friction and wear.	Tribology studies help to understand the friction and wear properties which plays an important role in reducing CO <sub>2</sub> emissions leading to sustainability. The hands-on training will be provided for the experimental setup of a pin-on-disc tribometer for friction and wear measurements.
Sustainable Automation.	The hands-on training will be on the use of cobots and retrofitting processes to convert existing industrial robots as cobots leading to Industry 4.0. The robot studio software and functionalities will be demonstrated.
Microwave heating technology	Microwave Heating Technology addresses the challenges involved in the uniform heating of materials. Facilities for microwave heating of different materials will be demonstrated for sintering, welding, casting and additive manufacturing.
Battery testing and characterization	Recent development of Li-ion and alternative chemistry batteries have garnered attention in the field of Electric Vehicles and Renewable Energy Storage Technologies. Battery testing and its fundamentals will be demonstrated during hands-on training session to carry out future studies/research in this area.
Supply chain analytics lab	This research facility is well-equipped to provide training on sustainable assessment using the Life Cycle Assessment (LCA) approach based on completed and on-going research projects sponsored by DST, DBT and the Ministry of Steel.

### RESOURCE PERSONS

Prof. Srikanta Routroy; Prof. Bijay Kumar Rout; Prof. P. Srinivasan; Prof. Arun Kumar Jalan; Prof. Suvanjan Bhattacharyya; Prof. Radha Raman Mishra and Prof. Tribeni Roy

### IMPORTANT DATES

<b>Registration</b>	<b>31<sup>st</sup> December 2024</b>
<b>Pre-conference Workshop</b>	<b>2<sup>nd</sup> February 2025</b>

Number of seats: 60

Selection will be based on first come first served basis.

### ELIGIBILITY

Faculty members of AICTE-approved institutions, research scholars, PG/UG Students, and participants from Government and Industry (Bureaucrats/ Technicians/ Participants from Industry etc.)

### ELIGIBILITY

Assistance will be provided for arranging accommodation at a nominal cost within the campus based on availability. A detailed list of hotels in Pilani and nearby places will be published on the website.

### CONTACT DETAILS

Email: [conference.me@pilani.bits-pilani.ac.in](mailto:conference.me@pilani.bits-pilani.ac.in)

Phone: +91-1596-25-5788