



IIT Kharagpur Platinum Jubilee Conference on Advanced Materials and Manufacturing, Energy and Sustainability

Dates: Thurs, 28 Jan to Sat 30 Jan 2027

@IIT Kharagpur Main Campus



Overview

As IIT Kharagpur celebrates its **Platinum Jubilee**, we stand at a pivotal moment in engineering history. The global imperative to achieve carbon neutrality and resource resilience has transformed the landscape of research. At the heart of this transformation lies the synergy between **Advanced Materials and Manufacturing** and **Energy and Sustainability**. This theme represents a holistic approach to the industrial challenges of the 21st century. Such an approach is the highlight of this conference to be delivered into three parallel tracks.

Track A: Renewable Energy Generation and Storage

This track explores the frontiers of **Photovoltaics** and **Solar energy**, alongside the rapidly evolving landscape of **Hydrogen technology**, **Green hydrogen** and **next generation Li/Na ion** and other rechargeable cells for the battery supply chain.

Track B: Advanced Materials and Manufacturing

The focus is on the exploration of **advanced materials**, **composites** and **nanomaterials** to address the need to withstand extreme environments. On the other hand, manufacturing is undergoing a revolution driven by **Industry 4.0** and **Advanced Manufacturing through intelligent sensors and actuators**.

Track C: Water-Food-Energy-Environment Nexus

This track addresses the "Nexus" where energy use impacts water scarcity, food security, and soil health. Key areas of focus include **Water and wastewater treatment technologies**, **Geothermal energy**, and the impact of industrialization on **Climate and Soil**.

Format of the conference

1. Plenary and Keynote talks
2. Invited talks
3. Oral and Poster Presentations
4. Exhibitory stalls from Industries/Sponsors

About IIT Kharagpur

History

First in the chain of Indian Institute of Technology (IIT)s to be set up by the Government of India, Indian Institute of Technology, Kharagpur started in 1951 in the erstwhile Hijli Detention Camp. It has now blossomed into one of the finest technical institutions in the world. Spread over a sprawling campus of 2100 acres, it is largest and most diverse technical institution in the country offering programmes in all disciplines of engineering, basic sciences, medical and life sciences, management, law and humanities.

Location

<https://maps.app.goo.gl/j8J1m6yQzvIcAuHt9>, 120 km west of Kolkata
Nearest Airport: CCU (Kolkata)
Nearest Train Station: KGP
Airport to IITKGP (by car): ~3 hrs

Weather

Winter (Oct to Feb) is moderate and pleasant, (10° to 25° C).

Registration details

Details of sponsorship and registration may be found at the link below:

<https://forms.gle/Ec8ocxK11R6ujQxm6>

Important dates

Registration: Jul – Nov 2026
Abstract submission by: Nov 2026
Guest house request by : Nov 2026
Acceptance email: 30 Nov 2026
Conference: 28 Jan – 30 Jan 2027

Core Committee Members

Subhasish Basu Majumdar, Mat. Sc.
Kinsuk Naskar, Rubber Tech Centre
Brajesh Kumar Dubey, Civil Engg
Susanta Banerjee, Mat Sc. Centre
Nilanjan Das Chakladar, Mech Engg
Madan Kumar Jha, Agr Food Engg
Soumyadip Choudhury, Rubber Tech
Titash Mondal, Rubber Tech Centre
Aghna Mukherjee, Mech Engg
Atul Jain, Mech Engg

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