



PROGRAM SCHEDULE



6TH INTERNATIONAL CONFERENCE ON CURRENT TRENDS IN MATERIALS SCIENCE AND ENGINEERING

HYBRID CONFERENCE | IN-PERSON & ONLINE

DATES

25 – 27 September 2026

VENUE

IEM Alumni Centre, 15th Floor, Godrej
Genesis Building, EP Block, Sector V,
Bidhannagar (Salt Lake), Kolkata,
West Bengal 700091

ORGANISED BY

Department of Basic Science & Humanities, Institute of Engineering &
Management, Kolkata

School of University of Engineering and Management, Kolkata

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Zoom Link for all Technical Sessions:

<https://us06web.zoom.us/j/2997723153?pwd=uxxlyc586mclqOiQPsRf6t3KacbQm8.1>



DAY 1 — 25 SEPTEMBER 2026

2:30 PM – 7:00 PM (IST)

IEM Alumni Centre, 15th Floor, Godrej Genesis Building, EP Block, Sector V, Bidhannagar (Salt Lake), Kolkata, West Bengal 700091

2:30 – 3:00 PM	REGISTRATION Distribution of registration kits
3:00 – 3:45 PM	INAUGURAL SESSION Welcome Address (Mrs. Banani Chakrabarti, President, IEM) • Welcome Address (Dr. Satyajit Chakrabarti, Director, IEM) • Message from the conference chair (Prof. Arun Kumar Bar) • Lamp Lighting Ceremony • Inauguration of Conference Proceedings • Conference Overview (Convener) • Vote of Thanks (Chief Advisor)
3:45 – 4:15 PM	TECHNICAL SESSION 1 - INVITED TALK 1 SESSION CHAIR: PROF. ANJAN BARMAN Prof. Prabhat Mandal – S. N. Bose National Centre for Basic Sciences Invited Talk
4:15 – 4:45 PM	TECHNICAL SESSION 1- INVITED TALK 2 SESSION CHAIR: PROF. ANJAN BARMAN Prof. Subhadeep Datta – Indian Association for the Cultivation of Science (IACS), Kolkata Invited Talk Title: FET-Based Electrical Rheometry and Microfluidic Sensing of Ionic Liquids

4:45 – 5:15	TECHNICAL SESSION 1 - INVITED TALK 3 SESSION CHAIR: PROF. SUMONA SINHA Prof. Sajal Dhara – Indian Institute of Technology (IIT) Kharagpur Invited Talk Title: Exceptional Points and Raman Emission in Non-Hermitian Polaritonic Systems
5:15 – 6:00	TECHNICAL SESSION 2 – PLENARY 1 (ONLINE) SESSION CHAIR : PROF. SUMONA SINHA Prof. Arindam Ghosh– Indian Institute of Science, Bangalore (IISc) Plenary Talk Title: Charge and Heat Flow in Quantum Critical Matter – The Case of Graphene
6:00 – 6:30	TECHNICAL SESSION 3 – INVITED TALK 4 (ONLINE) SESSION CHAIR: PROF. SUBARNA DATTA Dr. Vanessa Pilati Peixoto Jucá – Universidad de Oviedo, Spain Invited Talk Title: Magnetic Nanoparticles for Tri-Modal Magnetic, Photothermal and Colorimetric Sensing in Rapid Diagnostic Tests
6:30 – 7:00 PM	 HIGH TEA / NETWORKING

All timings are in Indian Standard Time (IST = GMT +05:30)

DAY 2 — 26 SEPTEMBER 2026

 9:30 AM – 6.00 PM (IST)

IEM Alumni Centre, 15th Floor, Godrej Genesis Building, EP Block, Sector V, Bidhannagar (Salt Lake), Kolkata, West Bengal 700091

9:30 – 10:00 AM	TECHNICAL SESSION 4 · INVITED TALK 5 SESSION CHAIR: PROF. DEBOSMITA BHATTACHARYAY Prof. Somnath C. Roy – Indian Institute of Technology (IIT) Madras Invited Talk Title: Highly aligned and vertically oriented metal oxide nanostructures: a pathway to investigate fundamental science and potential applications
10:00 – 10:30 AM	TECHNICAL SESSION 4 · INVITED TALK 6 SESSION CHAIR: PROF. DEBOSMITA BHATTACHARYAY Dr. Achintya Singha – Bose Institute, Kolkata Invited Talk Title: Spin-Valley Physics and Optical Access to Dark Excitonic States in 2D Transition Metal Dichalcogenides
10:30 – 11:00 AM	 TEA BREAK
11:00 AM – 11:30 PM	TECHNICAL SESSION 5 · INVITED TALK 7 SESSION CHAIR: PROF. SOMNATH C ROY Prof. Prabhat Kumar Giri – Indian Institute of Technology (IIT) Guwahati Invited Talk Title: Two-dimensional MXene-based Hybrid Nanostructures for Electromagnetic Interference Shielding and Artificial Synapse Applications

11:30 – 12:45 PM	TECHNICAL SESSION 6 · KEYNOTE (ONLINE) SESSION CHAIR: PROF. SUBHADEEP CHAKRABORTY Prof. Rajdeep Singh Rawat – Nanyang Technological University (NTU), Singapore Keynote Talk Title: Atomic-Scale Plasma Engineering of Electrode Materials for Electrochemical Energy Storage and Conversion
12:45 – 1:30 PM	 LUNCH BREAK
1:30 – 2:00 PM	TECHNICAL SESSION 7 · INVITED TALK 8 (ONLINE) SESSION CHAIR: PROF. SUBHADEEP CHAKRABORTY Prof. Nirupam Chakraborti – Czech Technical University, Prague Invited Talk Title: Evolutionary Deep Learning Algorithm EvoDN2 Applied to Materials Technology
2:00 – 2:45 PM	TECHNICAL SESSION 8 · PLENARY 2 SESSION CHAIR: PROF. PRABHAT KUMAR GIRI Prof. Robert J. Hicken – University of Exeter, UK Plenary Talk Title: Spin Dynamics in Ferromagnetic van der Waals Materials
2:45 – 3:15 PM	TECHNICAL SESSION 9 · INVITED TALK 9 SESSION CHAIR: PROF. SOUMYADIPTA PAL Prof. Debnarayan Jana – University of Calcutta Invited Talk Title: Intriguing topological signatures in family of Dumbbell C₃NX (X = C, Si, Ge) Monolayer
3:15 – 3:30 PM	 SHORT BREAK
3.30 – 6:00 PM	CONTRIBUTED ORAL SESSIONS · PARALLEL TRACKS Track 1 Environmental & Green Materials – Part I (Online)

Track 2 Environmental & Green Materials – Part II / Sustainable Engineering (Online)
Track 3 Polymers, Composite & Ceramic Materials (Online)
Track 7 Nanomaterials, Polymers & Composite Materials (Offline)
Track 10 Nanomaterials, Advanced & Sustainable Materials (IEM students - Offline) [10th Floor Godrej Genesis Building, IEM CSE IEDC]

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DAY 3 — 27 SEPTEMBER 2026

 **9.30 AM – 4:30 PM (IST)**

IEM Alumni Centre, 15th Floor, Godrej Genesis Building, EP Block, Sector V, Bidhannagar (Salt Lake), Kolkata, West Bengal 700091

9:30 – 10:00 AM

TECHNICAL SESSION 10 · INVITED TALK 10 **SESSION CHAIR: PROF. SASWATI BARMAN**

Dr. Srabanti Ghosh – CSIR–Central Glass and Ceramic Research Institute (CGCRI), Kolkata | **Invited Talk**

Title: Engineering Semiconductor Nanostructures for Photoelectrocatalytic water splitting and Green Hydrogen Production

10:00 – 10:30 AM

TECHNICAL SESSION 11 · INVITED TALK 11 **SESSION CHAIR: PROF. SASWATI BARMAN**

Dr. Biswarup Satpati – Saha Institute of Nuclear Physics (SINP), Kolkata | **Invited Talk**

Title: Noble Metal Based Electrocatalysts for Enhanced Ethanol Oxidation Reaction

10:30 – 11:00 AM

 **TEA BREAK**

11:00 AM – 11:45 PM	TECHNICAL SESSION 12 · INVITED TALK 12 (ONLINE) SESSION CHAIR: PROF. SANGEETA DAS Prof. S. M. Yusuf – Bhabha Atomic Research Centre, MUMBAI Plenary Title: Unlocking Quantum Spin Correlations
12:00 – 1:00 PM	 LUNCH BREAK
1:00 – 3:30 PM	CONTRIBUTED ORAL SESSIONS · PARALLEL TRACKS Track 4 Nanomaterials & Semiconductor / Smart / Medical Applications (Online) Track 5 Engineering Applications & Computational Materials (Online) Track 6 Artificial Intelligence, Machine Learning & Intelligent Systems (Online) Track 8 Environmental, Semiconductor & Engineering Applications (Offline) Track 9 Smart Systems, Computational Science & Emerging Technologies (IEM students - Offline) [10th Floor Godrej Genesis Building, IEM CSE IEDC]
4:00 – 4:30 PM	VALEDICTORY SESSION Certificates & Best Presentation Award Distribution • Closing Remarks • Vote of Thanks
4:30 PM	Tea

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CONFERENCE TRACKS

Track	Track Title
Track 1	Environmental & Green Materials – Part I (Online) Session Judge: Prof. Souvik Mondal and Prof. Suprava Ranjan Laha
Track 2	Environmental & Green Materials – Part II / Sustainable Engineering (Online) Session Judge: Prof. Soumyabrata Goswami and Prof. Ruchira Mukherjee
Track 3	Polymers, Composite & Ceramic Materials (Online) Session Judge: Prof. Kartik Malik and Prof. Anisha Purkait
Track 4	Nanomaterials & Semiconductor / Smart / Medical Applications (Online) Session Judge: Prof. Mainak Das and Prof. Chandan Adhikary
Track 5	Engineering Applications & Computational Materials (Online) Session Judge: Prof. Sumona Sinha and Prof. Sayani Das
Track 6	Artificial Intelligence, Machine Learning & Intelligent Systems (Online) Session Judge: Prof. Biswadip Basu Mallik and Prof. Sharmistha Ghosh
Track 7	Nanomaterials, Polymers & Composite Materials (Offline) Session Judge: Prof. Shreemoyee Ganguly and Prof. Arnab Ghosh
Track 8	Environmental, Semiconductor & Engineering Applications (Offline) Session Judge: Prof. Somnath Roy and Prof. Saswati Barman



Track	Track Title
Track 9	Smart Systems, Computational Science & Emerging Technologies (IEM students - Offline) [10 th Floor Godrej Genesis Building, IEM CSE IEDC] Session Judge: Prof. Saikat Chakrabarty and Prof. Siddhartha Biswas
Track 10	Nanomaterials, Advanced & Sustainable Materials (IEM students - Offline) [10 th Floor Godrej Genesis Building, IEM CSE IEDC] Session Judge: Prof. Sukhendu Sadhukhan and Prof. Subhadeep Chakarborty

SCHEDULE SUMMARY

Day	Date	Time	Key Events
Day 1	25 Sep 2026	1:30 – 6:00 PM	Registration • Inauguration • Technical Sessions (Speakers 1–5) • High Tea
Day 2	26 Sep 2026	9:45 AM – 6:00 PM	Technical Sessions (Speakers 6–12) • Oral Sessions (Tracks 1, 2, 3, 7, 10)
Day 3	27 Sep 2026	10:00 AM – 4:30 PM	Technical Sessions (Speakers 13–15) • Oral Sessions (Tracks 4, 5, 6, 8, 9) • Valedictory Session

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