



12th National Conference on Recent Trends in Materials Science and Technology - 2025

18 – 20 December 2025

Organised by
Department of Chemistry
Indian Institute of Space Science and Technology
Thiruvananthapuram



In collaboration with
MRSI Thiruvananthapuram Chapter

IIST Thiruvananthapuram



Multipurpose Hall
IIST



18 – 20 Dec 2025



ncmst2025@iist.ac.in



<https://events.iist.ac.in//ncmst2025/>

Dates to Remember

- Last date for Submission of Abstracts
- 5 Nov 2025
- Announcement of selected Abstracts
- 10 Nov 2025
- Last date for Registration
- 30 Nov 2025

The focus theme of NCMST – 2025 is 'Materials for Addressing Global Challenges'. Materials science plays a pivotal role in tackling some of the most pressing global challenges of our time, including clean energy, climate change, healthcare, and sustainable development. Advanced materials such as nanomaterials, biomaterials, composites, and smart functional materials are enabling transformative solutions across diverse sectors. The NCMST-2025 focuses on developing a comprehensive grasp of the research challenges in advanced materials. The conference consists of Plenary and Invited lectures by the pioneers in Materials Science and Technology and Oral/Poster presentations by young researchers.

Areas covered in the conference

Nanomaterials & sensors	Materials for food, agro & petrochemical applications
High-temperature materials	Materials for sustainable development
Computational chemistry	Advanced sustainable materials
Materials for Aerospace and Defence	Quantum materials
Metals, alloys & optoelectronic materials	Smart, functional & biomaterials
Polymers, blends & composite materials	Emerging green processes

Speakers

Keynote Speaker – Aravindakumar C T, Vice-Chancellor, MG University

Abdul Habid Pullichola, CHEMRAW Tech
Aruna S T, NAL Bengaluru
Biswapriya Deb, CSIR-NIIST
Durai Prabhakaran, IIT Jammu
Edamana Prasad, IIT Madras
Kothandaraman R, IIT Madras
Lisa Sreejith, NIT Calicut
Nirmala James, IIST
Palash Kumar Basu, IIST

Renjith S Pillai, VSSC Thiruvananthapuram
Sai Kalyan, Prevest Denpro, Jammu
Santhosh B, VSSC Thiruvananthapuram
Shikha Varma, IOP Bhubneswar & IUAC, Delhi
Smita Jauhari, NIT Surat
Subbiah Alwarappan, CSIR-CECRI Karaikudi
Suresh C H, SRIBS & CSIR-NIIST
Swapna S Nair, CU-Kerala

Patrons

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Dr B N Suresh, Chancellor, IIST
Dr. Dipankar Banerjee, Vice Chancellor, IIST

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Indian Institute of Space Science and Technology (IIST) Thiruvananthapuram

The Indian Institute of Space Science and Technology (IIST), a Deemed-to-be University, functions as an autonomous body under the Department of Space (DoS), Government of India. It is the first institute of its kind in the country to offer high-quality education at the undergraduate, postgraduate, doctoral, and post-doctoral levels in areas relevant to space science, space technology, and space applications. IIST has the unique distinction of having Dr. A.P.J. Abdul Kalam, the renowned technocrat and former President of India, as its founding Chancellor. IIST emphasizes research and innovation, with faculty collaborating closely with ISRO scientists and engineers on joint projects to drive advances in space science and technology.

Department of Chemistry

The Department of Chemistry of IIST offers Ph.D. and M.Tech. programmes in Materials Science and Technology, with a strong emphasis on building solid foundations that enable students to design and develop novel materials and processes to address future technological challenges. In addition, the department contributes to the B.Tech. curriculum by offering core and elective courses. Since its inception, the department has been engaged in pioneering research in diverse domains of materials such as biomaterials, smart materials, high-temperature materials, and composites. To further strengthen its research capabilities, the department has established state-of-the-art facilities and these facilities support the development of advanced materials for a wide range of applications, including sensors, electronics, batteries, supercapacitors, drug delivery, and electromagnetic interference (EMI) shielding.

MRSI-Thiruvananthapuram Chapter

The Materials Research Society of India (MRSI), based in Bengaluru, is an interdisciplinary professional body committed to promoting research in materials and their applications. Among its various regional chapters, the MRSI-Thiruvananthapuram chapter is one of the most active, with members drawn from leading institutions in Kerala, including IIST, VSSC, NIIST, SCTIMST, IISER, CUSAT, Mahatma Gandhi University, University of Calicut, University of Kerala, and NIT Calicut.



Abstract submission

- Abstract not exceeding 200 words can be submitted.
- Awards will be presented for the best posters in different themes.
- Further details are available in the website: <https://events.iist.ac.in//ncmst2025/>

Accommodation and Transportation

- Accommodation (Hostel) will be provided in the IIST campus for a nominal charge on a first-come, first-served basis.
- Bus conveyance will be provided at specific times: Pick up from the Central Railway Station and drop off.

Lab visits

Participants have an opportunity to visit the following laboratories.

- Microscopy and spectroscopy labs- Dept. of Chemistry
- Astronomical observatory, Geology lab, Remote sensing lab- Dept. of Earth & Space Sciences

Opportunities to sponsor NCMST-2025

During the conference, sponsors are encouraged to exhibit their products or provide information. This will offer the manufacturer and dealers of scientific equipment, an opportunity to engage with the delegates.

The tariffs for the sponsorship are as listed below.

- **Sponsorship with Exhibits & 20 min presentation: 1,00,000 + GST**
- **Sponsorship (with exhibit only) : 50,000 + GST**

Co-Convenor , NCMST 2025

Dr Gomathi N

Head, Department of Chemistry, IIST