COMMITTEES & MEMBERS

NATIONAL ADVISORY COMMITTEE

Shri Vivek Bhasin, Director, BARC, Mumbai Shri C G Karhadkar, Director, IGCAR, Kalpakkam Dr. U. Kamachi Mudali, Vice Chancellor, HBNI, Prof. Chandrabhas Narayana, JNCASR, Bangalore Dr. AK Tyagi, BARC, Mumbai Dr. R. Divakar, Director, MMG, IGCAR, Kalpakkam Dr. Sandip Dhara, Director, MSG, IGCAR, Kalpakkam Dr. V. K. Aswal, BARC, Mumbai Dr. Tapas Ganguly, RRCAT, Indore Prof. Ambarish Gosh, IISc Begalore Dr. SN Potty, CMET, Thrissur

LOCAL ORGANIZING COMMITTEE

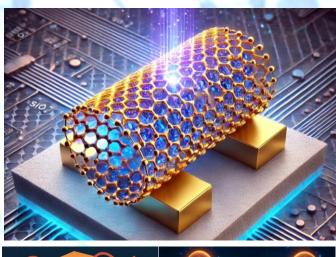
Chairperson : Dr. Awadhesh Mani, MSG, IGCAR Convener: Dr. K. Prabakar, MSG, IGCAR Secretary: Dr. Gururaj Kadiri

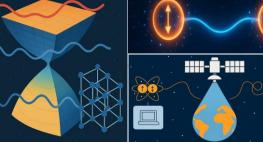
Dr. Kishore K. Madapu, MSG, IGCAR Treasurer: Dr. A. Edward Prabu, MSG, IGCAR

INVITED SPEAKERS

Prof. Chandrabhas Narayana Dr. Manoj Kumbhakar Prof. Prasanna Sahoo Prof. TR Ravindran **Dr. SN Potty Dr. Sandip Dhara** Dr. K.N. Uttam Dr. K. Prabakar **Dr. Arindam Das** Dr. Sivadasan A K Dr. Gururaj Kadiri Dr. Kishore Kumar Madapu Dr. Avinash Pashta Dr. B B Lahiri Prof. Jayasri Dr. Junaid Lashkar

Dr. R.G. Joshi Prof. Sabeena **JNCASR**, Bangalore BARC, Mumbai **IIT-KGP**, Kharagpur **IGCAR**, Kalpakkam **C-MET**, Thrissur **IGCAR**, Kalpakkam **Allahabad University IGCAR**, Kalpakkam IGCAR, Kalpakkam **C-MET**, Thrissur IGCAR, Kalpakkam IGCAR, Kalpakkam IIT-KGP, Kkaragpur IGCAR, Kalpakkam Mahindra Univ, Hyd SRM Inst. Sci. & Technol., Chennai IGCAR, Kalpakkam CUSAT





Dr. Soumee Chakraborty Dr. Deepak Kumar Gupta Dr. Vinita Daiya Dr. Menaka Dr. Siuli Maji Gayen IGCAR, Kalpakkam IGCAR, Kalpakkam IGCAR, Kalpakkam IGCAR, Kalpakkam IGCAR, Kalpakkam

All correspondence should be addressed to Dr. K Prabakar Convener, LMIN-2025, CMPD, MSG, IGCAR, Kalpakkam- 603 102, Tamil Nadu Email: <u>Imin2025.igcar@gmail.com</u> Webpage: <u>www.Imin2025.com</u> Phone: 044-27480500 extn:21395 2nd National Conference on Light Matter Interaction at Nanoscale (LMIN -2025) Sarabhai Auditorium, IGCAR, Kalpakkam

July 17-19, 2025









Indira Gandhi Centre for Atomic Research Kalpakkam-603102, Tamil Nadu

ABOUT

The National Conference on Light-Matter Interaction at the Nanoscale (LMIN-2025) is the second in its series, organized by the Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam. LMIN-2025 will highlight cutting-edge developments in nanoscale optical microscopy, leveraging advances in plasmonics and photonics for applications across materials science, as well as the physical, chemical, and life sciences. The conference will focus on Scanning Near-field Optical Microscopy (SNOM/NSOM) for highresolution nanoscale imaging, along with Surface-Enhanced Raman Spectroscopy (SERS) and Tip-Enhanced Raman Spectroscopy (TERS) for ultra-sensitive detection and molecular tagging. It will also cover recent advancements in spectroscopy-based chemical sensors. Additionally, sessions will explore the use of structured light for probing surfaces.

ABOUT IGCAR

LMIN-2025 will be held at Indira Gandhi Centre for Atomic Research (IGCAR) which is the second largest establishment of the Department of Atomic Energy next to Bhabha Atomic Research Centre. IGCAR was set up at Kalpakkam in 1971 with the main objective of conducting broad based multidisciplinary program of scientific research and advanced Engineering, directed towards the development of sodium cooled Fast Breeder Reactor (FBR) technology in India. This is a part of the second stage of the Indian atomic energy program, which is aimed at the utilization of the extensive Thorium reserves in India for the generation of electrical energy.

ABOUT KALPAKKAM

Kalpakkam is a small township 80 kms from Chennai (Madras) towards the south. The township in this erstwhile village was developed by the Department of Atomic Energy (DAE) in 1969 during the setting up of Reactor Research Center (RRC) and Madras Atomic Power Project. There is an old Dutch Fort (17th century) at Sadras outside the township. In the North of Kalpakkam, just a few kilometers away, is Mamallapuram, which was an ancient seaport built by the Pallava King Narasimhavarman I, in 7th century AD. It is known for its monolithic sculptural and architectural heritage. Fifteen Kilometers in the Northwest is Tirukalukundram. It has a Shiva temple on top of the Vedagiri hill which is 160m high.

SCOPE

The objective of the conference is to provide a dynamic forum for researchers from academia, scientific institutes, and industry to share and exchange valuable insights and experiences in the field of light-matter interaction at the nanoscale. This conference aims to foster collaboration and knowledge dissemination among researchers working with advanced techniques in plasmonics, photonics, and spectroscopy. The event will be especially beneficial for young researchers and postgraduate students involved in the study of materials at the nanoscale, offering them the opportunity to interact with leading experts in the field.

In addition to a limited number invited talks by distinguished speakers, the conference will feature oral and poster presentations of contributed papers.

CALL FOR PAPERS

Authors are requested to submit their extended abstracts (one page) before the specified deadline. The abstract should be prepared using the template provided on the conference website. For further details, please visit the conference webpage (<u>www.lmin2025.com</u>). Authors will be notified regarding the acceptance of their abstracts and the mode of presentation (oral/poster).

AREAS COVERED

Methods & Properties

- •Near-field spectroscopy (SERS & TERS)
- Near-field optics (SNOM/NSOM)
- Photonic confinement
- Single photon optics
- •Structured light (Polarization, etc.) as probe

Materials

- Plasmonic Materials
- Metamaterials
- Quantum materials

Theoretical Methods

- Finite Difference Methods (FDM)
- Lattice dynamics and DFT
 Quantum Simulation

REGISTRATION FEE

The details of registration fee (in Rupees) are as follows:

Category	Last date: 30/06/2025
Academics/R&D	5000/-
Students	3000/-
Accompanying Person	3000/-

All payments should be made via Demand Draft, online transfer, or UPI. In the case of a Demand Draft, the registration number and full name must be clearly mentioned on the reverse side. Payment details for Demand Drafts, online transfers, or UPI transactions must be submitted through the conference website before the specified deadline.

ACCOMMODATION

Accommodation will be provided to the participants on payment basis at IGCAR Guest House/Hostels. Those who prefer to stay in hotels should make their own arrangements at Mamallapuram.

AWARDS

Best oral & poster presentations will be given awards. Please visit the conference website for more information and updates.

Conference website: www.lmin2025.com

IMPORTANT DATES

Abstract Submission Opens	May 22, 2025
•Abstract Submission Closes	June 15, 2025
•Acceptance Notification	June 25, 2025
•Registration Closes	July 07, 2025