

IUAC is organizing a workshop on In Silico Quantum Modeling Studies to equip researchers, particularly in materials science, with essential computational techniques for studying quantum systems. It features lectures by eminent experts on topics including band structure, density functional theory, modelling of polymers and high pressure, low-dimensional, energy and biological materials, the interface between theory and experiment, and new computing technologies. The lectures are complemented by hands-on computing lab sessions. The software for density functional theory calculations will be SIESTA package. Familiarity with Linux Operating System is a requirement for the hands-on sessions. The participants are required to bring their own laptops with Linux installed on them.

Topics to be covered

- Magnetism in 2D materials
- 2D based materials for hydrogen storage
- Thermoelectric materials
- Molecular dynamics of biomolecules
- Machine learning in materials science
- Defects in 2D materials
- DFT level simulations for battery projects applications

REGISTRATION FEE

A registration fee of Rs. 2000 per participant, which covers the registration kit and local hospitality, is required to be deposited by the shortlisted candidates.

IMPORTANT DATES

Registration Opens
Registration Closes
Intimation of selection
Workshop

22nd December 2025 19th January 2026 23rd January 2026 23rd-27th February 2026

Tentative List of Speakers*

- Prof. Ravindra Pandey MTU, USA
- Dr. Puspamitra Panigrahi, HITS Chennai
- Dr. Ashok Kumar, Central University Punjab, Bhatinda
- Dr. Dr. Mohan Verma Shri Shankaraycharya Technical Campus, Bhilai
- Dr. Keshav Rao Shri Shankaraycharya Technical Campus, Bhilai
- Dr. B. K. Sahu, IUAC New Delhi
- Mr. Abhishek Kumar, IUAC New Delhi
- Dr. Mukesh Jakhar IUAC New Delhi (* will be updated soon)

Scan the following QR code to register:



Note: Travel support & shared accommodation will be arranged for outstation participants.



VENUE: Seminar Hall, Inter-University Accelerator Centre Aruna Asaf Ali Marg Vasant Kunj, Delhi-110067

ORGANIZING COMMITTEE

DR. SAIF A. KHAN, MR. ABHISHEK KUMAR, DR. BHUBAN K. SAHU, , MR. YATESH DABAS, MS. SHWETA AGARWAL, MR. ANAND PRAKASH, DR. MUKESH JAKHAR, DR. NISHA GUPTA