



Workshop and Hands-on Training Program on FE-SEM and AFM: Experimental Approaches to Surface Characterization

18 - 19 June 2026

Organized by

Sophisticated Instrumentation Centre,

IIT Indore

in collaboration with

ANRF-PAIR SAKSHAM

Patron

Prof. Suhas S. Joshi (Director, IIT Indore)

Chairperson

Prof. Abhirup Datta (Dean, R&D)

Prof. Suman Mukhopadhyay (Dean, ACR)

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Prof. Apurba K Das (Convener)

Prof. Krushna R. Mavani (Co-Convener)

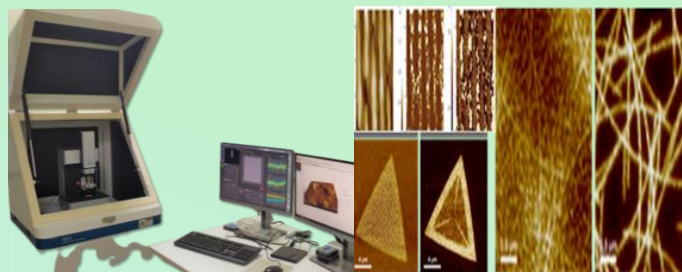
Prof. Shailesh I. Kundalwal (Co-Convener)

& Theme Leader-Advanced Materials,
ANRF-PAIR SAKSHAM Network)

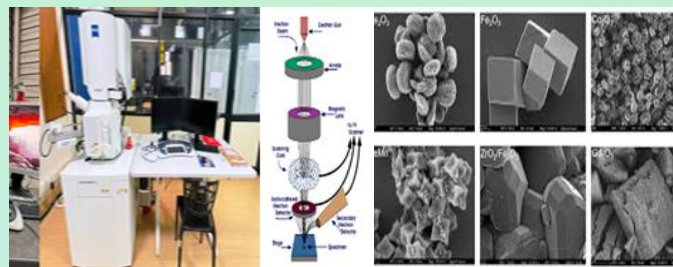
Dr. Ravinder (JTS, SIC)

SIC Team

AFM



FE-SEM



Workshop Relevance

This two-day workshop is designed to provide participants with comprehensive knowledge and practical exposure to Field Emission Scanning Electron Microscopy (FE-SEM) and Atomic Force Microscopy (AFM), two of the most advanced techniques used for surface and structural characterization of materials at micro and nano scales.

The program will cover the fundamental principles, instrumentation, sample preparation methods, imaging modes, data interpretation, and real-time applications of FE-SEM and AFM in materials science, nanotechnology, physics, chemistry, etc.

Workshop Objectives

- Understand the basic principles and applications of AFM and FE-SEM.
- Learn proper sample preparation methods for accurate analysis.
- Gain hands-on experience in instrument operation and imaging.
- Develop skills in data interpretation and result analysis.
- Understand troubleshooting and best practices for safe handling.
- Explore advanced research applications in various fields.

Technical Insight Sessions

- ❖ Prof. Shailesh I. Kundalwal
Professor, ME, IIT Indore
- ❖ Dr. Pravarthana Dhanapal
Asst. Professor, Chemistry, IIT Indore
- ❖ Dr. S. Janakiraman
Asst. Professor, ME, IIT Indore
- ❖ Dr. Abhijit Ghosh
Asst. Professor, MEMS, IIT Indore
- ❖ Dr. Murugan Sabarigresan
Application Scientist, Park SYSTEMS
- ❖ Application Representative from Zeiss

Indian Institute of Technology Indore

Indian Institute of Technology Indore (IITI) is a premier institution of national importance for higher education and research in India, established in 2009 at Indore. The institute has developed robust and state-of-the-art infrastructure to support research and development across diverse disciplines in engineering and science. IITI actively encourages interdisciplinary research in both fundamental and applied areas, fostering technology development and innovation, enabling excellence in science, engineering, as well as the humanities and social sciences. To further enhance the optimal utilization and efficient management of advanced, high-end research facilities, IIT Indore established a Sophisticated Instrumentation Centre (SIC) that is accessible to the wider research community.

Sophisticated Instrumentation Centre

Sophisticated Instrumentation Centre (SIC) is a national-level facility established to strengthen and accelerate research programs at IIT Indore. It provides advanced analytical services and technical expertise to researchers from academic institutions and industries across India, including some international research centers.

Our Mission

To advance and support the research ecosystem across all branches of science and engineering at the Indian Institute of Technology Indore (IITI) by providing: Access to state-of-the-art instrumentation and ancillary equipment, along with specialized expertise for their effective use and application. Comprehensive support under a single platform to deliver the highest quality data analysis for both research and teaching purposes. Collaboration with local industries to address critical gaps, thereby enhancing the quality and global competitiveness of Indian industrial products.

Important Dates

Registration deadline	June 13, 2026
Confirmation by mail	June 15, 2026
Commencement of Program	June 18, 2026

Target Participants

Open to students (UG,/PG/ Ph.D.), Post Doc, Technical staff, Industry Personnel and Faculty. Participants will gain hands-on experience and an in-depth understanding of the fascinating nanoscopic world of FE-SEM and AFM. **Seats are limited**, so early application is recommended to secure your spot. A certificate will be awarded upon successful completion of the workshop.

Registration details

The registration fee inclusive of GST (**non-refundable**) for participants attending the workshop is given below:

Registration type	Fee (Rs.)
Academia (Students)	1400
Staff and Post –Doc	2400
Academia (Faculty)	3000
Industry	4000

Bank Account Details:

The registration fee is to be deposited through the following link:

<https://payu.in/web/EB3AF4CBC22FB4C90B5ABC9A52E5CAC3>

Registration form:

To complete the online registration, the participants needs to fill the following google form:

<https://forms.gle/J3W89snTPMnL9UQy7>

Accommodation

Hostel accommodation will be provided to the participants attending this workshop for an additional charge of Rs 473 per person for double occupancy per night. Participants can apply for accommodation here:

<https://forms.gle/TBGrHxvtM6Hu91PL8>

Scan the below QR codes to reach IIT Indore

Indore
Airport



Railway
Station



Sarwate
Bus Stand



AICTSL
Bus Stand



Queries

For any questions or clarifications, please contact:

Dr. Ravinder (9713375057) **Facilitation**

Mr. Kinny Pandey (9713954703)
Mr. Amit Patel (9713116924) **Accommodation**

Mr. Ghanashyam Bhavsar (8085679173)
Mr. Ranjeet Raghuvanshi (9754957327)
Mr. Kunal Bhadra (8013785065) **Hospitality**

Er. Atul Singh (8889311535)
Mr. Sagar Patail (6261423810)
Mr. Gopi Kumar (8059735202) **Logistics**

Contact Details

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Venue

Sophisticated Instrumentation Centre (SIC),
IIT Indore, Simrol, Khandwa Road,
Indore – 453552, Madhya Pradesh