Workshop



ATOM PROBE TOMOGRAPHY (APT) – 2025



Advanced Centre for Materials Science (ACMS)

in conjunction with

Department of Materials Science & Engineering (MSE) Indian Institute of Technology Kanpur, India.



11th September 2025 (Thursday)

Session I	(Venue: Faculty Building, FB 421)
08:30 - 09:00	Registration
09:00 – 09:05	Welcome Address by Workshop Coordinator Dr. Niraj M. Chawake (Coordinator NFAPT-IITK Nodal Facility, ACMS)
09:05 – 09:10	Address by Prof. Anish Upadhyaya (Head, ACMS, IIT Kanpur)
09:10 – 09:15	Address by Prof. Kantesh Balani (Head, MSE Department, IIT Kanpur)
09:15 – 10:00	Talk #1: Atom probe tomography – fundamentals and applications Dr. Heena Khanchandani (MSE Department, IIT Kanpur)
10:00 – 10:45	Group Photograph and High Tea
Session II	(Venue: Faculty Building, FB 421)
10:45 – 11:30	Talk #2: 3D nanoscale characterization of engineered materials and natural materials meant for extreme environments Dr. Arun Devaraj (Pacific Northwest National Laboratory, United States)
11:30 – 12:15	Talk #3: Role of electron microscopy and atom probe tomography in design of new generation of structural alloys Dr. Surendra Makineni (Indian Institute of Science (IISC), Bengaluru)
12:15 – 01:00	ACMS Lab Visit (Coordinated by Dr. Niraj M. Chawake)









Dr. Rama Srinivas Varanasi (Tohoku University, Japan)

01:00 - 02:00

Session III

02:00 - 02:45

02:45 - 03:30

03:30 - 04:00

Session IV (Venue: Faculty Building, FB 421)

Tea Break

Lunch Break

(Venue: Faculty Building, FB 421)

Dr. Se-Ho Kim (Korea University, South Korea)

Talk #4: Role of atom probe tomography in materials design

Talk #5: Insights into defect-assisted phase transformation

mechanisms in medium Mn steels via Atom Probe Tomography

04:00 – 04:45 **Valedictory Session**

For details, please visit ACMS website (www.iitk.ac.in/acms)



Designed by: Mr. Pushpendra Kumar Mr. Ashutosh Yadav