

Indian Nanoelectronics Users' Programme - Idea to Innovation (INUP-i2i)
3rd User Awareness Workshop on Fabrication & Characterization Facility for Nanotechnology



Nanoscale Research Facility, Indian Institute of Technology Delhi

2nd – 3rd September, 2022

(Virtual Mode)

Workshop Coordinators: Prof. Bhaskar Mitra, Prof. Samaresh Das, Prof. Dhiman Mallick

DAY 1 (2nd September 2022, Friday)

10:00 – 10:45	Inauguration	
10:00 – 10:10	Prof. Neeraj Khare (Physics, IITD)	Welcome Address
10:10 – 10:25	Dr. Sunita Verma (Scientist G, Meity)	Introduction to INUP-i2i Program
10:25 – 10:45	Prof. Bhaskar Mitra (Electrical Engineering, IITD)	Introduction about the present Workshop
Clean Room and Device Fabrication		
10:45 – 11:30	Prof. Bhaskar Mitra (Electrical Engineering, IITD)	Clean Room
Thin Film Deposition		
11:30 – 12:15	Prof. Vamsi Krishna Komarala (Energy Science and Engineering, IITD)	Sputtering
12:15 – 13:00	Prof. Neeraj Khare (Physics, IITD)	E-Beam Deposition
Lunch		
Clean Room and Device Fabrication		
14:00 – 14:45	Prof. Samaresh Das (Centre for Applied Research in Electronics, IITD)	Lithography
14:45 – 15:30	Prof. Dhiman Mallick (Electrical Engineering, IITD)	Reactive Ion Etching (RIE)/Wet Etching
Materials Structure		
15:30 – 16:15	Prof. Neeraj Khare (Physics, IITD)	X-Ray Diffraction (XRD) / Scanning Electron Microscope (SEM)

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DAY 2 (3rd September 2022, Saturday)

Optical Characterization		
10:00 – 10:45	Prof. Sunil Kumar (Physics, IITD)	Photoluminescence (PL)/RAMAN Spectroscopy
10:45 – 11:30	Prof. Anuj Dhawan (Electrical Engineering, IITD)	Ellipsometry
11:30 – 12:15	Prof. Prashant Mishra (Biochemical Engineering and Biotechnology, IITD)	Fourier-Transform Infrared Spectroscopy (FTIR)
Surface Morphology		
12:15 – 13:00	Prof. Ankur Goswami (Materials Science and Engineering, IITD)	Atomic Force Microscope (AFM)
Lunch		
Electrical Characterization		
14:00 – 14:45	Prof. Rajendra Singh (Physics, IITD)	Electrical Characterization of Nanostructure Devices
INUP-i2i		
14:45 – 15:00	Prof. Prashant Mishra (Biochemical Engineering and Biotechnology, IITD)	Availing Fabrication and Characterization Facility through INUP-i2i
MCQ Based Quiz and Concluding Remark		
15:00 – 15:30	MCQ Based Quiz	
15:30 – 16:00	Concluding Remark	