



Ministry of Electronics &  
Information Technology,  
Government of India



Indian Nanoelectronics Users' Programme – Idea to Innovation  
A project of MeitY, Govt. of India



## INUP- i2i Hands-on Training Workshop on Fabrication and Characterization of Metal-Insulator-Metal (MIM) and Metal-Oxide-Semiconductor (MOS) Capacitors April 4 -13, 2022 IIT Bombay

### Programme Schedule

Monday (April 4, 2022) Venue: Conference Room, 4th Floor, VMCC		
08:30 - 09:20 AM	Registration	
09:20 - 09:30 AM	Welcome address	
09:30 - 11:00 AM	Thin Film Deposition	Prof. Anil Kottantharayil
	Tea Break	
11:30 - 01:00 PM	Fabrication and characterization of MOSCAP	Prof. Dipankar Saha
01:00 - 02:00PM	Lunch Break	
02:00 - 07:00 PM	Lab session	
Tuesday (April 5, 2022) Venue: Conference Room, 4th Floor, VMCC		
09:30 - 10:30 AM	Engineering Ge gate stacks for advanced CMOS applications	Prof. Saurabh Lodha
10:30 -11:30 AM	Overview of IITBNF infrastructure	Dr. Deepti Rukade
	Tea Break	
12 Noon - 12:30PM	RCA cleaning	Ms. Minita Surwade
12:30 -01:00 PM	Oxidation	Mr. Ambika Shukla
01:00 - 02:00 PM	Lunch Break	
02:00 - 06:00 PM	Lab session	
Wednesday (April 6, 2022) Venue: Conference Room, 4th Floor, VMCC		
09:30 - 10:30 AM	Lithography	Dr. Bhanu Upadhyay
10:30 -11:30 AM	Etching & Lift off	Mr. Nama Preamsai
	Tea Break	
12 Noon - 1:00 PM	Modelling and simulation using TCAD	Mrs. Prachi Pohekar
01:00 - 02:00 PM	Lunch Break	
02:00 - 06:00 PM	Lab session	
Thursday (April 7, 2022) Venue: Conference Room, 4th Floor, VMCC		
09:30 - 10:15 AM	Plasma assisted etching processes	Dr. Yogendra Yadav
10:15 -11:00 AM	Overview of Deep Reactive Ion Etching	Dr. Bikash Dev Choudhury

	Tea Break	
11:30 AM - 12:15 PM	Plasma Doping System - Principle and working	Mr. Rowtu Srinu
12:15 - 01:00 PM	Clewin Software Training	Ms. Akshata Bhosale
01:00 - 02:00 PM	Lunch Break	
02:00 - 06:00 PM	Lab session	
<b>Friday (April 8, 2022)</b>		
<b>Venue: Conference Room, 4th Floor, VMCC</b>		
09:30 - 10:30 AM	IITBNF lab overview & safety protocol	Ms. Satyavalli Paluri
10:30 - 11:15 AM	X-ray Photoelectron Spectroscopy Analysis	Ms. Anjum Ahmed
	Tea Break	
11:30 AM - 12:15 PM	Electrical characterization of devices	Mr. Paritosh Meihar
12:15 PM - 1:00 PM	Presentation by participants	
01:00 - 02:00 PM	Lunch Break	
02:00 - 06:00 PM	Lab session	
<b>Monday (April 11, 2022)</b>		
<b>Venue: Conference Room, 4th Floor, VMCC</b>		
09:30 - 10:30 AM	Characterization of nanomaterials and devices	Prof. Apurba Laha
10:30 - 11:30 AM	Overview of INUP-i2i	Dr. K. Nageswari
	Tea Break	
12 Noon - 1:00 PM	Presentation by participants	
01:00 - 02:00 PM	Lunch Break	
02:00 - 06:00 PM	Lab session	
<b>Tuesday (April 12, 2022)</b>		
<b>Venue: Conference Room, 4th Floor, VMCC</b>		
09:30 - 11:00 AM	Unique 2D and 3D Zeiss Microscopy Solutions for Electronics and Material Science.	Mr. Aloysius Daniel, Head Zeiss Microscopy Competence Center Zeiss Research Microscopy Solutions
	Tea Break	
11:30 AM - 01:00 PM	The future of X-Ray microscopy: high resolution meets non-destructive imaging	Dr. Yang Yanjing, X-Ray Microscopes. Specialist, APAC ZEISS Research Microscopy Solutions
01:00 - 02:00 PM	Lunch Break	
02:00 - 06:00 PM	Lab session	
<b>Wednesday (April 13, 2022)</b>		
<b>Venue: Conference Room, 4th Floor, VMCC</b>		
09:30 - 10:15 AM	MCQ Test	
10:15 - 11:15 AM	Presentation by participants	
11:15 - 12 Noon	Feedback session	
	Tea Break	
12 Noon - 12:30 PM	Certificate Distribution	

Short CV of the presenter: Yanjing joined ZEISS in September 2018 as Regional Product and Application Sales Specialist, mainly in charge of the X-Ray Microscopies, and developed the workflow for semiconductor customers. She has more than 10 years of experience in physical/surface analysis in the semiconductor industry. She worked in GlobalFoundries Singapore and Samsung Austin Semiconductor before, focusing on both die-level and package level Failure Analysis. She graduated from Electrical & Electronics Engineering and Industry System Engineering at the National University of Singapore.