

Indian Nanoelectronics Users' Programme - Idea to Innovation (INUP-i2i)
8th Hands-on Training on Thin Film based Field-Effect Transistor (FET)
Indian Institute of Technology Delhi
9th – 13th July, 2024



Workshop Coordinators

Prof. Neeraj Khare, Prof. Prashant Mishra, Prof. Samaresh Das & Prof. Bhaskar Mitra

Time (in Hours)	Session- Day 1 (9 th July 2024, Tuesday)	Venue
13:30 – 14:00	Registration	Physics Seminar Room (MS-420)
14:00 – 14:30	Welcome Address and Introduction to INUP-i2i & Hands-on Training Program Prof. Neeraj Khare, Prof. Prashant Mishra & Prof. Samaresh Das	Physics Seminar Room (MS-420)
14:30 – 15:30	Clean-Room Safety Prof. Bhaskar Mitra (Department of Electrical Engineering)	Physics Seminar Room (MS-420)
15:30 – 17:30	NRF Visit	NRF, Block – 6

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Time (in Hours)	Session- Day 2 (10 th July 2024, Wednesday)	Venue
09:30 – 10:30	Device Structure & Process Flow Prof. Samaresh Das (Centre for Applied Research in Electronics)	Physics Seminar Room (MS-420)
10:30 – 11:30	Wafer Cleaning & Oxidation Prof. Bhaskar Mitra (Department of Electrical Engineering)	Physics Seminar Room (MS-420)
11:30 – 12:15	XRD/SEM Prof. Neeraj Khare (Department of Physics)	Physics Seminar Room (MS-420)
12:15 – 13:00	FTIR Prof. Prashant Mishra (Department of Biochemical Engineering & Biotechnology)	Physics Seminar Room (MS-420)
13:00 – 14:30	Lunch Break	
14:30 – 17:00	Mask Design (L-Edit/K-Layout)	Physics Seminar Room (MS-420)

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Time (in Hours)	Session- Day 3 (11 th July 2024, Thursday)	Venue
09:00 – 10:30	Introduction to Sputtering Prof. Vamsi Krishna Komarala (Department of Energy Science and Engineering)	Physics Seminar Room (MS-420)
10:30 – 11:30	Lithography Prof. Dhiman Mallick (Department of Electrical Engineering)	Physics Seminar Room (MS-420)
11:30 – 12:30	Electrical Characterization Prof. Rajendra Singh (Department of Physics)	Physics Seminar Room (MS-420)
12:30 – 14:00	Lunch Break	
14:00 – 17:00	Wafer/Substrate Cleaning/Thermal Oxidation	NRF (Block-6)

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Time (in Hours)	Session- Day 4 (12 th July 2024, Friday)	Venue
09:30 – 11:30	Level 1 st Lithography	NRF (Block-6)
11:30 – 13:00	Semiconducting Layer Deposition (RF Sputtering)	NRF (Block-6)
13:00 – 13:30	Lift-off	NRF (Block-6)
13:30 – 14:30	Lunch Break	
14:30 – 17:00	Level 2 nd Lithography	NRF (Block-6)

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Time (in Hours)	Session- Day 5 (13 th July 2024, Saturday)		Venue
09:30 – 11:30	Metal Deposition		NRF (Block-6)
11:30 – 12:00	Lift-off		NRF (Block-6)
12:00 – 13:00	Electrical Characterization		NRF (Block-6)
13:00 – 14:00	Lunch Break		
14:00 – 15:00	Electrical Characterization		NRF (Block-6)
15:00 – 16:00	MCQ/Feedback/Concluding remarks		Physics Seminar Room (MS-420)