



Ministry of Electronics &
Information Technology,
Government of India



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



INUP-i2i FAMILIARIZATION WORKSHOP ON NANOFABRICATION TECHNOLOGIES, January 22-24, 2024, IIT Bombay Programme Schedule

| Monday (January 22, 2024) | | |
|---------------------------|--|---------------------|
| 1430 - 1440 | Welcome address by Prof. Ashwin Tulapurkar | |
| | Theme 1: HEMT Devices | |
| 1440 – 1540 | High Electron Mobility Transistors | Prof. Dipankar Saha |
| | Theme 2: 2D Materials & Devices | |
| 1540 - 1640 | β - Ga ₂ O ₃ Gate Stacks and Diodes for High Power Electronics | Prof. Saurabh Lodha |
| 1640 - 1700 | Tea Break | |
| 1700 - 1800 | An Overview of IITBNF Research Infrastructure | Dr. Deepti Rukade |
| 1800 – 1900 | Poster presentation (participants) | |

| Tuesday (January 23, 2024) | | |
|----------------------------|---|--------------------------|
| 0930 - 1030 | Transient Memory and Learning in Correlated Oxide Neuromorphic Devices | Prof. Sandip Mondal |
| 1030 - 1130 | Reactive Ion (Plasma dry) Etching–RIE for Micro and Nanoscale device processing - An overview | Dr. Bikash Dev Choudhury |
| 1130 - 1145 | Tea Break | |
| | Theme 3: Energy | |
| 1145 - 1245 | Hydrogen Fuel Cell | Prof. Richard Pinto |
| 1245 - 1400 | Lunch Break | |
| | Theme 4: Spintronics | |
| 1400 – 1500 | Spin-based Devices and Phenomena | Prof. Ashwin Tulapurkar |
| 1500 – 1600 | Spintronics-based Neuromorphic and Ising Computing for Edge AI and Optimization | Prof. Debanjan Bhowmik |
| 1600 - 1615 | Tea Break | |
| 1615 – 1830 | Poster presentation (participants) | |

| Wednesday (January 24, 2024) | | |
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| | Theme 5: Sensors | |

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| 0930 – 1030 | Quantum Tunneling Based Electronic Nose and Tongue Sensors | Prof. Swaroop Ganguly |
| | Theme 6: Compound Semiconductor Devices | |
| 1030 – 1130 | III-Nitride Nano-optoelectronics: Exploring the Unexplored Potentials of Quantum Nature of III-Nitride semiconductors | Prof. Apurba Laha |
| 1130 - 1145 | Tea Break | |
| 1145 - 1245 | Defects in Silicon | Prof. B.M. Arora |
| 1245 - 1400 | Lunch Break | |
| | Theme 7: Organic Electronics | |
| 1400 - 1500 | Organic and Perovskite Optoelectronic Device Research @ IITBNF | Prof. Dinesh Kabra |
| | Theme 8: Logic & Memory Devices | |
| 1500 – 1600 | Embedded Non-Volatile Memory Technologies | Prof. Veeresh Deshpande |
| 1600 - 1615 | Tea Break | |
| | Theme 9: Photovoltaics | |
| 1615 - 1715 | Crystalline Silicon Solar Cell Research at NCPRE | Prof. Anil Kottantharayil |
| 1715 – 1930 | Poster presentation (participants) | |

| Thursday (January 25, 2024) | | |
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| 0930 – 1030 | An Overview of INUP-i2i & How to avail IITBNF Facilities through INUP-i2i? | Dr. K. Nageswari |
| 1030 – 1130 | Photolithography | Prof. Anil Kottantharayil |
| 1130 - 1145 | Tea Break | |
| 1145 - 1245 | MCQ Test | |
| 1245 - 1330 | Poster presentation (participants) | |