

Schedule of Faculty Development Program on “VLSI Design & Nanoelectronics: Emerging Challenges & Opportunities” (September 01-08, 2022)

Date & Time	11:30 – 12:00	12:00 – 13:30	13:30 – 14:00	14:00 – 15:30	15:30 – 17:00	17:00 – 18:30
Sept. 1	Inauguration ceremony Prof. P. N. Kondekar, Director IIITDM	“Advanced Thin Film Deposition Systems”, Dr. Paolo Rava, Elletrorava, Italy	Lunch Break	“Full Custom IC Design Flow”, Mr. Shivaprasad, Entuple Technologies Bangalore	“Semiconductor Heterostructures for Optical Communication” Prof. Govind Gupta, NPL Delhi	“Functional Simulation using Spectre”, Mr. Shivaprasad, Entuple Technologies Bangalore
Sept. 2		“Photodetectors based on few-layer 2D semiconductors” Prof. Saurabh Lodha, IIT Bombay	Lunch Break	“Layout Design & Physical Verification”, Mr. Shivaprasad, Entuple Technologies Bangalore	“Post Layout Simulation”, Mr. Shivaprasad, Entuple Technologies Bangalore	“Semi-Custom IC Design Flow”, Ms. Navaneetha Krishanan, Entuple Technologies Bangalore
Sept. 3		“Metal Oxide Nanostructures for Sensing Applications”, Prof. Satyabrata Jit, IIT BHU	Lunch Break	“Role of Wearable Devices: An Aid to Healthcare Sector”, Prof. Gaurav Trivedi, IIT Guwahati	“Functional Verification & RTL Synthesis”, Ms. Navaneetha Krishanan, Entuple Technologies	“Physical Implementation & Routing”, Ms. Navaneetha Krishanan, Entuple Technologies
Sept. 4		“Essentials of Low Power”, Prof. R. K. Sharma, NIT Kurukshetra.	Lunch Break	“Analog & Mixed Signal Design Flow”, Mr. Shivaprasad, Entuple Technologies Bangalore	“FinFET Technology Design with Opensource ASAP 7nm”, Mr. Shivaprasad, Entuple Technologies	“SETFOS SOFTWARE for Solar Cells & OLED Simulation”, Mr. Anil Sharma, Impulse Technology
Sept. 5		“Recent research on Negative Capacitance Transistors”, Prof. Yogesh Chauhan, IIT Kanpur	Lunch Break	“Green Perovskite Oxide for Inclusive Energy and Environmental Industry”, Dr. Deni Shidqi, BRIN, Indonesia	“Intel SoC FPGA Design”, Padmanaban K, Intel Bangalore	“Embedded System Design using Cyclone V and ARM”, Padmanaban K, Intel Bangalore
Sept. 6		“Synthesis and advanced characterization of functional thin films”, Prof. Mukul Gupta, UGC DAE CSR Indore	Lunch Break	“Nanomaterials for Photovoltaics”, Prof. N. B. Chaurse, Pune University.	“Intel High Level Synthesis compiler”, Padmanaban K, Intel Bangalore	“Intel Quartus & System Integration”, Padmanaban K, Intel Bangalore
Sept. 7		“High Speed Nanoscale Interconnects Modelling”, Dr. Somesh Kumar, IIITM Gwalior	Lunch Break	“Functional Verification using SV”, Padmanaban K, Intel Bangalore	“Oxide HEMTs for Power Electronics”, Prof. Shaibal Mukherjee, IIT Indore	“Functional Verification using SV”, Padmanaban K, Intel Bangalore
Sept. 8		“Nanoelectronics material & device simulation using NanoDCAL”, Mr. Anil Sharma, Impulse Technology	Lunch Break	“Future Aspects of Nanoelectronics”, Dr. Pankaj Sharma, IIITDM Jabalpur	Quiz	Feedback & Valedictory