Online Faculty Development Program on

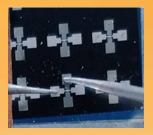
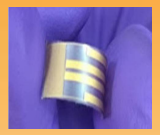
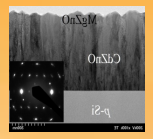
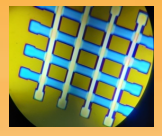
Emerging Trends in VLSI and Nanoelectronics for Building Atmanirbhar Bharat

Organized by

Centre for Advanced Electronics (CAE)

Indian Institute of Technology Indore

February 15-20, 2021

Course Overview

This faculty development program (FDP) will cover topics in VLSI and nanoelectronics devices and technologies for multidisciplinary applications including computing, communication, medical, defence, space and and energy. This FDP is designed to give an exposure to design of experiments, material growth, characterizations and device/system fabrication and system packaging and integration. The vision of the program is to expand knowledge and technology in specialized areas in advanced electronics through research, training, discussions and brainstorming sessions and to inculcate young faculty members, scientists, students and young researchers to become future leaders and innovators. This FDP is in line with various GoI initiatives such as Make in India, Aatmanirbhar Bharat, Skill India, Startup India, Digital India, AMRUT, so on and so forth.

Course Details

Module 1: Advances in VLSI and Nanoelectronics
Module 2: Modeling, material growth, characterization, Cleanroom processing and fabrication of devices, system integration
Module 3: Neuromorphic computation and Silicon brain
Module 4: Advancement in solar cell technology, biomedical applications, and biochemical sensing
Module 5: VLSI circuits and systems for AI and machine learning
Module 6: Nanoelectronics for energy storage, hybrid electric vehicles, and CMOS Photonics
Module 7: Fundamentals and advances in basics of applications in beyond 5G communications
Module 8: IoT applications of LEDs and Photodiodes
Module 9: On-chip devices for optical fibre communication and optical interconnects
Module 10: Nanofabrication of advanced semiconductor devices for Atmanirbhar Bharat

Eminent Speakers

Prof. Udayan Ganguly
IIT Bombay

Prof. Nihar R. Mohapatra
IIT Gandhinagar

Prof. Bhaswar Chakrabarti
IIT Madras

Prof. Enakshi Bhattacharya
IIT Madras

Prof. Madhusudan Singh
IIT Delhi

Prof. Shree Prakash Tiwari
IIT Jodhpur

Prof. Mahesh Kumar
IIT Jodhpur

Prof. Amlan J Pal
IACS, Kolkata

Prof. Shaibal Mukherjee
IIT Indore

Prof. Abhinoy Kumar Singh
IIT Indore

Prof. Vivek Kanhangad
IIT Indore

Prof. Mukesh Kumar
IIT Indore

Prof. Ram Bilas Pachori
IIT Indore

Prof. Vinod Kumar
IIT Indore

Prof. Vimal Bhatia
IIT Indore

Prof. Apurba K. Das
IIT Indore

Prof. Srimanta Pakhira
IIT Indore

Course Fees

No registration fee for faculty participants from AICTE approved colleges and institutes

Participants from non-AICTE institutes

- Rs. 7,000* (for industry personnel)
- Rs. 5,000* (for faculty / scientist)
- Rs. 2,000* (for student)

*inclusive of service tax

Mode of Payment

For Online Payment
http://www.iiti.ac.in/page/e-payments

Bank Transfer
Beneficiary Name: Registrar IIT Indore
Bank Name: Canara bank
Branch: IIT Indore, Khandwa Road, Simrol, Indore
Account number: 1476101027440
IFS Code: CNRB0006223
SWIFT Code/BIC: CNRBINBBISG

Course Registration

- Number of seats are limited.
- Online link will be provided for the registered participants prior to the FDP.
- Certificates will be issued for the registered participants.
- All relevant queries should be directed through e-mail to: shaibal@iiti.ac.in

Course Coordinator

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Indian Institute of Technology Indore,
Madhya Pradesh 453552, India
Website: http://people.iiti.ac.in/~shaibal/index.php
Email: shaibal@iiti.ac.in

REGISTRATION PROCESS

Click on the link below for online registration:-

https://forms.gle/PsqKoDddLzYfWd4F6

Note

- ✓ Registration in the course should be completed by **February 10, 2021**.
- ✓ Notification of acceptance of registration will be sent via email by **February 13, 2021**.