# **About PDPM IIITDM Jabalpur**

PDPM IIITDM Jabalpur was established in 2005 with a focus on education and research in ITenabled Design and Manufacturing. Since its inception, PDPM IIITDM Jabalpur has been playing a vital role in producing quality human resources for contribution in India's mission of inclusive and sustainable growth. The Institute offers undergraduate, postgraduate and PhD programmes in Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Design and PhD programmes in Mathematics, Physics and Literature. Under IIIT Act, the Institute has been declared an Institute of National Importance in January 2015.

# **About Department**

The discipline of **Electronics and Communication** Engineering (ECE) has a perfect combination of teaching and research activities in the field of Electronics and Communication. Since its inception, the main objective of the discipline has been to impart quality education, hands-on training and research in the frontier areas of Electronics and Communication Engineering with a broad focus on IT-enabled design and manufacturing. The research and teaching expertise of the faculty members of the discipline covers the broad domain of applied and fundamental aspects of Electronics and Communication Engineering. Interdisciplinary research between the research groups of the discipline and with other disciplines and institutes is also in practice. The broad areas of research and academic activities in the discipline are Microwave

and Communication Engineering, Signal and Image Processing, Micro & Nano Electronics and Power and Control. The Department has a current faculty strength of 17.

### **About the FDP**

The main objective of FDP is to plan and help impart quality technical education in the country and to support technical institutions in fostering research, innovation, and entrepreneurship through training in various emerging and science fields. The main objective of this FDP is to provide in-depth exposure to Photovoltaics and to raise awareness about the most recent developments in Semiconductor devices within the research group.

The goal is to generate resources that contribute to the advancement of solar energy applications. This helps to avoid the loss of time and energy. The FDP will help the participants identify the problems and find solutions for the fundamental photovoltaic aspects to minimize the research gap existing in this domain.

# **Program Objectives**

- to provide an in-depth understanding of advanced semiconductor materials and innovative device concepts.
- to provide tutorial in the simulation of advanced materials and devices.



# Who can participate?

The Faculty Members, Research Scholars, PG Scholars, UG Students, participants from the Government, Industry (Bureaucrats/Technicians/ Participants from Industry, etc.) / School Teachers and staff of host institutions.

## **Topics to be Covered**

- Nanoscience and Nanotechnology
- Modelling of Semiconductor devices
- Simulation and Modeling of Microelectronic **Devices**
- Quantum Dots for Optoelectronic and Biomedical applications
- FET-based Biosensors and Machine Learning
- Photonics and Nanofabrication
- New-generation Solar Cells
- Fabrication of Solar Cells
- Perovskite Quantum Dots
- Tandem Solar Cells

**Tutorial Sessions on Semiconductor Device Simulation** 

## **Guidelines**

- Eligible participants will be selected based on first come first serve basis and will be intimated by email only.
- A Digital Certificate will be issued to the registered participants.

#### **Important Dates**

Last Date for Receipt of	27.01.2024
Registration Form	
Information of selection	27.01.2024
FDP Date	29.01.2024 to 02.02.2024

# **Organizing Committee**

**Chief Patron** 

**Prof. Bhartendu Kumar Singh** Director, PDPM IIITDM Jabalpur

**Advisory Committee** 

Prof. P.N. Kondekar

Professor, Dept. of ECE & Dean P&D

**Prof. Dinesh Kumar V.** 

Professor, Dept. of ECE & Dean RSPC

**Prof. Prabin Kumar Padhy** 

Professor, Dept. of ECE

Dr. Matadeen Bansal

Assistant Prof. & HoD, Dept. of ECE

**Dr. Mukesh Kumar Roy** 

Assistant Prof., Dept. of NS & FIC Student Affairs

Coordinator

Dr. Dip Prakash Samajdar

Assistant Professor, Dept. of ECE

**Co-coordinator** 

**Dr. Koushik Dutta** 

Assistant Professor, Dept. of ECE

## **Student Coordinators**

Neelesh Jain, Sadhna Singh, Srishti, Gagan Kumar, Babban Kumar Ravidas, Rituraj Jain, Omkar Rajendra Lunge

## **Registration Details**

The registration fee (non-refundable) for various participants for attending FDP is given below:

Registration Type	Fee IEEE Member	Fee IEEE Non-Member
Students/Research Scholars	INR 400	INR 500
Faculty Members	INR 800	INR 1000
Scientis from R&D Organization/ Industry Person	INR 1200	INR 1500

## **SPEAKERS**



Dr. Basudev Pradhan Central University,



Dr. Sarang Ingole IIT Kanpur



Dr. Avirup Dasgupta



Dr. Jhuma Saha

IIT Gandhinagar

Dr. Sagar Bhattarai

IIT Guwahati

Dr. Nikhil Deep Gupta Dr. Kumar Prasannajit Dr. Aviru Kumar Basu Pradhan INST, Mohali

IIITDM Kanchipuram



IIT BHU,

Varanasi

Chitkara University, Punjab



VNIT Nagpur

Dr. Rupam Goswami Tezpur University, Assam



Dr. Deepak Jarwal



Er. Anil Kumar Sharma Er. Amit Saini Impulse Technology Cadre Design System

Registration Form

Participants are requested to register and make payment compulsorily at the following link:

https://forms.gle/uUVs2rR4iPzFf3Nk6



For Further Enquiries contact:

ieeentc@iiitdmj.ac.in

Mob.: 9424983777, 9575227201



# **FIVE DAYS FACULTY DEVELOPMENT PROGRAM** ON

**ADVANCED SEMICONDUCTOR DEVICES** 

(Virtual Mode)

29 January - 02 February 2024



Organized By

**Department of Electronics and Communication Engineering PDPM Indian Institute of Information Technology, Design and Manufacturing** Jabalpur-482005, MP, India







