

*Technical Education Quality
Improvement Programme- III*
**Malaviya National Institute of
Technology Jaipur**
&
**College of Technology &
Engineering, Udaipur**



Organizing
**Workshop on “3D Simulations
of Semiconductor Devices”**

November 15 to 16, 2018

**Venue: E & ICT Academy,
Prabha Bhawan, MNIT Jaipur**

COORDINATOR(s)

Dr. KavitaLalwani, MNIT Jaipur
Dr. Chitrakant. Sahu, MNIT Jaipur
Prof. Sunil Joshi, CTAE Udaipur

ABOUT THE WORKSHOP

This workshop is aimed to explore new device structures to select a viable process and device development pathways using TCAD (technology computer-aided design) simulations. During the workshop, special lectures and hands-on sessions on 3D simulations and data analysis of semiconductor devices will be delivered to postgraduate students (M.Tech in ECE and MSc Physics) and research scholars from both the institutes. In addition, an interaction meeting cum discussion will also be organized between the expert from CAD industry and faculty to develop the collaborative activities between the MNIT and Cadre Design System, New Delhi. Further, this workshop will provide exposure to our students to work with industry expert and learn the state of art techniques in 3D CAD simulations of semiconductor devices.

PROGRAM TOPICS

- Physics of Semiconductor Devices: Silicon Sensors, Solar Cells, CMOS devices
- Radiation Damage effects
- Non-conventional CMOS Devices such as FinFETs, Tunnel Field Effect Transistor (TFET), Thin Film Transistor (TFT) and Nanowire etc.
- Hands-on training on 3D simulations: Design optimization of sensors.

EXPERTS

Mr. Amit Saini, Cadre Design System, New Delhi
Dr. Chitrakant. Sahu, MNIT Jaipur
Dr. Kavita Lalwani, MNIT Jaipur
Prof. Sunil Joshi, CTAE Udaipur

REGISTRATION

Registration is open to faculty members, doctoral and postgraduate students of the Department of Electronics and Physics at MNIT Jaipur and CTAE Udaipur. There is no participation fee for the workshop. The seats are limited to 30.

For Registration send e-mail to chitrakant.ece@mnit.ac.in/kavita.phy@mnit.ac.in with subject line **3D Simulations of Semiconductor Devices** with following details: Student Id, Name, Category: PG Student/Research Scholar/Faculty, Department, Institute, Mobile No. and E-mail.

CONTACT(s)

In case of any query, please contact:
Dr. C.Sahu: chitrakant.ece@mnit.ac.in,
9549655371
Dr. K. Lalwani: kavita.phy@mnit.ac.in,
9549650180

Organized by

Department of Physics, Department of Electronics and Communication Engineering form MNIT Jaipur in collaboration with Department of Electronics and Communication Engineering, CTAE Udaipur.