

भारतीय सूचना प्रौद्योगिकी संस्थान भागलपुर  
Indian Institute of Information Technology  
Bhagalpur

(Institute of National Importance Under an Act of Parliament)



*Five Days Online Hands-on Workshop*  
on

**Next-Generation Nano-electronics  
Devices, Circuits and its Applications  
using EDA tools**

**24<sup>th</sup> - 28<sup>th</sup> February 2021**



**Patron**  
**Prof. Arvind Choubey**  
**Director, IIIT Bhagalpur**

**ABOUT IIIT BHAGALPUR**

Indian Institute of Information Technology Bhagalpur (IIIT Bhagalpur) is an Institute of National Importance, MoE (earlier MHRD), Govt. of India in Public-Private Partnership (PPP) mode. Bhagalpur is a city of historical importance on the southern banks of the river Ganges in the Indian state of Bihar and popularly known as Silk City. The institute is actively exploring the technical intervention required for the development of the country under the Make in India Initiative. The institute is in notable progress under the able leadership of Prof. Arvind Choubey, Hon'ble Director of the Institute.

Presently, the institute offers B.Tech in engineering in three disciplines in Computer Science and Engineering, Electronics and Communication Engineering and Mechatronics Engineering. The institute is going to start Ph.D, M.Tech and Dual Degree M.Tech & Ph.D programs from July 2021.

**THEME OF THE WORKSHOP**

It gives an opportunity for participants to get acquainted with modelling & simulation of Next-Generation Nanoscale Devices, Circuits and its applications in analog & digital. Furthermore, individual participants will be benefitted with hands-on with COGENDA Device Simulation tool and MICROWIND IC design tool.

**KEY POINTS**

- Keynote speakers from the professors of IITs/NITs and industry persons.
- Hands-on practice of EDA tools using dedicated PC through Team viewer/parallel RS for each participant.
- Exposure of recent trends in next-generation devices and their circuit application.
- In depth discussion of topics from beginning to advanced level with modeling & simulation examples of advanced CMOS devices such as FinFET, TFET, Junction-less FET etc.
- Dedicated hands-on training sessions for fabrication, design & characterization of advanced nano-scale devices by industry partners through COGENDA tool.
- Demonstration of Digital CMOS Logic Design from layout to transistor level circuit design through MICROWIND IC design tool.
- Trends in beyond CMOS technologies and Identify and understand open problems & challenges.

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organized by

**Department of Electronics and  
Communication Engineering**



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in association with  
**COGENDA & MICROWIND**



**Workshop Coordinators**

**Dr. Sanjay Kumar & Dr. Dheeraj Kr. Sinha**

Assistant Professor  
Department of Electronics and  
Communication Engineering  
IIIT, Bhagalpur

**Number of Seats (Tentative): 30** (on first come first basis)

**Important Dates:**

Early Bird Registration: **–21 February 2021**

Late Registration: **–22 February 2021**

**Registration Fee: in INR**

- Students: **500.00**
- Faculties: **700.00**
- Industry: **1000.00**

**Registration Fee includes:**

- Access of EDA tools
- Participation e-Certificate
- One-to-One doubt session (during hands-on training)

**e-Certificate:**

e-Certificate will be provided to the participants, with at least 75% attendance, upon successful completion of the program.

**Mode of Payments\***

For Internet Banking User:

**Account Name:** Indian Institute of Information Technology Society Bhagalpur

**Account Number:** 11270110047149

**Bank Name:** UCO Bank, Sabour, Bhagalpur.

**IFSC Code:** UCBA0001127

**RESOURCE PERSONS**

Internationally acclaimed faculty members from premier institutions like IIT, NIT, IIIT and abroad.

**CONTACT DETAILS**

**Dr. Sanjay Kumar**

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**REGISTRATION DETAILS**

Name (Mr/Ms/Dr).....

Designation .....

Department.....

Institute/Organization.....

Address .....

.....

Email: .....

Mobile Number .....

WhatsApp Number.....

Payment Details:

Online payment Reference number details

.....

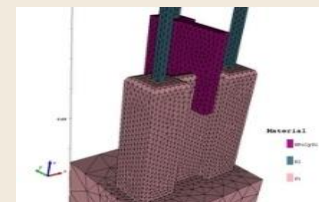
..... Date .....

Amount.....

Signature of Applicant

Click the following link for online registration:

<https://forms.gle/QUqqe7km9uLJ3xDz6>



**ABOUT COGENDA EDA TOOL**

Cogenda provides software products and technical services in semiconductor simulation and other fields of numerical simulation. Cogenda is a private-owned company with strong emphasis on research. Having been serving customers from the semiconductor and aerospace industries with challenging and sometimes unconventional engineering objectives, Cogenda has emerged as a partner of in-depth physical insights and practical engineering solutions.

**ABOUT MICROWIND EDA TOOL**

MICROWIND is truly integrated EDA software encompassing IC designs from concept to completion, enabling chip designers to design beyond their imagination. MICROWIND integrates traditionally separated front-end and back-end chip design into one flow, accelerating the design cycle and reduces design complexities.

**ORGANIZING COMMITTEE**

**Patron**

Prof. Arvind Choubey, Director, IIIT Bhagalpur

**Coordinators**

Dr. Sanjay Kumar, ECE, IIIT Bhagalpur

Dr. Dheeraj Kr. Sinha, ECE, IIIT Bhagalpur

**Convener**

Dr. Sandeep Raj, ECE, IIIT Bhagalpur

**Advisory Committee**

Dr. Prakash Ranjan, ECE, IIIT Bhagalpur

Dr. Suraj, ECE, IIIT Bhagalpur

Dr. Chandan Kr. Jha, ECE, IIIT Bhagalpur

Dr. D. Bhattacharya, ECE, IIIT Bhagalpur

Mr. Chetan Barde, ECE, IIIT Bhagalpur