## **Resource Persons:**

Dr. N.N. Murthy,

IIT, Tirupati.

Dr. Pramod Kumar Tiwari,

IIT, Patna.

Dr. Chandan Kumar Yadav,

IIT, Jammu.

Dr. S. K. Mitra,

Project Engineer, Synapse Techno Design

Innovations Private Limited.

Dr. Satish Chandra,

MNNIT, Allahabad.

Dr. Ashok Kumar,

NIT, Srinagar.

Dr. Sumit Saha,

NIT, Rourkela.

Dr. S. Sagar,

VIT, Vellore.

Dr. Pankaj Kumar

Graphic Era, Deemed to be university,

Dr. Maimur Hossain,

University of California San Diego, USA

Dr. Y. Ramesh Babu,

Project Scientist, Centre for nanotechnology,

IIT, Guwahati.

Mr. Lakku Rajiv Reddy

Technical Manager, Intel Corp.

Dr. Niranjan Raj

BITs Pilani, Hyderabad

## **Advisory Committee:**

Mr. G. Prakash Babu, Dean Training & Placements-LIET

Dr. Hari babu Thammineni, Vice-Principal-Admin

Prof. K.V. Narasimham, Vice-Principal Academic, IQAC.

## **Targeted Participants:**

Ph.D. Scholars, Researchers, and Faculties working in Devices and Circuits. Faculties who want to start their research in this field are encouraged to register.



#### **Chief Patrons:**

Sri P. Madhusudana Rao

Chairman

Sri P. Srinivasa Rao

Vice-Chairman

Sri K. Siva Rama Krishna

Secretary & Correspondent

## Patron:

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## **Organizing Committee:**

Dr. B. Sridhar, Professor

Dr. A. V. Paramkusam, Professor

Dr. S. Sridhar, Professor & COE

Dr. D. Naresh Kumar, Professor & Dean R&D

Dr. R. V. Ch. Sekhar Rao, Associate Professor

Dr. Srikant Kumar Beura, Associate Professor

Mr. B. Rama Mohan, Associate Professor

Mr. N. Rajasekar, Associate Professor

Mr. B. Hemanth Nag, Associate Professor

Mr. S. Rama Krishna, Associate Professor

Mr. D. Shankar reddy, Associate Professor

Mrs. M. Sujatha, Assistant Professor

Mrs. R. Divya Kanthi, Assistant Professor

Mr. Azeez Shaik, Assistant Professor

Mr. V. Y. S. S. Sudir Patnaikuni, Assistant Professor

Ms. J. Priyanka, Assistant Professor

Mr. S. Suresh Kumar, Assistant Professor

Mr. S. S. Kiran, Assistant Professor

Mr. P. Hareesh, Assistant Professor

Mr. D. Venkatachari, Assistant Professor

Mrs. P. Srujana, Assistant Professor

Mr. K. Gurucharan, Assistant Professor

Mrs. S. Durga Madhuri, Assistant Professor

Mr. L. Srinivasa rao, Assistant Professor

Mrs. G. L. Saranya, Assistant Professor

Mrs. P. Sravanthi, Assistant Professor

Mrs. M. Pavani, Assistant Professor

Mr. P. Anil Kumar, Assistant Professor



# One week Online FDP on Semiconductor Devices, Modeling & Circuit Technology: Recent Advancements



19<sup>th</sup> – 24<sup>th</sup> August 2024

## Organized by

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

# LENDI INSTITUTE OF ENGINEERING AND TECHNOLOGY

## **An Autonomous Institute**

Approved by A.I.C.T.E & Permanently Affiliated to JNTUGV, Vizianagarm

Accredited by NBA, NAAC with 'A' Grade,

Jonnada (Village), Denkada (Mandal),

Vizianagaram Dist – 535 005 <u>www.lendi.org</u>

#### **About the College:**

Lendi Institute of Engineering and Technology is an outstanding academic reputation, known for its commitment to cutting-edge research, innovation, and knowledge exchange. We have a diverse faculty of experienced researchers and a talented student body eager to contribute to the growth of technology and industry. Lendi Institute of Engineering and Technology was established in 2008 by a divine body of committed intelligentsia under the aegis of Sai Dhamam Educational Trust of Visakhapatnam to cater to the needs of young graduates of technology. It is on national highway near to both Visakhapatnam and Vizianagaram having a lush green campus with eco-friendly environment. Its vision is to produce globally competent and quality technocrats with human values for the holistic needs of industry and society. Ours is an Autonomous College which is spread to all directions with a strength of over 2600 students and above 200 faculty. College is accredited by NAAC with "A" Grade, NBA and permanently affiliated by JNTU Gurajada, Vizianagaram.

## **About the Department:**

Department of ECE was started with an initial intake of 60 students (in 2008) and gradually enhanced to 240 students intake at graduation level. Post-Graduation M.Tech program in Embedded Systems & VLSI Design was introduced in 2014 – 2015 with an intake of 18 seats. The department is strengthened by its eminent faculty of 10 doctorates, 11 pursuing doctorates and senior faculty. Department is equipped with state of art infrastructure comprising ICT class rooms, advanced laboratories including Industry sponsored lab, dedicated projects lab and R&D lab supported by licensed software tools like Mentor Graphics, MATLAB, XILINX, VIVADO, ANSYS-HFSS, etc.

#### **About the FDP:**

The aim of the "Semiconductor Devices, Modeling and Circuit Technology: Recent Advancement". Faculty Development Program (FDP) is to provide educators and researchers a comprehensive platform to explore emerging trends in semiconductor technology. This FDP focuses on addressing the need for continuous professional development in the rapidly evolving field of advanced materials, device modeling with machine learning and their applications in circuit technology.

The program holds immense importance as it equips participants with the knowledge and skills

necessary to harness cutting-edge materials for innovative device development. By delving into novel materials, devices and their potential applications, participants can contribute significantly to scientific advancements and technological breakthroughs. This FDP not only enhances participant's expertise but also fosters collaborations among academia and industry, facilitating the seamless transition of research into practical applications. In a world driven by technological progress, this program stands as a pivotal opportunity for educators to stay updated, fostering a skilled workforce capable of driving material-based fundamental research and innovations.

### **Objectives of the FDP:**

The faculty development program aims to

- Provide participants with in-depth knowledge of the latest developments in semiconductor devices, including emerging materials, device modeling & fabrication processes, and circuit design methodologies.
- Introduce participants to the forefront of research in semiconductor devices and circuits through expert-led session.
- Encourage participants to engage in quality research and contribute to academic publications. The program will provide guidance and resources to support faculty in conducting significant research that can lead to notable publications in high-impact journals.
- Provide industry-academia collaboration, strengthening ties with the electronics industry, leading to practical insights, industry-relevant projects, and student internships or employment prospects.

#### **Details:**

The mode of the FDP is ONLINE. Participants are requested to have laptop or desktop with broad band internet connectivity. Preference will be given to new participants. Maximum 200 participants may be allowed to attend online FDP on a first come first serve basis.

There is no registration fee for any participant.

### **Certificate:**

The certificates shall be issued to those participants who have attended the program with minimum 80% attendance, and submitted the feedback form session wise.

#### **Topics To be covered:**

- 2D and Nano Semiconductors and their applications.
- Reliability of Semiconductors devices
- Semiconductor Devices Design, Machine Learning for Device Modeling
- TFET transistors for Bio-medical sensors and applications
- GaN/AIGaN HEMT Devices for high Power high Frequency applications
- Organic and Perovskite LEDs and solar cells
- Analog VLSI Circuits: Voltage, Current and Mixed-Mode; MOS and Bipolar Analog Circuit Design
- VLSI design, Analog memory, and Mem-elements using open source EDA tool flow and Chip tape out
- Current Trend in VLSI and Semiconductor Technology.
- SRAM cells and Circuit designing using Cadence

#### **Registration link:**

Participants are requested to register the following links and join whatsapp group also.

https://forms.gle/uNaWUzmGoLC9cyW66



#### For any querries contact:

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