Scope of the FDP Programme

Current trend of research and development is the integration of different technologies. The Opto-VLSI technology offers close combination of photonic devices with VLSI microchip technology. Continuous scaling of VLSI technology leads to parasitic effects in devices. So, Integration of optical and VLSI is very much important in the case high density and low power silicon on Chip fabrication. The aim is to stream several high-performance optical inputs and output signals, with cumulative data-rates up to and even exceeding a terabit-per-second, to state-of-the-art VLSI circuits. Opto-VLSI technologies are used most effectively in systems where a high-bandwidth must be received, switched or quickly processed by the electronic circuit, and communicated out of the subsystem. Along with this, this technology is highly used in the efficient system based on solar sell and biosensors. Hence, Opto-VLSI are used in military applications, biosensors, solar cell, healthcare and optical designs.

Chief Guest

Prof. Vineet Kansal
Vice Chancellor, AKTU Lucknow
Director, IET Lucknow

Guest of Honor

Prof. M. J. Siddiqui
Professor, AMU Aligarh

Resource Persons

- Prof. Devendra Arora, Dean, MIET Business School, Meerut
- Dr. Jitendra Bahadur, Chung-Ang University, Seol, South Korea
- Dr. Vadthiya Narendar, Assistant Professor, NIT Warangal
- Dr. Jitendra Bahadur Maurya, Assistant Professor, NIT Patna
- Dr. Mandeep Singh, Assistant Professor, NIT Surathkal
- Dr. Abhinav, Assistant Professor, REC Sonbhadra
- Dr. Sajal Agarwal, Assistant Professor, RGPIT Jais, Raebareli
- Dr. Yogendra Upadhyay, Assistant Professor, GEC Raipur
- Dr. Pratosh Kumar Pal, Assistant Professor, MMMUT Gorakhpur

Eligibility

Faculty members/Engineering professionals of the AICTE approved institutions/ Universities and Industries can apply for this program. However, research scholars/ M. Tech. and B. Tech. Final Year Students with an ambition to study this exciting area are also welcome.

Registration Link

https://forms.gle/uQ2vAXA8sHZFPkuT6

- **No Registration Fee.**
- The number of participants is limited to 100 as per AICTE norms, and the selection is based on first come - first served basis.
- Online google meet/Zoom link will be provided through Whatsapp/E-mail.

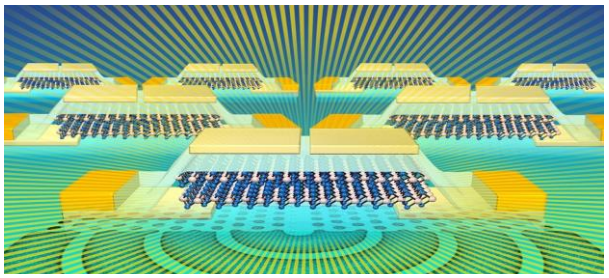
Important dates

- Last date (Online Registration): **25.08.2021**

-Selected Participants will be notified through email by **28.08.2021.**

Certification

An **E-Certificate** will be provided to every participant upon successful completion of the FDP i.e. after **at least 80% attendance** and securing **> 60% marks** in online quiz.



MIET

One Week Online Faculty Development Programme

On

Emerging Technologies of Opto-VLSI and Its Applications

(ETOVA-2021)

31st August- 4th September, 2021

(In Association with VLSI CLUB)

Co-sponsored by:

IEEE STUDENT BRANCH MIET | MEERUT

ENTUPLE TECHNOLOGIES

Organized by:

Department of Electronics and Communication Engineering,
Meerut Institute of Engineering & Technology,
N.H. 58, Delhi-Roorkee Highway,
Baghpat Road Bypass Crossing
Meerut - 250005. UP (India)
https://miet.ac.in

VLSI Club

About MIET

The flagship Institute of the group, Meerut Institute of Engineering & Technology (MIET), has officially been ranked as the 4th best Engineering College in Uttar Pradesh by AKTU. **MIET**, located in the National Capital Region, is one of the oldest self-financed Engineering Institutions in Uttar Pradesh. **MIET** is declared a **STAR PERFORMER** (an Academic Excellence Award by UPTU). It has B++ NAAC ranking and 5 departments are NBA accredited. The group employs over 1,000 staff and has more than 6000 students. The Institute offers PG and UG courses including MBA, PGDM, MCA, M.Tech., M.Pharm., B.Tech. in 8 popular branches and B.Pharm. The Institute has established Atal Community by Innovation Centre, a five-year project from NITI AYOG to foster the culture of innovation and entrepreneurship on the campus.

Department of ECE (NBA accredited)

Since its inception in the year 2001, the ECE department has taken a great leap in providing quality technical education. At present, the department is running a 4 years Bachelor of Technology (B.Tech) program in Electronics and Communication and 2 years Master of Technology (M.Tech) program in Electronics and Communication Engineering. Both the programs are approved by AICTE, New Delhi and affiliated to Dr. A.P.J Abdul Kalam Technical University, Lucknow. The present student intake in UG and PG programs are 120 and 18 respectively. The department has been accredited by 'National Board of Accreditation (NBA)' three times in the respective years 2008, 2014 and 2020.

The B.Tech and M.Tech in Electronics and Communication Engineering is a broad degree program, structured to provide students with the smallest set of constraints consistent with a rich and comprehensive view of the profession. Students are encouraged and stimulated to explore multiple areas of theory and applications like Communication, Signal Processing, Embedded Systems, Microwave Engg. and VLSI.

Vision of Department

To be an outstanding department in the country imparting need based, value based technical education, producing socially responsible, self-reliant and technically sound technocrats capable of meeting emerging challenges in ECE and allied area.

Mission of Department

- To educate young aspirants in the core and allied areas of Electronics and Communication Engineering by providing state of art resources.
- To imbibe outcome based, value-based education for holistic development of students.
- To create innovative environment leading to solutions of socio-economic and environmental problems.

About Entuple Academy

Entuple Technologies was Founded on 1st January 2010 by professionals with a combined experience of over 80 years in the Electronics Industry. Combined from the words "Enable" and "n-tuple", Entuple is suggestive of enabling multi-dimensional possibilities and growth for all our stakeholders.

Entuple Technologies is a Design Service, Product and Engineering Solution Provider for Electronic System Design, VLSI/Semiconductor, Electrical Drives & Renewable Energy Systems, RF & Antenna, Additive Manufacturing, Mechanical, Finite Element Analysis (FEA), Computational Fluid Dynamics, PCB Design & Prototyping Solutions, IoT & Data Sciences and more.

Objective: To provide precise quality solutions to our customers and win loyalty by leveraging our technical capability. Satisfaction of the customer is valued and is of paramount importance right from the beginning of the engagement with the customer.

Tentative Programme Contents

- ✓ Recent Advancement in Nanoelectronics
- ✓ Subthreshold CMOS based Circuits and Its Applications
- ✓ Charge & Spin Electronics: From Device to Integrated Circuits
- ✓ Implementation of Metamaterials for THz Range Absorber
- ✓ Fabrication of Organic/Inorganic Lead Halide based Perovskite Solar Cell under Ambient Conditions
- ✓ Advancement in Nano Photonics Devices
- ✓ Utilization of Nano Materials in Plasmonic Biosensors
- ✓ Manage Always Stress and Time (MAST)
- ✓ Hands-on Analog Design practical session on Cadence
- ✓ Hands-on Digital Design practical session on Cadence

CHIEF PATRON

Prof. Vineet Kansal, (Vice Chancellor, AKTU, Lucknow)
Er. Vishnu Saran Agarwal (Chairman, MIET)

PATRON

Mr. Puneet Agarwal (Vice Chairman, MIET)
Prof. Mayank Garg (Director, MIET)
Prof. Santosh K. Das (Dean Academic, MIET)

CONVENER

Prof. Neha Mittal (Head, ECE, MIET)
Dr. Ankur Kumar (ECE, MIET)

COORDINATOR(s)

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Dr. Tanmay Dubey (ECE, MIET)
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