About VNIT Nagpur

Visvesvaraya National Institute of Technology, Nagpur is one of the thirty National Institutes of Technology in the country. The Central Govt. by Act of Parliament (National Institutes of Technology Act, 2007 (29 of 2007)) declared VNIT Nagpur as an Institute of National Importance along with all other NITs. Earlier, the Institute was known as Visvesvaraya Regional College of Engineering (VRCE). It was established in the year 1960 under the scheme sponsored by Govt. of India and Govt. of Maharashtra. The college was started in June 1960 by amalgamating the State Govt. Engineering College functioning at Nagpur since July 1956. In the meeting held in October 1962, the Governing Board of the College resolved to name it after the eminent engineer, planner, and statesman of the country Sir M. Visvesvaraya.

About the Department

The Center for VLSI and Nanotechnology started with the research facilities in the analog and digital domains and has grown steadfastly since its inception, expanding into the areas of nanoelectronics and MEMS. The center has excellent research facilities for carrying out research in different areas of Micro & Nano Electronics and VLSI. The center is actively involved in R & D as well as consultancy projects and has collaborations with several industries, academic institutes, and R&D organizations in the country.

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Workshop on

Enlightenment - Workshop on Research and Applications in Photonics

16th - 18th May, 2023





Organized by:

Centre for VLSI and Nanotechnology, Visvesvaraya National Institute of Technology, South Ambazari Road, Nagpur - 440010, Maharashtra, India,



Workshop on

Enlightenment - Workshop on Research and Applications in Photonics

(16th - 18th May, 2023)

Registration Information

Categories for registration –

- (a) Student IEEE Member Rs. 500;
- (b) Student Non IEEE Member Rs. 600
- (c) Professional/Academician IEEE Member Rs. 800
- (d) Professional/Academician Non IEEE Member Rs. 1000

Link for Payment: https://pay.vnit.ac.in/home

Flowchart for payment – Go to the above website and select Courses/Seminar/Workshop and submit. Then in the Name of event select Enlightenment - Workshop on Research and Applications in Photonics. Then carry on selecting the remaining required information.

After payment and generation of unique payment ID, kindly fill the following Google form for registration - https://forms.gle/DR3JzZM7F13biZXy5

About the Workshop

The primary objectives of the course are as follows:

- Exposing participants to the basics of Semiconductor Photonic Devices for sustainable future.
- To become familiar with the nanophotonic devices and their role in modern consumer electronics.
- Exposing participant to the physical and design aspects for advancement in photonic devices through simulation tools and their role in designing devices for various applications to attain sustainable future.
- To make the audience aware about how the nanophotonica can provide a sustainable solution for the various applications.
- Building in confidence and capability amongst the participants in the semiconductor nanophotonic devices designing tools and techniques and to discuss what should be the future research course of action.

Target Audience

Undergraduate and Post Graduate Students, PhD Scholars, Young Professional, Academicians and Scientists.

Resource Persons

Scientists, Academicians and Industry professionals from DRDO, ISRO, IITs, NITs, TIFR etc.

Topics that will be Discussed

- 1. Shining a Light on the Future;
- 2. Artificial Intelligence for Photonics
- 3. Optical Tomography;
- 4. Photonics Sensors;
- 5. Silicon Solar Cells Design criticalities;
- 6. Nanophotonics Structures for Solar Cells;
- 7. Tools for Simulation of Photonics Devices;
- 8. Design of Injection LASER Diodes
- **9.** Compound Semiconductors for Photonics and others.

Other Exciting Stuffs

The workshop is organized on the occasion of International Day of Light (16^{th} May). There are two unique events within the Workshop – 1. Quiz for the Students on 16^{th} May; and 2. Open Forum for the students to directly discuss and interact with the experts.

