Introductory Training Course in Nanofabrication Technologies

International Bilateral Cooperation Division, DST, Govt. of India

http://www.cense.iisc.ac.in/content/introductory-training-course

Sept 10-28, 2018

Enabling national level skill development in nanofabrication and nano-characterization technologies, for applications in Nanoelectronics and beyond...

CENTRE FOR NANO SCIENCE AND ENGINEERING

Indian Institute of Science (IISc), Bengaluru, INDIA

सत्यमेव जयते
Department of Science and Technology
Ministry of Science and Technology
Government of India

Overview of the Training Course:

The program is intended as a platform for sharing knowledge and expertise in Nanoscience and Nanotechnology with researchers and professionals from neighbouring countries so that they will be able to initiate R&D work in these domains in their respective institutions at home. This will be done through a series of well-designed lectures, interspersed with hands-on training in the state-of-the-art facilities at CeNSE, IISc, Bengaluru, India. The two-week program will also provide opportunity for participants to have discussions with faculty members and graduate students of CeNSE. In addition, visits to other laboratories within and outside IISc – including industry and national laboratories - will be arranged for participants. These various interactions can catalyse collaborations with Indian labs as well as among the participants.

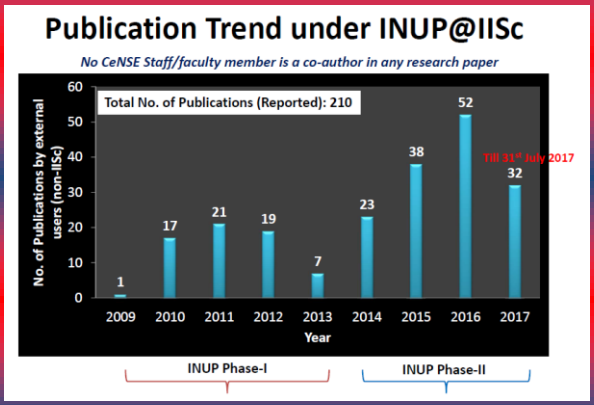
Objectives:

- To conduct workshops for dissemination of knowledge in the field of Nanoelectronics
- To impart hands-on training in Nanoelectronics to researchers from different countries.
- To assist researchers from these countries with initiation of their research projects in Nanoelectronics by enabling their execution at CeNSE
- To provide a platform for researchers in Nanoelectronics to come together and benefit from complementary expertise

About the Indian Nanoelectronics Users Program (INUP):

The National facilities at CeNSE, IISc, are committed to training scientists and engineers around the country and facilitating their research in nanoscience and engineering. INUP@CeNSE is now connected to more than 470 institutions in India. Besides training, INUP provides technical expertise to fine-tune and execute research projects. For more details: https://www.inup.cense.iisc.ac.in/

Participants attended the Hands- on Training in the National Facilities @CeNSE



National Facilities at CeNSE:

Dedicated to the nation by Hon'ble PM Shri Narendra Modi on Feb.18, 2015

National Nanofabrication Centre (NNfC)
Micro and Nano Characterisation Facility (MNCF)

Training Courses for International Participants at CeNSE

Participants from Bangladesh, Sri Lanka, Myanmar, and Maldives for the Two-week Introductory Training Course in Nanotechnologies: 18th January -03rd February 2016

Participants from Bangladesh, Kazakhstan, and Vietnam for the Two-week Introductory Training Course in Nanotechnologies: 17th August -01st September 2017

For more details: http://www.cense.iisc.ac.in/itec-workshop/

Eligibility Criteria (for selection as a participant):

1. The Applicant must be a citizen of one of the following countries: Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Myanmar, Sri Lanka, Thailand and Vietnam.
2. The Applicant must have at least a Master's degree (from a recognized University) in any branch of Science and Engineering.
3. The Applicant must be a member of faculty teaching courses, and/or involved in research in Physics, Chemistry, Materials, Electronics and Communications, Electrical Engineering, and Nanotechnology, or must be a student registered for the PhD degree in Science and Engineering in an accredited academic institution/university in one of the countries listed above.

How to apply:
Please download the application form from the web site, fill it, sign it, and have it endorsed by the Head of the Institution.
http://www.cense.iisc.ac.in/content/introductory-training-course
Please send via Email (at the earliest) the scanned copy of the signed application form, along with copies of the requisite certificates/degree (s) and the valid passport to: sanjeevs@iisc.ac.in & jain.s@nic.in

The hard copy of the signed application must reach the following address no later than **August 01, 2018.**

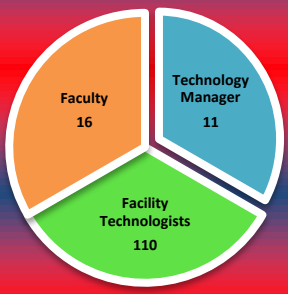
Dr. Sanjeev Kumar Shrivastava
Course Coordinator
CeNSE, IISc, Bengaluru-560012 Karnataka INDIA

Financial Support:
All costs, i.e., visa fee, return airfare, boarding and lodging, and health insurance will be borne by the DST, Govt. of India.

Note: The selected participants are requested to apply for the visa IMMEDIATELY and inform the Course coordinator upon receiving the visa. Air travel will be booked by the Coordinator's office and tickets will be sent through email. Participants are also requested to obtain health insurance for the duration of the training course and produce the receipt for the same.

Technical Manpower and Expertise at CeNSE:

Fully appreciating that Nanoscience and Nanotechnology are highly interdisciplinary, CeNSE has assembled a faculty and technical staff that includes electrical engineers, mechanical engineers, physicists, and materials scientists, with biologists as associate faculty members, all with training from highly reputed institutions in India and abroad.



Details of Training Course:

From Device Simulation to Packaging: The duration of the Training Course will be Sept 10-28, 2018, with the following broad modules:

1. Lectures on various aspects of nanoscience and technology, followed by a poster session on one of the first two days in which participants present their work/project ideas

2. Practical training:
   i. Photolithography and pattern transfer
   ii. Device Simulation and Fabrication
   iii. Measurement techniques
   iv. Packaging techniques

Who we are?

CeNSE was the direct outgrowth of the initiative of the Dept. of Electronics and Information Technology (DeitY) and the Principal Scientific Adviser (PSA) to the GoI, through which the Centre of Excellence in Nanoelectronics (CEN) came into being at IISc in 2005. The intent was to establish state-of-the-art facilities for research and development in the emerging fields of nanoscience and technology.

Therefore, state-of-the-art laboratories, equipped to fabricate nanostructured devices and materials, as well as to characterise and measure them precisely and comprehensively, were established at CeNSE (more than 100 pieces of equipment for fabricating, processing, and measuring nanomaterials and structures). The cleanroom at CeNSE is among the largest and most capable anywhere in an academic setting; the characterization laboratory is the only one of its kind in the academic world.

Contact Us

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