

SELF-SPONSORED SHORT-TERM TRAINING PROGRAM (STTP) ON 'Nanoscience and Nanotechnology-2022'

04 – 8th July 2022

Department of Chemical Engineering, Visvesvaraya National Institute of Technology, Nagpur

ABOUT DEPARTMENT

The Chemical Engineering Department is one of the premier engineering and the youngest department of VNIT Nagpur started in 2006. It offers B.Tech., M.Tech., & Ph.D. programs in Chemical Engineering. At present, the department is going with a full pace towards a bright future with the strength of 17 full-time faculty, 380 undergraduate students, 15 postgraduate students, and more than 25 Ph.D. research scholars. It has a dynamic and goal-oriented group consisting of highly qualified, young, and experienced faculties working in emerging research areas such as nanotechnology, biotechnology, energy and environment, modeling and simulation, separation processes, green chemistry, catalysis, polymers, biomass gasification, etc. The department consists of eight undergraduate and five research laboratories equipped with modern instruments like HPLC, GC, GCMS, BET surface area analyzer, UV-Vis, FT-IR, high-pressure reactors, particle size analyzer, TGA/DTA, etc., and softwares such as MATLAB, COMSOL, Aspen Plus, etc. The Department has been consistently receiving R&D project funds from private industries and various government organizations in India like DST, DBT, CSIR, BARC, DRDO, etc, and abroad.

SCOPE AND OBJECTIVE OF WORKSHOP

The workshop will provide a unique platform to bring together the eminent academicians/researchers, leading scientists, engineers, technology developers, and industry persons working in the field of nanoscience and nanotechnology to exchange information on their recent research progress and innovation. Students will be benefited by learning the fundamentals of recent developments in nanotechnology, and nanomaterial characterization techniques, and will have the chance to meet and discuss their interests with lead researchers. The program will cover frontier topics including fundamentals, modeling, simulation, and application of nanotechnology in energy, environmental, materials development, and health care/biomedical fields. The lectures will be delivered by experts from AIIMS Nagpur, NEERI Nagpur, and VNIT Nagpur (Chemical/Mechanical/Metallurgical and Materials/VLSI& Nanotechnology/Chemistry and Physics departments), private academic institutes, and other government agencies nearby. The theme has been selected to accommodate a wide range of interests to facilitate interaction among chemical engineers and interdisciplinary persons working in various academic institutes, research organizations, government, and private sectors.

The STTP on 'Nanoscience and Nanotechnology' topics include:

Fundamentals of Nanoscience and Nanotechnology	Nanobiotechnology
Nanomaterial formation- Modeling and Simulation	Nanotechnology for Energy and Environment
Nanomaterials for bioavailability enhancement of drugs	Nanocomposites
Characterization and Simulation of Nano Devices	Nanotechnology in Life science and Medicine
Nanoscale Electronics	Nano-Structured Materials

LAB/INDUSTRIAL VISITS

Two to three-day lab visits to the Chemical, Mechanical, Metallurgy, VLSI-Nanotechnology, Physics, and Chemistry Departments of VNIT Nagpur will be arranged (in the afternoon) to provide hands-on/demonstration of advanced instrumentation techniques.

FOR PARTICIPANTS:

A maximum of 30 participants (Faculty members/Scientists/Industrial persons/PG students/Ph.D. Scholars) will be selected on a first come first serve basis. **There is no registration fee for this program.** The participants will have to bear the travel, boarding, and lodging expenses. The institute can provide limited accommodation in the hostels (Rs. 250/per day)/guest house (Rs. 1250/- per day per twin room) if requested in advance.

Contact

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Last Date of Registration: June 28, 2022

Inauguration at 9.00 am on 4th July 2022

REGISTRATION FORM (Confirm your participation by Email and attach the below-filled information)

Name: _____ Designation: AP / ASSO.P / P / RS / PG Other _____

Affiliation: _____

Address: _____

Mobile No. _____ WhatsApp No. _____ E-mail ID: _____

Date: _____ Signature of Applicant

Signature of HoD/ Supervisor/Principal/Director