

**Online Short Term Course (e-STC)
On**

**“Advances in Nanomaterials for Energy and
Environment Applications
(ANEEA-2025)”
3rd - 7th March, 2025**

An Initiative of
National Institute of Technology Hamirpur
Hamirpur, Himachal Pradesh, India



Organized by
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About the Institute

National Institute of Technology Hamirpur, (HP) is one of the thirty one NITs of the country, established in 1986 as Regional Engineering College, as a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. The goals of the institute as embodied in the logo are truly remarkable in their scope of vision. The college provides Undergraduate, Postgraduate and Doctorate Education in Engineering, Sciences & Humanities; fostering the spirit of national integration among the students, a close interaction with industry and a strong emphasis on research, both basic and applied.

About Department

The Department of Chemical Engineering was established in the year 2013, with a mission to impart high quality engineering education and to mould the students to meet the ever growing demand of technical manpower in the area of Chemical Engineering. The department offers four years B. Tech program in Chemical Engineering, M.Tech. Program in Chemical Engineering (started from July, 2020), and Ph.D. program. The department has a strong core curriculum complemented by electives in the important emerging areas of Chemical Engineering. The department comprises of eleven different laboratories for the undergraduates catering to the needs of the curriculum. In addition, analytical instruments, computer facilities and research laboratories for the postgraduates and doctoral resources are already in place. All the faculties are highly qualified and well dedicated to teaching and research in various fields of chemical engineering as well as in different interdisciplinary areas of engineering.

Objectives and Scope

The e-STC will be an opportunity to explore the recent developments of nanomaterials for energy and environmental applications. The main objective of this STC is to educate the young researchers/students about the synthesis, engineering/modifications of nanomaterials through various physical and chemical techniques, their characterizations along with potential and interdisciplinary applications in various fields including energy, environment and biomedical. This will also be one of the aims of this e-STC to bring together the scientists from various fields to a single platform to explore the interdisciplinary research. It will assist the participants to achieve the information related to experimental and theoretical along with technological advancement in the field of development of novel nanomaterials for various interdisciplinary applications. The engineering and modification of the materials at nanoscale and also in various dimensions bring improvement in physical, chemical or biological properties of the materials different from the ones originally found in the materials. The development of novel modification methods, tools and instruments for modifying materials properties, and characterizing/manipulating functional nanomaterials respectively, is one of the greatest challenges in materials research and development of technology specifically at nanoscale. Hence, this e-STC will be very beneficial to all the participants including students and researchers from both the science and engineering streams because the functional nanomaterials are being used in all disciplines of science and engineering.

The e-STC will also cover the basics and advanced research aspects of the emerging areas.

- Nanoscience and Nanotechnology of Nanomaterials
- Synthesis and Characterization of Nanomaterials
- Energy & Environmental Engineering/applications
- Multifunctional nanomaterials
- Nanomaterial for Electronic / Magnetic / Optic Applications
- Nano-electronics: Nanodevices and Applications
- Nanomaterials in Wastewater Treatment
- Nanomaterials in Biomedical applications
- Nanomaterials for novel applications in the field of Chemical Engineering
- Other Emerging Relevant Areas in the field of energy, environment, and smart materials.

Targeted Participants

Faculty from science/engineering institutes, universities, research scholars, UG/PG students, and other educational institutes and employees of the industries.

Number of Participants

Number of participants is limited for this webinar. Application will be accepted on *first- cum-first serve basis*.

Certificate

e-Certificate will be issued to the participants having attendance $\geq 75\%$ and after submitting the feedback form on successful completion of this online short-term course (e-STC).

Registration Fee (Non-Refundable) Details

Participants	Amount (in Rs.)
Participants from Academia/R&D Labs	500
Students (UG/PG/PhD)	200
Participants from Industries	1000

Registration is compulsory for all the delegates. Participants should have 75% attendance.

How to apply

The interested candidates must deposit the registration fee through SBI collect with the following procedure;

- ✓ Go to SBI collect and choose Himachal Pradesh as state of Institution and type of institution as educational institute
- ✓ Choose NIT Hamirpur from the Name of the institutions and Select payment category as **“WORKSHOP FDP STC CONFERENCE”**
- ✓ Generate the payment slip and attached it with the registration form available at the following link;

RegistrationLink:

<https://forms.gle/wZ4HEdSBzzEFgigL6>

Application in the prescribed format, must reach to the coordinators on or before **28th February, 2025**.