NIT Hamirpur

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, which came into existence on 7th August 1986 as Regional Engineering College, a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. On 26th June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology. NIT Hamirpur is an institute of National importance set up by an act of Parliament namely the National Institute of Technology Act 2007 which received the accent of the President of India on 5th June, 2007.

Chemical Engineering Department

The Department of Chemical Engineering was established in the year 2013, with a mission to impart high quality education and to mold the students to meet the ever-growing demand of technical manpower in the field of Chemical Engineering. The department offers B. Tech, M.Tech and Ph.D programs. The department comprises of several laboratories for the undergraduates catering to the needs of the curriculum.

In addition, computational/ experimental 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.

PATRON

Prof. Lalit Kumar Awasthi
Director, NIT Hamirpur

CHAIRMAN

Dr. Tapas Palai
Head, Department of Chemical Engineering
NIT Hamirpur

COORDINATORS

Dr. Pooja Thakur
Dr. Rahul Saha
Department of Chemical Engineering
NIT Hamirpur

CONTACT PERSON

Dr. Rahul Saha
Assistant Professor
Department of Chemical Engineering
NIT Hamirpur- 177005 (H.P.) India
Email: rsaha@nith.ac.in
Phone: +91-7005645345

Important Dates

Last date of online registration: 3th September 2021
Intimation of participants: 4th September 2021
Event dates: 6th to 10th September 2021

Registration

Only online registration of participants to be done though a single webpage

https://www.aicte-india.org/atal

No registration fee will be charged from the participants.

AICTE Training and Learning (ATAL) Academy

Online Faculty Development Program (FDP) On

Computational Methods in Chemical Engineering: (CMCE- 2021)

6th – 10th September 2021

ORGANIZED BY

Department of Chemical Engineering
National Institute of Technology
Hamirpur – 177005
Himachal Pradesh-India

AICTE Training and Learning (ATAL) Academy

The ATAL academy was established on 24th September 2018 with the objective to plan and help in imparting quality technical education in the country, and to assist technical institutions in advancing research, innovation, and entrepreneurship through training. The Academy stresses upon empowering technical teachers and technicians using Information and Communication Technology. It also aims at utilizing the SWAYAM platform and other resources for the delivery of the training. The academy provides a variety of opportunities for training and exchange of experiences, such as workshops, orientation, learning communities, peer monitoring, and other FDPs.

Topics to be covered

The area to be covered for the FDP are as follows:

- Density Functional Theory (DFT)
- Molecular Dynamics Simulations
- Monte Carlo Simulations
- Dissipative Particle Dynamics Simulations
- Brownian Dynamics Simulations
- Granular Flow
- Computational Fluid Dynamics
- Process Control Simulations

Objective and scope

Over the past few decades, owing to a phenomenal rise in processing power, a plethora of new simulation methods have emerged to investigate various aspects of science and engineering in a variety of interdisciplinary areas like biotechnology, nanotechnology, energy and environment. Hence, in modern-day chemical engineering, the complete understanding of a given problem needs a thorough analysis at various length and associated time scales. The workshop is designed to provide a comprehensive exposure to the computational techniques, covering all ranges of length and time scales, employed in various fields of research within chemical and allied engineering branches. These will include atomistic length scales (Density functional theory/Monte Carlo/Molecular dynamics), mesoscale (Dissipative particle dynamics/Brownian dynamics), continuum (computational fluid dynamics) and an industrial plant (process modelling and dynamics). The workshop will be designed to expose the participants to the fundamentals as well as the relevant software packages. These tools will include state-of-the-art packages like LAMMPS, GAUSSIAN, COMSOL and ASPEN. Thus, it will consist of lectures as well as interactive hands-on sessions to provide the participants with maximum training to handle any simulations-related challenge. The workshop will be open to undergraduate and graduate students and enhance their skills and fundamental knowledge to be successful in industry or academics.

Resource Persons/Speakers

Faculties/Experts from IITs, NITs, IIITs and other premier Institutions/Organizations will deliver the lectures.

Who Can Apply

Faculty members of AICTE approved institutions, research scholars, UG students, PG scholars, and participants from Government and Industry (Bureaucrats/Technicians), and staff of NIT Hamirpur.

Number of Participants

Maximum 200 participants may be allowed to attend online FDP/PDP however AICTE officials may be allowed to attend over and above 200 number.

ATAL FDPs are completely free for participants.

General Information

- An online test shall be conducted at the end of the program.
- E-certificates will be issued by ATAL Academy only to those participants who attend the program with a **minimum 80% of attendance** and score **minimum 60% marks** in the test.
- Selection of participants will be as per the rules and regulations of ATAL Academy.