



Accelerate Vigyan Sponsored High-End Workshop On



Artificial Intelligence In Drug Discovery: Quickening The Pace From Bench To Bedside

23-29 May, 2022 at Indian Institute of Technology (BHU), Varanasi, India

About the Institute

Established in 1919, the Indian Institute of Technology (Banaras Hindu University) owes its existence to the farsighted vision of its founder Bharat Ratna Mahamana Pandit Madan Mohan Malaviya. Initially, three engineering and technological institutions were established. Later, merged to form Institute of Technology (IT-BHU) in 1968. In 2012, IT-BHU was converted into IIT (BHU), Varanasi.

Apart from implementing rigorous academic programmes, the institute has been consistently promoting research on thrust areas of various engineering and science disciplines.

Advisory Board

Chief Patron: Prof. Pramod Kumar Jain, Director, IIT (BHU)

Chairman: Prof. Vikash Dubey, Dean Research & Development, IIT (BHU)

Head of The Department: Prof. (Mrs) Siva Hemalatha, Department of Pharmaceutical Engineering and Technology, IIT (BHU)

Convener (Event Organizer): Dr. Rajnish Kumar, Assistant Professor, Pharmaceutical Department, IIT (BHU)

Email: Rajnish.phe@iitbhu.ac.in

About the Department

The Department of Pharmaceutical Engineering & Technology came into existence in 1934 under the leadership of Professor Mahadev Lal Schroff, the first Head of the erstwhile Department of Pharmaceutics. Over the last eighty eight years, the department has been continuously imparting quality education to produce pharmacists befitting to the requirements of industry and society and thus contributing to the growth and expansion of pharmaceutical education and research across the country. The department has been actively engaged in the cutting edge research areas of drug discovery and development.

About the Karyshala Scheme

KARYASHALA is an effort by the Science and Engineering Research Board, Government of India via Accelerate Vigyan to improve research productivity of promising PG and Ph.D. students from universities and colleges through high-end workshops on specific themes. This program aims to provide opportunities to acquire specialized research skills and experience to students in handling/troubleshooting of high-end instruments.

About the Workshop

The aim of this workshop is to offer highly supervised and industry relevant training on the applications of Machine Learning and Artificial intelligence in early phase drug discovery. This workshop will introduce the students about basic workflow of drug discovery, hands-on supervised training of various software packages supported by theory lectures for a compendious learning.

Invited Speakers

- Prof. PV Bharatam, Department of Medicinal Chemistry, NIPER (Mohali)
- Prof. Kenji Mizuguchi, Osaka University, Japan
- Prof. Parthasarathi Ramakrishnan, IITR, Lucknow
- Prof. Vikash Dubey, IIT (BHU), Varanasi
- Prof. Sanjay Singh, IIT (BHU), Varanasi
- Prof. S. K. Srivastava, IIT (BHU), Varanasi
- Prof. Sairam Krishnamurthy, IIT (BHU), Varanasi
- Dr. Senthil Raja A, IIT (BHU), Varanasi
- Dr. Tarak Karmakar, IIT (Delhi), Delhi
- Dr. Shovan Lal Gayen, Jadavpur University (Kolkata)
- Dr. Vinod Tiwari, IIT (BHU), Varanasi

Key Objectives

- To give an in-depth knowledge of the drug discovery paradigm and artificial intelligence.
- To provide hands-on training on QSAR, hit identification using deep learning, pharmacokinetic property prediction including toxicity, de novo ligand design using deep learning, and biomolecular simulations.
- To brief the participants on the use of high performance computers/super-computers (Param-Shivay) to ramp up the speed of computational modeling for drug discovery.
- To provide a networking opportunity to the participants to enhance broaden their research network.

Register online before 04/05/2022

Link to registration:

shorturl.at/msMV2

(Only 20 Participants will be selected)

Workshop cost: Nil

Mode of workshop: Offline

Duration: One Week

Participants: Eligibility Criteria

1. Only PG level students (i.e., the students pursuing their Masters or Ph.D. degree from a recognized university/institution) working in the relevant area of specializations are eligible to apply.
2. The relevant areas of specializations include Pharmacy, Biotechnology, Medicine etc.
3. The applicants must produce a letter of authentication from their Supervisor/Head of the Department/Head of the Institute indicating their association with the institute and “No Objection Certificate (NOC)” for allowing their student to undergo training in the workshop, if selected.

Registration Information

- Fill the application form available at shorturl.at/msMV2 along with the requested details, scanned copies of certificates, resume and other supporting documents including the letter of authentication latest by Wednesday, 04 May 2022.
- As the number of participants in the workshop is limited to twenty (20), applicants will be selected on the basis of their area of research, motivation to attend the workshop and possible use and dissipation of knowledge gained from the workshop.
- Only selected candidates will be informed by an email after a week of application deadline. Therefore, the candidates must provide a valid E-mail ID while applying for the workshop.
- Shared accommodation in the hostel, food and travel allowance as per GOI rules will be provided to the selected candidates.
- Certificate will be provided after successful completion of the workshop to the participants.
- Visit the website of Accelerate Vigyan (<https://acceleratevigyan.gov.in>) for more details.



Indian Institute of Technology (BHU), Varanasi, India
Department of Pharmaceutical Engineering & Technology
Website: <https://iitbhu.ac.in/dept/phe>

