

ONE WEEK FACULTY DEVELOPMENT PROGRAM on

Theme: “AI and ML in Pharmaceutical
Chemistry: Drug design to development”

Organised by
School of Pharmacy
Vishwakarma University, Pune, Maharashtra.

03th to 08th November, 2025

SCHOOL OF PHARMACY
VISHWAKARMA UNIVERSITY
PUNE- 411048, MAHARASHTRA, INDIA



ABOUT THE VISHWAKARMA UNIVERSITY (VU), PUNE



Vishwakarma University (VU), Pune, established in 2017 under the Maharashtra Government Act, is a State Private University recognized by the UGC. It carries forward the 35+ years of rich educational legacy of the Vishwakarma Group. VU is a member of the Association of Indian Universities (AIU), New Delhi, and holds national and international recognition for its academic excellence. The university has earned several prestigious accolades, including the FICCI Higher Education Excellence Award 2025 for “Excellence in Globalisation” and the ASSOCHAM Emerging University Award. VU ranked 11th globally and 1st in India in the World University Rankings for Innovation 2024 (Social Responsibility category) and is featured among the top global institutions in the Times Higher Education Impact Rankings 2025, particularly excelling in SDG 7 – Affordable and Clean Energy. The University continues to be recognized for its innovation-driven education, global collaborations, and commitment to the United Nations’ Sustainable Development Goals.

Vishwakarma Group of Institutions

Vishwakarma Institutes (VI) embody the vision of the Vishwakarma Group to create social wealth through the creation of quality human capital and a sharp focus on value creation for all its stakeholders through its academic endeavours. The Vishwakarma Institutes caters to diverse economic strata and the diversity continues in the programmes being offered. The mission of influencing practice and promoting value-based growth is derived by imparting high-quality services at the educational institutions. The University focuses on academic excellence, positively impacting the student community and the society at large.

VISION

Emerge as a Premier University Recognized Internationally for Excellence in Education, Research and Innovation.

MISSION

To impart contemporary transformative education through research and innovation
To develop competent leaders-professionals for life and livelihood
To co-create human and socio-economic capital par excellence
To inculcate life skills and holistic culture appreciating morals and ethics

ABOUT THE SCHOOL OF PHARMACY, VU



Pharmaceutical Industries have become Hi-Tech and are performing an important role in global healthcare today. It is paramount that students are prepared to meet all the new challenges. The School of Pharmacy, Vishwakarma University was established in 2019 with the intention of maximizing human potential in the pharmacy field and as per the requirement of the Pharmacy Council of India (PCI).

Building technical and managerial capabilities amongst students to meet the needs of society and industry is an integral part of the school pedagogy. The school of pharmacy offers D. Pharmacy, B. Pharmacy, M. Pharmacy Courses & PhD course

VISION

Evolve as a leading centre of quality in pharmacy domain through continual education of pharmaceutical sciences, research and community practice.

MISSION

- To Achieve Excellence in Pharmacy Education.
- To Foster Collaborative and Innovative Research in Healthcare Management.
- To Learn and Meet the Challenges in Healthcare through Industry Connect.
- To Inculcate Ethics and Morals for the Management of Health.



The Faculty Development Programme (FDP) on “AI and ML in Pharmaceutical Chemistry: Drug Design to Development” aims to equip faculty and researchers with knowledge and practical skills in applying Artificial Intelligence (AI) and Machine Learning (ML) to modern drug discovery and development. The programme covers key applications such as lead identification, QSAR modeling, predictive ADMET analysis, and toxicological profiling, emphasizing the integration of computational tools with laboratory research. Through conceptual sessions, hands-on demonstrations, and case studies, participants will gain insights into AI-driven approaches that enhance research efficiency and teaching innovation. The FDP also promotes interdisciplinary collaboration across chemistry, pharmacology, and data science, enabling participants to adopt AI-enabled methodologies even in resource-limited academic environments.

Highlights of the Programme

- 1 Conceptual grounding in AI and ML fundamentals relevant to pharmaceutical sciences.
- 2 Live demonstrations of computational tools used in drug design and development.
- 3 Case studies on AI-assisted discovery of novel drug candidates.
- 4 Integration of AI/ML into academic curricula and student projects.
- 5 Expert sessions from academia and industry professionals in cheminformatics, bioinformatics, and data science.
- 6 Opportunities for collaborative research discussions and proposal ideation.

Aim and Objectives of the Proposed Workshop

Aim: Equip educators, researchers, and professionals in pharmaceutical sciences with the conceptual understanding and practical competence to apply Artificial Intelligence (AI) and Machine Learning (ML) in drug design and development.

Objectives:

- 1 To provide faculty with an understanding of core concepts of Artificial Intelligence, Machine Learning (ML), and Deep Learning relevant to pharmaceutical sciences.
- 2 To explore AI applications in predicting pharmacokinetics (ADME), toxicology, and clinical trial simulations, computer-aided drug design (CADD), molecular docking, QSAR modeling, and lead optimization
- 3 To equip participants with exposure to AI-driven software, databases, and online platforms used in pharmaceutical research.
- 4 To sensitize faculty about current trends and challenges in AI-driven pharmaceutical R&D and align teaching/research with industry requirements.
- 5 To highlight ethical, legal, and regulatory aspects of AI adoption in drug development.
- 6 To strengthen faculty skills for curriculum enrichment, interdisciplinary teaching, and guiding students in AI applications within pharmaceutical chemistry.

Target Audience:

This FDP invites the following categories of individuals to participate:

- 1 Faculty Members and Researchers from Pharmaceutical, Chemical, and Life Sciences Disciplines
- 2 Ph.D. Scholars and Postgraduate Students interested in Computational Drug Discovery
- 3 Industry Professionals exploring AI applications in R&D

Participant Criteria:

This FDP welcomes Academicians, Scientists, Industry & healthcare professionals and research scholars.

Technical Requirements:

To attend the program in the online mode, participants are responsible for ensuring the availability of the following equipment and facilities:

- Reliable internet connectivity on devices such as mobile phones, laptops, and tablets.
- Access to an internet platform.

The organizers will not be liable for any issues arising from poor internet connectivity on the participants' end.

Contact Information:

All participants are required to furnish their WhatsApp number and email ID for communication purposes.

Certification:

Participants who actively engage with the program by attending all sessions and successfully completing assignments and evaluations will receive digitally signed e-certificates.

Online Etiquette:

Participants are encouraged to keep their microphones muted unless directed otherwise by Resource Persons, Coordinators, or Department staff to ensure a great learning environment.

Participant Information:

To ensure accurate e-certificates, participants must provide their full name, correct designation, and the name and address of their respective institute. This information should be accurately submitted to avoid any errors in the e-certificates.

Key Information



Venue: School of Pharmacy,

Duration: One week (3rd Nov 2025 -8th Nov,2025)

Registration fees: Rs.500/- per participant (Non-Refundable), No Fees will be charged from VU faculty.

Note: VU Participants can use their own laptop/Mobile or they can be seated in the allotted hall for live streaming.

STEPS FOR REGISTRATION

Interested candidates to fill the following Registration form:

Link: - <https://learner.vupune.ac.in/events>



SCAN TO REGISTER



**Convener**

Prof. (Dr) S. Sampathi

Co-Convener & Organising Secretary

Prof. (Dr.) Gopinath Papichettypalle

Coordinators:

Prof. Poonam Taru | Prof. Uppu Srinivas

Day and Date	Time	Name of the Speaker
Monday 03/11/25	10:30 AM - 12:30 PM	Dr. T. Tamilanban, Associate Prof., Mahsa University, Malaysia
Tuesday 04/11/25	11:00 AM - 12:30 PM	Dr. Parasuraman Pavadai, Associate Prof., M.S. Ramaiah University of Applied Sciences, Bangalore, India
Wednesday 05/11/25	11:00 AM - 12:30 PM	Dr. Afreen Khan, Assistant Prof., Shri Ville Parle Kelavani Mandal's Dr. Bhanuben Nanavati College of Pharmacy, Mumbai, India
Thursday 06/11/25	11:00 AM - 12:30 PM	Dr. Manik Ghosh, Associate Prof., Birla Institute of Technology, Mesra, Ranchi, India
Friday 07/11/25	11:00 AM - 12:30 PM	Dr. Prashant Kharkar, Professor, Institute of Chemical Technology (ICT), Mumbai, India
Saturday 08/11/25	11:00 AM - 12:30 PM	Dr. Hanumanth Srikanth Cheruvu, Clinical Pharmacologist, Parexel International, Brisbane, Australia.

For further enquiry contact:

Prof. (Dr.) Sunitha Sampathi

Mobile: 9490834268, Email: s.sunitha@vupune.ac.in

Prof. (Dr.) Gopinath Papichettypalle

Mobile: 9042570604, Email: gopinath.p@vupune.ac.in

Prof Poonam Taru

Mobile: 9960500151, Email: poonam.taru@vupune.ac.in

Department of Pharmacy
VU, Pune, Maharashtra, India
Website: www.vupune.ac.in

STEPS FOR REGISTRATION

Interested candidates to fill the following Registration form:

<https://learner.vupune.ac.in/events>



SCAN TO REGISTER

Vishwakarma University, Pune

Survey No. 2, 3, 4 Laxmi Nagar, Kondhwa (Bk.)
Pune - 411048. Maharashtra, India.

Email:

admissions@vupune.ac.in | connect@vupune.ac.in

Contact Us :

+91 90670 022 23 / 24 / 25

 www.vupune.ac.in

Follow Us:

 Vishwakarma University - VU |  @VU_Connect |  @vishwakarmauniversity