AIP e Newsletter

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AMITY UNIVERSITY NOIDA CAMPUS

AMITY INSTITUTE OF PHARMACY

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Glimpses of Current Issue















Highlights of Current Issue

- Freshers' party
- Pharmacovigilance Week
- World Pharmacists' Day
- Alumni Connect Sessions
- Faculty Development Programme

Invited Guest Editorial



Sunil Babu Gosipatala
Professor and Head, Department of Biotechnology, School of Life Sciences, Babasaheb Bhimrao Ambedkar University, Vidya Vihar, Rae Bareli Road, Lucknow, Uttar Pradesh - 226025, India

CAR T-cell therapy: The promise of living drugs

What if a cancer treatment could do more than destroy tumour cells? What if a patient's own immune cells could be engineered to recognise and eliminate them? This possibility lies at the heart of chimeric antigen receptor (CAR) T-cell therapy, one of the most significant advances in modern cancer immunotherapy. For patients with relapsed or refractory cancer, whose disease persists or returns despite conventional treatments, this approach offers renewed hope where therapeutic options may be limited.

The idea behind CAR-T cell therapy began in the late 1980s, when researchers showed that T cells could be genetically redirected to recognise specific targets. Subsequent works by researchers including Steven Rosenberg, Michel Sadelain, Carl June helped turn the concept into a clinical treatment. In 2011, June's group reported the first durable remissions in chronic lymphocytic leukaemia, and two of those patients were still in remission a decade later. Unlike chemotherapy and radiotherapy, which act through relatively non-specific mechanisms, CAR-T cell therapy involves genetically engineering a patient's T cells to recognise specific cancer-associated antigens and mount a targeted immune response.

When cancer returns, it is mostly because the tumour cells have become invisible to the immune system. The CAR-T cell therapy removes this invisibility cloak and facilitates their destruction with great precision. These CAR-T cells are not like the conventional 'off-the-shelf' drugs, they are customized 'living drugs' made from patient's own immune system. Body's natural defenders, called T cells are taken from patient's blood and are genetically modified to express a unique receptor capable of recognizing markers on cancer cells. . Its clinical success in selected haematological malignancies, including leukaemias, lymphomas, and multiple myeloma, has redefined the possibilities of cancer treatment. In different blood cancers, these targets can include proteins such as CD19 on B cells and BCMA on malignant plasma cells. These T cells are then multiplied and returned to the patient through a single infusion. These cells multiply inside the body when they encounter their target, peaks in blood days after infusion and can persist for years. Their effect differs from person to person, as it depends on the amount and type of tumour present and how well the modified cells function in the body. It provides the body with a continuous immune surveillance, though this does not guarantee complete cure.

CAR-T cell therapy emerged as a promising cancer treatment through successive clinical breakthroughs rather than a single achievement. Its initial success was demonstrated in B-cell acute lymphoblastic leukaemia (B-ALL), where engineered T cells targeting the CD19 protein on malignant B cells produced remarkable clinical responses. This progress was subsequently extended to aggressive B-cell lymphomas and, later, multiple myeloma, through the targeting of B-cell maturation antigen (BCMA), which is highly expressed on malignant plasma cells. These advances marked a significant evolution in CAR-T cell therapy, expanding its therapeutic scope beyond a single molecular target or cancer type.

CAR-T cell therapy remains one of the most expensive cancer treatments, with cost representing a major barrier to its wider adoption. In India, imported CAR-T therapies have been reported to cost approximately ₹3–4 crore per patient, whereas the indigenous therapy NexCAR19 reduced the product price to approximately ₹30–40 lakh, nearly one-tenth of the cost of imported alternatives. Recognising these challenges, India has pursued the development of indigenous CAR-T cell therapy rather than relying exclusively on imported technologies. A collaborative research initiative led by Rahul Purwar's team at IIT Bombay, in partnership with the teams of Hasmukh Jain and Gaurav Narula at Tata Memorial Centre, resulted in the development of NexCAR19, an indigenous CD19-directed CAR-T cell therapy. Commercialised by ImmunoACT, the therapy represents a significant milestone in translating home-grown scientific innovation into clinical application within a low- and middle-income country. Clinical studies reported an overall response rate of approximately 73% in patients with relapsed or refractory B-cell malignancies.

Beyond its clinical promise, NexCAR19 demonstrates the potential of domestic research, academic–clinical collaboration, and biotechnology entrepreneurship to improve access to advanced cancer treatments. ImmunoACT has reported that the therapy has reached more than 500 patients through clinical and commercial use and is available at over 80 authorised hospitals in India. The company has also introduced a bridge-financing initiative offering eligible patients loans of up to ₹10 lakh at zero interest, aimed at easing the immediate financial burden of treatment. Together, these developments illustrate how indigenous innovation, supported by appropriate financing mechanisms and healthcare infrastructure, can help narrow the gap between scientific advancement and equitable patient access.

Despite its promising clinical outcomes, CAR-T cell therapy faces several significant challenges that limit its broader clinical application. Its success has been most pronounced in haematological malignancies, whereas its effectiveness against solid tumours, which account for a substantial proportion of the global cancer burden remains limited. Unlike blood cancers, solid tumours present multiple barriers, including dense tissue architecture, an immunosuppressive tumour microenvironment,

Invited Guest Editorial

and physical obstacles that restrict the infiltration, persistence, and activity of engineered T cells. Safety and treatment-related toxicity represent equally important challenges. Cytokine release syndrome (CRS) and immune effector cell-associated neurotoxicity syndrome (ICANS) can be severe or life-threatening, necessitating specialised clinical facilities, trained personnel, and prompt intervention. These risks, together with the complexity of patient selection and post-treatment monitoring, underscore the need for robust healthcare infrastructure. Moreover, the personalised manufacturing process, which involves collecting, genetically modifying, expanding, and reinfusing a patient's T cells, can be time-consuming and expensive. For patients with rapidly progressing disease, the delay between cell collection and treatment may be clinically consequential.

Addressing these limitations requires innovations in both cellular engineering and manufacturing. Allogeneic, or 'off-the-shelf', CAR-T cell therapies, developed from healthy donor cells, offer the potential to reduce manufacturing time, improve product availability, and achieve economies of scale. However, challenges such as immune rejection and graft-versus-host disease must be addressed to ensure their safety and efficacy. Similarly, advances in gene-editing technologies, including CRISPR-Cas systems, may enable more precise and potentially cost-effective cell engineering, although their overall manufacturing and regulatory implications require further evaluation. Ultimately, overcoming these challenges will require coordinated efforts in translational research, clinical validation, manufacturing innovation, and healthcare policy to make CAR-T cell therapy safer, more effective, affordable, and accessible to a broader patient population.

Sunil Babu Gosipatala

From the Desk of Editor-in-Chief



Amity Institute of Pharmacy, Noida, Uttar Pradesh, is a prestigious institution that offers education and training in the field of Pharmaceutical Sciences. The institute was founded in 2007 with a focus on research and innovation, aligning with the mission and vision of Amity University.

At present, the institute offers a Bachelor of Pharmacy program with an intake of 100 students along with Master of Pharmacy specializations in Pharmaceutics, Pharmacology, Pharmaceutical Regulatory Affairs, Industrial Pharmacy, Pharmaceutical Chemistry, Pharmaceutical Analysis, Phytopharmacy & Phytomedicine, Pharmaceutical Quality Assurance, Pharmacy Practice, Pharmaceutical Biotechnology and Pharmaceutical Technology. The institute also offers a six year Pharm. D. (Doctor of Pharmacy) program in collaboration with Apollo Hospital and a research-oriented Ph.D. program in Pharmaceutical Sciences. The institute is known for producing globally competent pharmascists, the institute has built a strong network of more than 1600 alumni who continue to guide and support graduating students in the pharmaceutical industry. The institute secured the 18th rank in the National Institutional Ranking Framework (NIRF) 2025.

The quarterly AIP newsletter “Pharma Panorama” (ISSN 3049-0944) presents a detailed overview of academic and co-curricular activities, research outputs, faculty achievements, and student accomplishments during July-September 2026. Students and faculty members published several papers in indexed journals with notable impact factors and also submitted patents to the Indian Patent Office. Twenty two book chapters and two books were published by our faculty. Fifteen funded research projects from agencies such as Ayush and CCRUM are currently ongoing.

The Quality Council of India (QCI) acting through the National Accreditation Board for Education and Training (NABET) launched its joint Ranking and Rating exercise for Pharmacy Colleges in collaboration with the Pharmacy Council of India (PCI). The institute achieved an A Grade in the Quality Council of India (QCI) assessment, reflecting its commitment to quality, continuous improvement, and institutional excellence. The recognition serves as a motivation to further strengthen institutional practices and pursue excellence in education, research, and innovation. The ranking is valid for next five years.

Among the faculty achievements Dr. Hemlata Nimesh was granted an Indian patent on silver nanoparticles with potential applications in ovarian cancer treatment. Dr. Kalpana Nagpal delivered several expert sessions and keynote addresses on AI-powered research and pharmaceutical innovation and Dr. Rupesh Gautam served as a resource person and invited speaker at National and International conferences. Dr. Saurabh Mittal secured second prize in an oral presentation competition for his research on a nanoemulsion-based gel for vulvovaginal candidiasis, and Dr. Vikesh Kumar Shukla was nominated by the Pharmacy Council of India for an innovative leadership development programme.

AIP students actively participated in various academic, cultural, and extracurricular activities during the July–September 2026 period. The Research & Writing (R&W) Cell organized a panel discussion on genetically modified animals. The RX Club celebrated Pharmacovigilance Week (17–23 September) by conducting departmental lecture, Canvas of Care drawing competition, along with debate and discussion competition. Several industry expert sessions were also conducted, including talks on drug product development from a regulatory perspective by the R&W Cell and the role of pharmaceutical executives in driving innovation, strategy, and market execution by the I&E Cell. Other notable activities included Act it Out: Medical Edition by the RX Club and several Alumni Connect sessions. The Institute celebrated World Pharmacists Day 2026 on 25 September with lots of activities including logo-making, rangoli, and slogan-writing competitions, along with a plantation drive and an awareness rally to educate the public about “Antimicrobial Resistance” (AMR). The institute also planned and conducted the celebration of Freshers' Party, the Deeksharambh Orientation Programme, and a Pharma Quiz competition held on 28 September, reflecting the institute's continued commitment to learning, innovation, and student engagement.

The institute is the first in country to successfully organize a One-Day Faculty Development Programme (FDP) on "Effective Implementation of the Bachelor of Pharmacy (B.Pharm.) New Curriculum (2026) under NEP 2020" on 10th July 2026. Dr. Montu Kumar M. Patel, President, Pharmacy Council of India (PCI), delivered the keynote address as Chief-Guest highlighting the vision and objectives behind the revised B.Pharm. Curriculum (2026).

I am pleased to introduce the third quarterly issue of the year 2026 of 'Pharma Panorama', the official newsletter of Amity Institute of Pharmacy, Amity University Uttar Pradesh, Noida.



Dr. Havagiray R. Chitme
Head of the Institute
Amity Institute of Pharmacy

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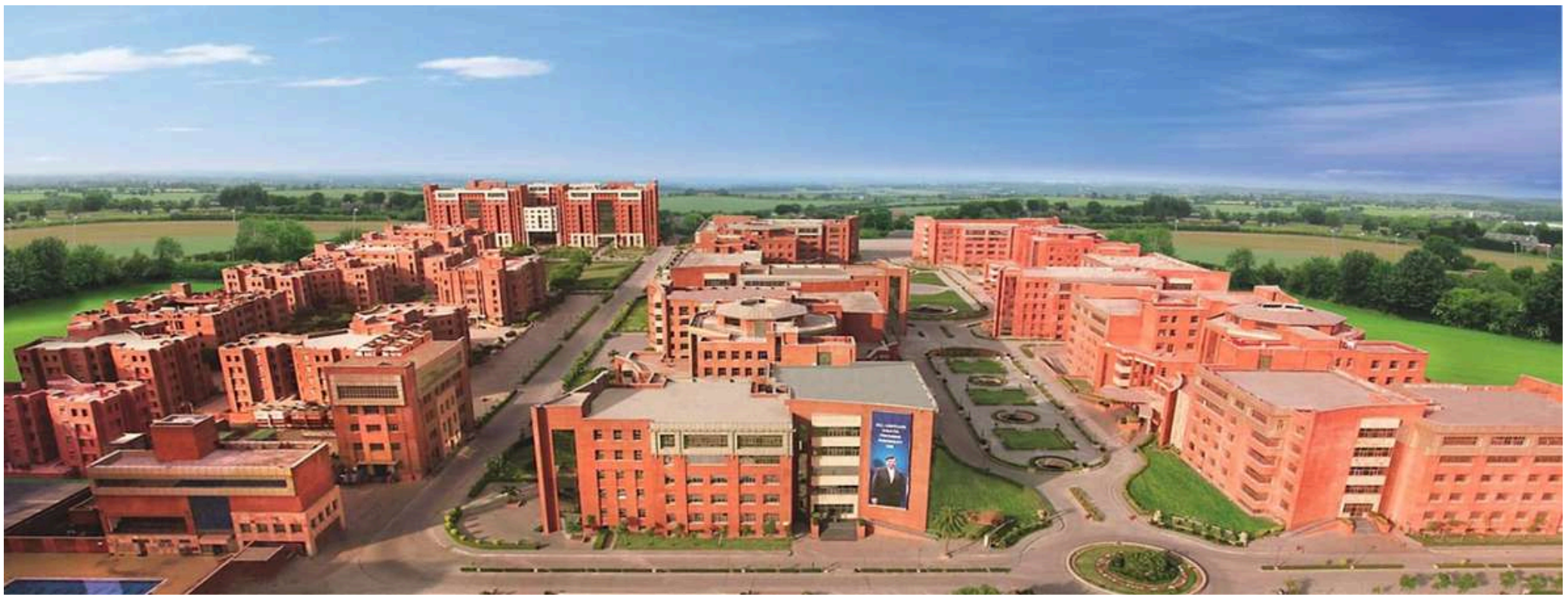

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About Us



Amity Institute of Pharmacy (AIP) is a well-established institution of Amity University, Uttar Pradesh, Noida having a high profile with interdisciplinary areas of specializations in Pharmacy offering UG, PG and PhD programs. Currently, AIP offers B.Pharm program with an intake of 100 and M.Pharm programs in Pharmaceutics, Pharmacology, Pharmaceutical Regulatory Affairs, Industrial Pharmacy, Pharmaceutical Chemistry, Pharmaceutical Analysis, Phytopharmacy & Phytomedicine, Pharmaceutical Quality Assurance, Pharmacy Practice, Pharmaceutical Biotechnology and Pharmaceutical Technology. The institute also offers a six year Pharm. D. (Doctor of Pharmacy) program in collaboration with Apollo Hospital and a research-oriented Ph.D. program in Pharmaceutical Sciences.. The Institute stands amongst top institutes with NIRF ranking and leads in the top 25 institutions since past 02 years. The Institute has received several research grants over last 05 years from funding agencies like SERB, ICMR, AAYUSH, CCRUM. AIP has more than 500 Scopus/WoS listed research publications and 25 patents to its credit in the last 05 years in diverse research areas like NDDS, Medicinal Chemistry, Neuropharmacology, Phyto-pharmaceuticals, Drug Regulatory requirements and pharmaceutical analysis etc.



The thrust areas of research include novel drug delivery systems for skin disorders and burns, drug discovery and development for cancer, diabetes, autoimmune diseases, neurodegenerative diseases like Alzheimer's, Parkinson's and Global regulatory framework for drugs, medical devices etc. The Institute is situated in a centrally air-conditioned four storey building. The Institute is having well equipped laboratories, one central instrumentation lab with HPLC, UV Spectrophotometer, ELISA Reader etc and Machine Room facilities. The faculties are well trained in diverse disciplines of Pharmacy and allied areas such as Pharmacology, Pharmaceutics, Pharmacognosy, Medicinal Chemistry, Pharm. Biotechnology etc. All the faculty members regularly attend Seminars, Conferences of National and International levels as well as Staff Development Programmes and also FDP organized by Amity University.



VISION:
"To become a leading centre of excellence of pharmaceutical science and technology education to fulfil the aspiration of students and fostering translational research through technology transfer, start-ups and entrepreneurship."

OBJECTIVES:
•To be the most valued institution of pharmacy in the country
•To offer the industry-ready curriculum-based pharmacy programs
•To produce technically competent pharmacy professionals
•To meet the growing aspiration in the field of pharmacy and healthcare professionals
•To be the innovation and research driven globally competent pharmacy institute

Details of Research Centres in AIP



Prof. H. R. Chitme
Dy. Director, AIP
(Research Areas-Molecular pharmacology,Cytogenetics, Proteomics)



Dr. Nitin Sharma
Professor & Centre Head – Pharmaceutics



Dr. Kalpana Nagpal Chaswal
Associate Professor & Centre Head-DRA



Dr. Shikha Chauhan
Associate Professor & Centre Head-Industrial Pharmacy



Prof. H. R. Chitme
Dy. Director & Centre Head - Pharmacology



Dr. Rajeev Kharb
Professor & Centre Head –Pharmaceutical Analysis



Dr. Ramanpreet Walia
Professor &CentreHead - Pharmaceutical Chemistry



Dr. Swati Madan
Professor &Centre Head - Pharmacognosy



Dr. Dheeraj Nagpal
Associate Professor



Dr. Alka Lohani
Associate Professor



Dr. Vikesh Kr.Shukla
Professor



Dr. Sangeetha Gupta
Assistant Professor-III



Dr. Neerupma Dhiman
Professor



Dr. Vinay Lather
Professor



Dr. Tanveer Naved
Professor



Dr. Neha Jain
Assistant Professor-III



Dr. Navneet Sharma
Assistant Professor-II



Prof. (Dr.) Sunil Mahor
Professor



Dr. Rupesh Gautam
Professor



Dr. Shikha Saxena
Assistant Professor-III



Dr. Hemlata Nimesh
Assistant Professor-II



Dr. Kavita Munjal
Assistant Professor-II



Dr. Indu Singh
Assistant Professor-II



Dr. Rimpy Pahwa
Assistant Professor-I



Dr. A. Porselvi
Associate Professor



Dr. Annie Gupta
Assistant Professor-III



Dr. Smriti Sharma
Assistant Professor-II



Dr. Nipun Abhinav
Assistant Professor-I



Dr. Monika Kaurav
Assistant Professor-II



Dr. Saurabh Verma
Assistant Professor-I



Dr. Priyanka Saroj
Assistant Professor-II



Dr. Puneet Gupta
Assistant Professor-III



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Assistant Professor-II



Dr. Nivedita Bhardwaj
Assistant Professor-I



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Assistant Professor-I



Dr. Prashant Chandra
Assistant Professor-II



Dr. Ravi Rawat
Assistant Professor-II



Dr. Ajita Paliwal
Assistant Professor-I



Dr. Shreya Kaul
Assistant Professor-I



Dr. Shweta Bawari
Assistant Professor-I

Dr. Mukesh Kumar
Assistant Professor-I

Dr. Priya Gupta
Assistant Professor-I

Neha Kukreti
Assistant Professor-I

Dr. Gourav Singh
Assistant Professor-I

Dr. Saurabh mittal
Assistant Professor-I

Dr. Ajay Kumar Pal
Assistant Professor-I

Dr. Manvendra Kumar
Assistant Professor-I

Faculty Achievements

Dr. Havagiray R. Chitme



- Dr. H. R. Chitme participated as an Eminent Panel Expert in the panel discussion titled “Encouraging ADR Reporting by Patients: Challenges & Strategies” at the ANRF-sponsored National Conference on “Strengthening India's Pharmacovigilance Ecosystem: Training on ADR Reporting, Signal Management & Regulatory Compliance,” organized in association with the Indian Pharmacopoeia Commission (IPC), Ghaziabad, on 14 August 2026.
- Dr. H. R. Chitme also chaired a scientific session titled “Emerging Challenges in Pharmacovigilance & Regulatory Compliance for Vaccines,” featuring a presentation by Dr. Anil Kumar Chawla, Scientist, Immunization and Vaccine Development, WHO Regional Office for South-East Asia, New Delhi. The session was held as part of the aforementioned national conference on 13–14 August 2026.



- Copper Nanoparticle-Based Composition for Purification of Water: An Indian patent granted to Shubham Pathak, Dr. Kumud Joshi, Dr. Chitme Havagiray, and Dr. Neeraj Sethiya for their innovation in water purification. Patent Application No. 202211066462, filed on 19 November 2022 and published on 25 November 2022. Granted on 9 July 2026 (Patent No. 594876).



- Diabetes Management System: An Indian patent granted to Abhijeet Prasad Sinha, Dr. Manmohan Singhal, Dr. Bhavna Kumar, Dr. Neeraj Kumar Sethiya, Dr. Mandeep Kumar Arora, Dr. Samir Bhargava, Mr. Vijay Singh Rana, and Dr. Havagiray Chitme for their work on a diabetes management system. Patent Application No. 202311002366, filed on 11 January 2023 and granted on 6 August 2026 (Patent No. 598128).



- On behalf of the Amity Institute of Pharmacy and Amity University Noida, Dr. H.R. Chitme, along with Dr. Viney Lather, Dr. Tanveer Naved, and Dr. Navneet Sharma, visited to felicitate Mr. Jashubhai Chaudhari, the Vice President of the Pharmacy Council of India (PCI). The occasion served as a gesture of respect and appreciation.





Faculty Achievements

Dr. Havagiray R. Chitme



- Dr. Havagiray R. Chitme joined an invited meeting with Dr. Martyn J. Miller, Assistant Vice President, Office of Global Engagement, Temple University, Philadelphia, and the University's President, Mr. John A. Fry. The invitation marked an important opportunity for international academic engagement and strengthened the prospects of institutional interaction and collaboration between the two universities.





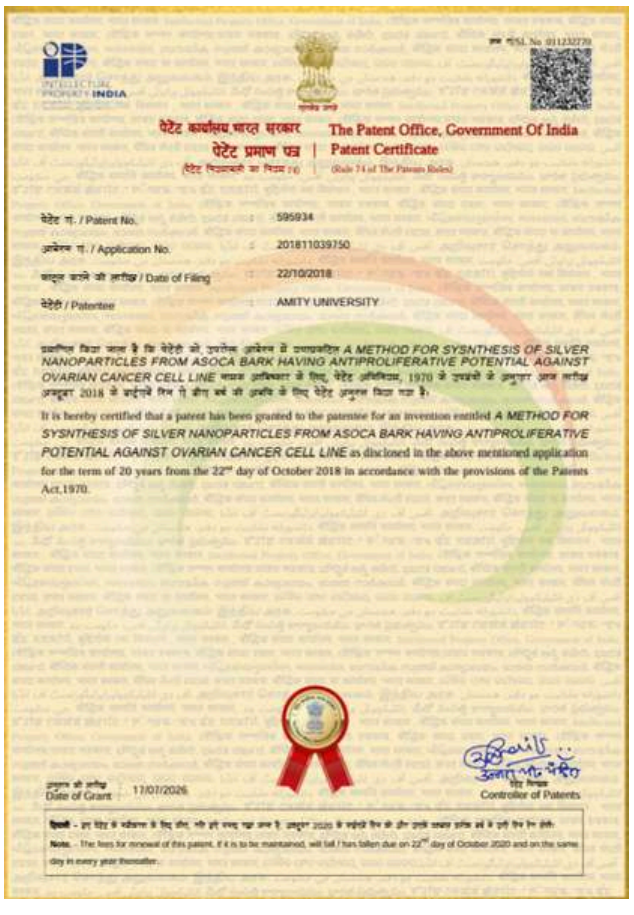


Dr. Hemlata Nimesh



- Dr. Hemlata Nimesh has been granted a patent titled "A method for synthesis of silver nanoparticles from Asoca bark having antiproliferative potential against ovarian cancer cell lines" from The Patent Office, Government of India Patent Application No. 201811039750, filed on 22 October 2018

Patent number: (595934)
Date of grant: 17/07/2026



पेटेंट कार्यालय भारत सरकार
पेटेंट प्रमाण पत्र
The Patent Office, Government Of India
Patent Certificate

पेटेंट सं. / Patent No. : 595934
आवेदन सं. / Application No. : 201811039750
फाइल करने की तारीख / Date of Filing : 22/10/2018
पेटेंटी / Patentee : AMITY UNIVERSITY

A METHOD FOR SYSNTHESIS OF SILVER NANOPARTICLES FROM ASOCA BARK HAVING ANTIPROLIFERATIVE POTENTIAL AGAINST OVARIAN CANCER CELL LINE

It is hereby certified that a patent has been granted to the patentee for an invention entitled A METHOD FOR SYSNTHESIS OF SILVER NANOPARTICLES FROM ASOCA BARK HAVING ANTIPROLIFERATIVE POTENTIAL AGAINST OVARIAN CANCER CELL LINE as disclosed in the above mentioned application for the term of 20 years from the 22nd day of October 2018 in accordance with the provisions of the Patents Act,1970.

Date of Grant : 17/07/2026
Controller of Patents

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 22nd day of October 2020 and on the same day in every year thereafter.

Faculty Achievements

Dr. Kalpana Nagpal Chaswal



- Dr. Kalpana Nagpal has delivered a session titled “AI-Powered Research Decision-Making” as a Resource Person at the Science Camp organized by Chitkara University, Punjab, on 22 August 2026.

- Delivered a keynote address titled “Utilization of AI Tools for Research Decision-Making: Predicting Non-Linear Multi-Drug Interactions” at the AICTE VAANI-funded Two-Day National Seminar on “Language-Focused Innovations in Medical Devices and Bioinformatics,” held at Galgotias University, Greater Noida, on 21 August 2026.

- Delivered a session titled “Future-Ready Pharmaceutical Research: Computational Tools for Experimental Optimization and Drug Synergy Analysis” as a Resource Person in the Two-Week Online Faculty Development Programme, “AI² Pharmacy: Artificial Intelligence × Academic Innovation,” organized by Gateway College of Pharmacy, Gateway Education, Sonipat, Haryana, on 19 August 2026.



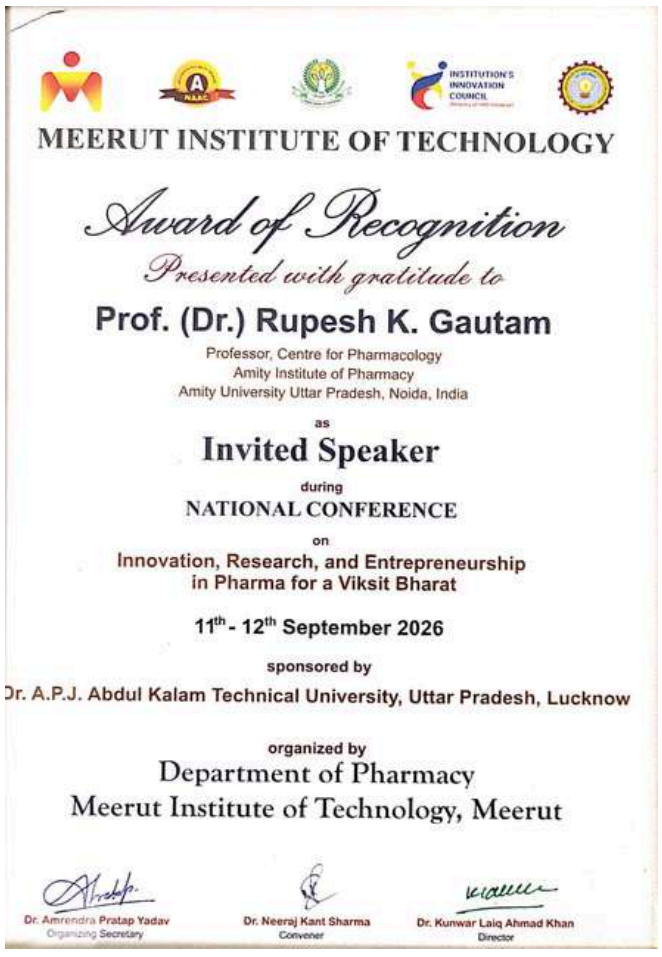


Dr. Rupesh Gautam



- Dr. Rupesh Gautam has participated as a Resource Person at the Indo-US International Conference on “Emerging Trends in Pharmaceutical Sciences, Healthcare, Biotechnology & Artificial Intelligence” (IUIC 2026), held on 24–25 August 2026 at Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India. He is also featured on ScholarGPS, a platform that ranks scholars based on their research performance. ScholarGPS Profile.

- Dr. Rupesh Gautam served as an Invited Speaker at the AKTU-sponsored National Conference on “Innovation, Research and Entrepreneurship in Pharma for a Viksit Bharat,” organized by the Department of Pharmacy at Meerut Institute of Technology, Baral Partapur, Bypass Road, Meerut, on 11–12 September 2026.


MEERUT INSTITUTE OF TECHNOLOGY

Award of Recognition

Presented with gratitude to

Prof. (Dr.) Rupesh K. Gautam

Professor, Centre for Pharmacology
Amity Institute of Pharmacy
Amity University Uttar Pradesh, Noida, India

as

Invited Speaker

during

NATIONAL CONFERENCE

on

Innovation, Research, and Entrepreneurship in Pharma for a Viksit Bharat

11th - 12th September 2026

sponsored by

Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

organized by

Department of Pharmacy
Meerut Institute of Technology, Meerut

Dr. Amrendra Pratap Yadav, Organizing Secretary
Dr. Neeraj Kant Sharma, Convener
Dr. Kunwar Laiq Ahmad Khan, Director


गुरुकुल काँगड़ी (समविश्वविद्यालय) हरिद्वार
Gurukula Kangri (Deemed to be University) Haridwar, Uttarakhand
(NAAC 'B' Accredited Deemed to be University u/s 3 of UGC Act 1956)

INDO-US
INTERNATIONAL CONFERENCE
ON
EMERGING TRENDS IN PHARMACEUTICAL SCIENCES, HEALTHCARE, BIOTECHNOLOGY & ARTIFICIAL INTELLIGENCE
IUIC-2026-Hybrid Mode
24-25 August 2026

CERTIFICATE
OF PARTICIPATION

This is to certify that

Dr. Rupesh K. Gautam

Professor, Centre for Pharmacology, Amity Institute of Pharmacy, Amity University Uttar Pradesh, Noida-201303, India

has participated as Resource Person in the Indo-US International Conference on "Emerging Trends in Pharmaceutical Sciences, Healthcare, Biotechnology & Artificial Intelligence" (IUIC-2026)" held on August 24-25, 2026 at Gurukula Kangri (Deemed to be University) Haridwar, U.K., India.

We appreciate your valuable contribution to the success of the conference.

Dr. Subhash C Chauhan
Professor and Division Chief,
Cancer Immunology and Microbiology Group,
Founding Director, South Texas Center of Excellence in Cancer Research
University of Texas Rio Grande Valley, USA

USA

Prof. Satyendra Rajput
Head and Dean
Department of Pharmaceutical Sciences
Gurukula Kangri (Deemed to be University)
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INDIA

Organized by: Department of Pharmaceutical Sciences, Gurukula Kangri (DU), Haridwar
In association with: International Society for Education, Health and Science (ISEHS), New Delhi



Faculty Achievements

Dr. Saurabh Mittal



Dr. Saurabh Mittal received the 2nd Prize in the oral presentation competition at the Drug Delivery of Complex Molecules 2026 programme, organized at DPSRU, New Delhi.

He presented his work on the development of a nanoemulsion-based gel for **Vulvovaginal Candidiasis** (**VVC**) — a formulation research project focused on improving drug delivery and therapeutic performance at the site of infection.





Dr. Vikesh Kr. Shukla



Dr. Vikesh Kr. Shukla was nominated by the Pharmacy Council of India (PCI) to participate in the 3rd Batch of CAPSULE – Innovative Leadership Development Program on 3rd July and 4th July 2026 at PCI, New Delhi





Dr. Ajay Kumar Pal



Dr. Ajay Kumar Pal was invited as Guest in 6th National Pharmacovigilance Week Celebration Campaign held on 21st September 2026, at BHIM Hall, Ambedkar Bhawan, New Delhi-110001



2026-09-24

National Coordination Centre - Pharmacovigilance Programme of India
WHO Collaborating Centre for Pharmacovigilance in Public Health Programmes and Regulatory Services
Indian Pharmacopoeia Commission
Ministry of Health & Family Welfare, Government of India
Sector-23, Raj Nagar, Ghaziabad - 201002

Certificate of Appreciation

is awarded to

Dr. Ajay Kumar Pal

in sincere appreciation of your esteemed presence as an Invited Guest during the 6th National Pharmacovigilance Week celebration at BHIM Hall, Dr. Ambedkar International Centre, New Delhi on 21st September 2026 organized by National Coordination Centre- Pharmacovigilance Programme of India, Indian Pharmacopoeia Commission, Ghaziabad.

Dr. Jai Prakash
Officer-in-Charge
Pharmacovigilance Programme of India
Indian Pharmacopoeia Commission
Ghaziabad

Dr. V. Kalaiselvan
Secretary-cum-Scientific Director
Indian Pharmacopoeia Commission
Ghaziabad

Newly Appointed Faculty



Dr. Monika Kaurav
Assistant Professor - II



Dr. Prashant Chandra
Assistant Professor -II



Dr. Priya Gupta
Assistant Professor-I



Dr. Nipun Abhinav
Assistant Professor -I



Dr. Krishan Kumar
Assistant Professor -I



Dr. Gourav Singh
Assistant Professor - I



Dr. Manvendra Kumar
Assistant Professor-I



Dr. Ajay Kumar Pal
Assistant Professor - I



Dr. Mukesh Kumar
Assistant Professor - I

Publications

S. No.	Name of Faculty/Scientist	Full Publication Details	Publisher	Published (Month/Year)
1	**Dr. A. Porselvi**	S, N., Velayuthem, J., Krishnan, A. P., Anand, A., Jeyamani, V., B, A., S, R., D, C., & Arumugam, P. (2026). Macrophage Dynamics in Diabetic Wounds: Mechanisms, Signalling Pathways, and Therapeutic Innovations. Mini reviews in medicinal chemistry, 10.2174/0113895575487146260831113744. Advance online publication. https://doi.org/10.2174/0113895575487146260831113744	Bentham Science	16/09/2026
2	**Dr. A. Porselvi**	Arumugam, P., Manirajan, P., & Sivanandy, P. (2026). Prevalence and risk factors of nutritional anaemia among adolescents in India: a systematic review with meta-analysis of prevalence. Annals of medicine, 58(1), 2694147. https://doi.org/10.1080/07853890.2026.2694147	Taylor & Francis	18/08/2026
3	**Dr. A. Porselvi**	Porselvi, A., Saxena, S., & Rao, P. P. (2026). Strengthening Healthcare Professionals' Understanding and Practices in Medical Device Postmarket Surveillance: Key Insights from Shukla et al . Indian journal of public health, 10.4103/ijph.ijph_1374_24. Advance online publication. https://doi.org/10.4103/ijph.ijph_1374_24	Indian Public Health Association	29/07/2026
4	**Dr. A. Porselvi**	Singh, P.K.R., Pubalan, J.K., Manirajan, P. et al. Evaluating the impact of an Antimicrobial Stewardship Programme on antimicrobial resistance, multidrug resistance, and cost of therapy in a private hospital in Malaysia. Discov Public Health 23, 696 (2026). https://doi.org/10.1186/s12982-026-02042-6	Springer Nature	11/5/2026
5	**Dr. Ajita Paliwal**	Negi, S., Pushp, Paliwal, A., & Singh, M. P. (2026). Ergothioneine as a candidate longevity-associated micronutrient: roles and therapeutic potential. South African Journal of Botany, 197, 83–96. https://doi.org/10.1016/j.sajb.2026.06.061	Elsevier	16/07/2026
6	**Dr. Ajita Paliwal**	Sengar, M. S., Paliwal, A., Kaushik, N., Singh, S., Kashyap, P., Paliwal, D., & Negi, S. (2026). Tumor resistance to protein kinase inhibitors. Journal of Chemotherapy, 1–15. https://doi.org/10.1080/1120009X.2026.2728432	Taylor & Francis	10/9/2026
7	**Dr. Alka Lohani**	Khan, S., Rizvan, M., Varshney, H., & Lohani, A. (2026). Targeting Synovial Inflammation and Joint Destruction: Therapeutic Potential of Nigella sativa Seeds in Rheumatoid Arthritis. Recent advances in inflammation & allergy drug discovery, 10.2174/0127722708496311260911114837. Advance onlinepublication.https://doi.org/10.2174/0127722708496311260911114837	Bentham Science	22/09/2026
8	**Dr. Havagiray R. Chitme**	Chitme, H. R., Baig, M. M. F. A., Gupta, A. K., eds. (2026). Pharmaceutical care and wellness of diabetes. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-8325-8380-7	Frontiers	30/06/2026
9	**Dr. Indu Singh**	Mittal, S., Singh, I., Verma, R., Gupta, M., Chauhan, S. B., & Talegaonkar, S. (2026). Capsaicin and diclofenac coloaded nanoemulsion gel optimized by quality by design approach of for the treatment of rheumatoid arthritis. Therapeutic Delivery, 17(7), 675–692. https://doi.org/10.1080/20415990.2026.2700163	Taylor & Francis	11/8/2026
10	**Dr. Indu Singh**	Chaudhary S, Chauhan SB, Swami R, Singh I. Integrating Artificial Intelligence into Biopharmaceutical Formulation and Development: A Critical Review. Curr Pharm Des. Published online August 1, 2026. doi:10.2174/0113816128486398260721142703	Bentham Science	1/8/2026
11	**Dr. Kavita Munjal**	Singla, M., Verma, S., Mittal, P., Munjal, M., Roopashree, R., Khurana, M., Goyal, K., ... & Gupta, G. (2026). Discovering Multifaceted Role of Garcinia Indica Beyond Flavors: Nutraceutical and Therapeutic Potential. Pharmacological Research-Natural Products, 100825.	Elsevier	25/07/2026
12	**Dr. Kavita Munjal**	Munjal, Kavita et al., Measuring the composition and availability of human resources for health by sex in 204 countries and territories, 1990–2023, and workforce gaps for universal health coverage: a systematic analysis for the Global Burden of Disease Study 2023. vol 11. 2026. The Lancet Public Health. DOI - 10.1016/S2468-2667(26)00145-3.	Elsevier	1/9/2026
13	**Dr. Kavita Munjal**	Munjal, Kavita et al, Global, regional, and national burden of tuberculosis and multidrug-resistant tuberculosis by HIV status, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023, The Lancet Infectious Diseases, https://doi.org/10.1016/S1473-3099(26)00295-1.	Elsevier	1/7/2026

Publications

S. No.	Name of Faculty/Scientist	Full Publication Details	Publisher	Published (Month/Year)
14	**Dr. Kavita Munjal**	Munjal, Kavita et al, Measuring the composition and availability of human resources for health by sex in 204 countries and territories, 1990–2023, and workforce gaps for universal health coverage: a systematic analysis for the Global Burden of Disease Study 2023, The Lancet Public Health, https://doi.org/10.1016/S2468-2667(26)00145-3.	Elsevier	30/09/2026
15	**Dr. Kalpana Nagpal Chaswal**	Behera, B. S., Nagpal, K., & Gupta, S. (2026). STRENGTHENING THE LONG PEPPER (PIPALI) VALUE CHAIN FOR INCLUSIVE LIVELIHOODS AND INCOME ENHANCEMENT OF RURAL HOUSEHOLDS IN KORUT, ODISHA. Genetics and Molecular Research.	FUNPEC-RP	15/08/2026
16	**Dr. Kalpana Nagpal Chaswal**	Imam, M., Gupta, N., Narayan, S., & Nagpal, K. (2026). Taste-Masked orodispersible tablets of alfuzosin hydrochloride: response surface methodology (RSM) based approach for enhanced patient compliance in BPH management. Pharmaceutical Development and Technology, 31(6), 1050–1070. https://doi.org/10.1080/10837450.2026.2707519	Taylor & Francis	29/07/2026
17	**Dr. Kalpana Nagpal Chaswal**	Pathak, S., & Nagpal, K. (2026). Stimuli-Responsive Wound Management: A Focus on Innovative pH-Driven Healing Systems. Critical Reviews™ in Therapeutic Drug Carrier Systems, 43(3).	Begell House	17/04/2026
18	**Dr. Kalpana Nagpal Chaswal**	Rajora, A., Kohli, K. & Nagpal, K. Topical Delivery of Itraconazole by Clove Oil Based Nanoemulgel for Inhibition of 1ZAProtein in Candida albicans : Formulation, Optimization, In Silico Study, and Antimicrobial Evaluation. J Pharm Innov 22, 39 (2027). https://doi.org/10.1007/s12247-026-10906-2	Springer Nature	12/8/2026
19	**Dr. Neha Jain**	Singh P, Kaul S, Jain N, Nagaich U, Elella MHA, Faia PM, Araújo ES. Zirconium Dioxide Nanoparticles in Bone Tissue Engineering: Recent Advances, Biological Interactions, and Future Perspectives. Ceramics. 2026; 9(10):104. https://doi.org/10.3390/ceramics9100104	MDPI	22/09/2026
20	**Dr. Neha Jain**	Jayshree, Rajpoot, K., Mishra, D. et al. Oxaliplatin Encapsulated Hyaluronic Acid-Engineered Chitosan Nanoparticles for Enhanced Tumor Targeting: In Vitro Cytotoxicity Study Using HCT-116 Cell Lines. BioNanoSci. 16, 534 (2026). https://doi.org/10.1007/s12668-026-02782-4	Springer Nature	17/08/2026
21	**Dr. Neha Jain**	Jain N, Kaul S, Verma R, Triveni, Jangde KK, Garg U, Mishra DK, Nagaich U, Abu Elella MH. Quaternary Ammonium-Functionalized Chitosan as a Next-Generation Antifungal Platform: Chemistry, Mechanisms, and Therapeutic Applications. Marine Drugs. 2026; 24(7):249. https://doi.org/10.3390/md24070249	MDPI	17/07/2026
22	**Dr. Ravi Rawat**	Pal, K., Islam, M. M., Kurmi, B. D., Rawat, R., Eyupoglu, V., & Patel, P. (2026). A computational drug design approach for optimization of PHGDH inhibitors in cancer metabolism. In Silico Research in Biomedicine, 2, 100460. https://doi.org/10.1016/j.insi.2026.100460	Elsevier	19/06/2026
23	**Dr. Ravi Rawat**	Kumar A, Laldingliani TBC, Kumar R, Thangjam NM, Vuite R, Sahu SK, Rawat R, Behl T and Eyupoglu V (2026) Pongamia pinnata (L.) Pierre leaf extract: in vitro, in vivo, and in silico approaches to combat the waterborne bacterial pathogens associated with diarrheal conditions. Front. Cell. Infect. Microbiol. 16:1830625. doi: 10.3389/fcimb.2026.1830625	Frontiers	20/07/2026
24	**Dr. Ravi Rawat**	Upadhyay B, Akhtar A, Rawat R, Jain M. Drug-Induced Reduction in 80Q Aggregates in a Dictyostelium discoideum Model of PolyQ Disease. Biomedicines. 2026;14(9):1931. Published 2026 Aug 28. doi:10.3390/biomedicines14091931	MDPI	28/08/2026
25	**Dr. Ravi Rawat**	Dişli A, Tan B, Adem Ş, Akdoğan N, Rawat R, Eyüpoğlu V. Phenothiazine-tetrazole hybrids as potent cholinesterase inhibitors: Integrated experimental and computational insights for Alzheimer's therapy. Bioorg Chem. 2026;181:110350. doi:10.1016/j.bioorg.2026.110350	Elsevier	13/08/2026
26	**Dr. Rupesh K. Gautam**	Ledesma, J. R., Zhang, M., Liew, M. F., Dominguez, R. M. V., Whikehart, S. M. L., Verma, M., ... & Aldhahir, A. M. (2026). Global, regional, and national burden of tuberculosis and multidrug-resistant tuberculosis by HIV status, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023. The Lancet infectious diseases.	Elsevier	1/7/2026

Publications

S. No.	Name of Faculty/Scientist	Full Publication Details	Publisher	Published (Month/Year)
27	**Dr. Rupesh K. Gautam**	GBD 2023 Asia Life Expectancy Collaborators. Mapping drivers of life expectancy change in Asia from 1990 to 2023. Nature 656, 971–979 (2026). https://doi.org/10.1038/s41586-026-10739-6	Springer Nature	22/07/2026
28	**Dr. Rupesh K. Gautam**	Dandona, R., Kumar, G. A., Comfort, H., McHugh, T. A., Abdulkader, R. S., Acharya, A. B., ... & Kamal, M. (2026). Stillbirths at 22-and 28-weeks' gestation or longer for the states in India: findings from the Global Burden of Disease Study 2023. The Lancet Regional Health-Southeast Asia, 52.	Elsevier	27/07/2026
29	**Dr. Rupesh K. Gautam**	GBD 2023 LDL Cholesterol Collaborators, Razo, C., DeCleene, N. K., Johnson, C. O., Stark, B. A., LeGrand, K., ... & Amini, S. (2026). Global burden of elevated LDL-C: findings from the Global Burden of Disease Study 2023. Jama, 336(8), 673-698.	The American Medical Association	29/7/2026
30	**Dr. Rupesh K. Gautam**	Gautam, R. K., Shen, B., & Kamal, M. A. (2026). Role of Phenolic Nanocompounds in Inflammatory Disorders: Current View and Future Aspects. Current Pharmaceutical Design. DOI: 10.2174/0113816128529368260701073841	Bentham Science	1/7/2026
31	**Dr. Rupesh K. Gautam**	GBD 2023 LMIC Mental Disorders Collaborators. Electronic address: yonkkang@gmail.com. Burden of 10 mental disorders in low- and middle-income countries, 1990-2023, with forecasts to 2050: a Global Burden of Disease Study. Med. 2026;7(8):101224. doi:10.1016/j.medj.2026.101224	Elsevier	29/07/2026
32	**Dr. Rupesh K. Gautam**	Dhankhar, S., Gautam, R. K., Chauhan, S., Sharma, H., Saini, M., Singh, T. G., ... & Chopra, H. (2026). Role of Non-Pharmacological Cognition Building Techniques in Delayed Progression of Alzheimer's Disease: A Matter of Blood-Brain Barrier Dysfunction. Scripta Medica, 57(4), 863-878.	Medical Society of the Republic of Srpska and Faculty of Medicine, University of Banja Luka.	1/9/2026
33	**Dr. Rupesh K. Gautam**	GBD 2023 HIV Collaborators. Global, regional, and national burden of HIV/AIDS, 1990-2023, with the estimated burden attributable to intimate partner violence and forecasted impacts of funding cuts through 2030: results from the Global Burden of Disease Study 2023. Lancet HIV. Published online August 18, 2026. doi:10.1016/S2352-3018(26)00147-5	Elsevier	18/08/2026
34	**Dr. Rupesh K. Gautam**	GBD 2023 Asia Pacific Adolescent Health Collaborators. Adolescent health across Asia Pacific, 2000-23: a systematic analysis for the Global Burden of Disease Study 2023. Lancet Child Adolesc Health. 2026;10(10):731-754. doi:10.1016/S2352-4642(26)00163-X	Elsevier	1/9/2026
35	**Dr. Rupesh K. Gautam**	GBD 2023 Human Resources for Health Collaborators (2026). Measuring the composition and availability of human resources for health by sex in 204 countries and territories, 1990-2023, and workforce gaps for universal health coverage: a systematic analysis for the Global Burden of Disease Study 2023. The Lancet. Public health, 11(9), e604–e629. https://doi.org/10.1016/S2468-2667(26)00145-3	Elsevier	18/08/2026
36	**Dr. Rupesh K. Gautam**	Areda, D., Kim, H., Kang, J., Shalev, N., Poudyal, I., Kim, M. S., ... & Endalamew, S. G. (2026). Global, regional, and national burden of tetanus in 204 countries and territories, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023. eClinicalMedicine, 100.	Elsevier	28/09/2026
37	**Dr. Rupesh K. Gautam**	GBD 2023 Chewing Tobacco Collaborators (2027). Global, regional, and national burden of exposure to chewing tobacco, 1990-2023: a systematic analysis of the Global Burden of Disease Study 2023. The Lancet. Global health, 104043. Advance online publication. https://doi.org/10.1016/j.langlo.2026.104043	Elsevier	30/09/2026
38	**Dr. Saurabh Mittal**	Mittal, S., Singh, I., Verma, R., Gupta, M., Chauhan, S. B., & Talegaonkar, S. (2026). Capsaicin and diclofenac coloaded nanoemulsion gel optimized by quality by design approach of for the treatment of rheumatoid arthritis. Therapeutic delivery, 17(7), 675–692. https://doi.org/10.1080/20415990.2026.2700163	Taylor and Francis	11/8/2026

Publications

S. No.	Name of Faculty/Scientist	Full Publication Details	Publisher	Published (Month/Year)
39	**Dr. Shikha Baghel Chauhan**	Sisodia, P., Baghel Chauhan, S., & Jain, C. (2026). Navigating the mucosal frontier: Mucus-penetrating nanocarriers for precision pulmonary drug delivery and respiratory therapeutics. Current Respiratory Medicine Reviews, 22. https://doi.org/10.2174/011573398X477844260824095418	**Bentham Science**	30/08/2026
40	**Dr. Shikha Baghel Chauhan**	Baghel Chauhan, S., Bhardwaj, A., Jain, C., & Singh, I. (2026). Nano-magnetism for precision neuroscience: Biohybrid magnetoelectric nanocarriers as next-generation neural drug delivery platforms. CNS & Neurological Disorders - Drug Targets, 25. https://doi.org/10.2174/0118715273397455251030094458	**Bentham Science**	24/08/2026
41	**Dr. Shikha Baghel Chauhan**	Arora, S., Baghel Chauhan, S., Jain, C., & Singh, I. (2026). Hyaluronic acid-based hydrogels as anti-inflammatory drug delivery platforms for osteoarthritis: Design strategies, mechanisms, and translational perspectives. Anti-Inflammatory & Anti-Allergy Agents in Medicinal Chemistry, 25. https://doi.org/10.2174/0118715230472714260810073857	Bentham Science	19/08/2026
42	**Dr. Shikha Baghel Chauhan**	Baghel Chauhan, S., Jain, C., & Singh, I. (2026). Designing photostable hair dyes with UV-blocking properties: Molecular docking approaches for targeted hair protection. Current Pharmaceutical Design, 32. https://doi.org/10.2174/0113816128464711260701164206	Bentham Science	10/8/2026
43	**Dr. Shikha Baghel Chauhan**	Baghel Chauhan, S., Singh, M., Jain, C., & Singh, I. (2026). Smart biopolymer packaging for food sustainability: Integrating chitosan–alginate nanoparticles with RFID and biosensor technologies. Current Nanomaterials, 11. https://doi.org/10.2174/0124054615465403260615154927	Bentham Science	2/7/2026
38	**Dr. Shikha Baghel Chauhan**	Chaudhary, R., Baghel Chauhan, S., Jain, C., & Singh, I. (2026). Chemical systems biology of herbal medicines: Integrating AI and systems chemical biology for personalized phytotherapy: A review article. Current Chemical Biology, 20. https://doi.org/10.2174/0122127968469219260821090015	Bentham Science	7/9/2026
44	**Dr. Swati Madan**	Tyagi, R., Bhar, J., Kumar, N., Sharma, V., Madan, S., Aljameeli, A. M., Alenazi, F. S., Alaradi, M. M., AlMaqati, A. F., Alanezi, A. A., Shalayel, M. H. F., Al-Mazaideh, G. M., & Siddique, N. A. (2026). Rutin and scopoletin co-loaded niosomes for intranasal brain delivery: Formulation optimization and ex vivo evaluation. Current Drug Delivery, 23. https://doi.org/10.2174/0115672018473163260713051930	Bentham Science	23/07/2026
45	**Dr. Vikesh Kumar Shukla**	Katrolia, A., Singh, R., & Shukla, V. K. (2026). Synthesis and evaluation of triphenylphosphonium-Pluronic F127 conjugate for enhanced mitochondrial targeting in drug delivery systems. Indian Journal of Pharmaceutical Education and Research, 60(3), S1004–S1011. https://doi.org/10.5530/ijper.20262468	Association of Pharmaceutical Teachers of India (APTI)	2/6/2026
46	**Dr. Vikesh Kumar Shukla**	Sahu, V., Kaur, S., Yadav, S., Sharma, N., & Shukla, V. K. (2026). Global narcotics regulations: An overview of international drug control conventions and the need for responsible legal regulation. Journal of Opioid Management, 22(3), 309. https://doi.org/10.5055/jom.0925	**Weston Medical Publishing**	1/6/2026
47	**Dr. Vikesh Kumar Shukla**	Shukla, V. K., Chauhan, A., Malakar, K., & Rana, M. (2026). Expedited regulatory approval pathways for novel oncology drugs. Medical Oncology, 48(8), 211. https://doi.org/10.1007/s12032-026-03313-7	Springer Nature	3/7/2026

BOOK CHAPTERS

S. No.	Author Name	Book chapter details	Month and Year	Publisher	ISBN
1	Dr. Ajita Paliwal	GBD 2023 TB HIV Collaborators. (2026). Global, regional, and national burden of tuberculosis and multidrug-resistant tuberculosis by HIV status, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023. *The Lancet Infectious Diseases*. https://doi.org/10.1016/S1473-3099(26)00295-1	Jul 2026	Elsevier	1473-3099
2	Dr. Ajita Paliwal	Sengar, M. S., Paliwal, A., Kaushik, N., Singh, S., Kashyap, P., Paliwal, D., & Negi, S. (2026). Tumor resistance to protein kinase inhibitors. Journal of Chemotherapy. https://doi.org/10.1080/1120009X.2026.2401234	Sep 2026	Taylor & Francis	1120-009X
3	Dr. Alka Lohani	Khan, S., Rizvan, M., Varshney, H., & Lohani, A. (2026). Targeting Synovial Inflammation and Joint Destruction: Therapeutic Potential of *Nigella sativa* Seeds in Rheumatoid Arthritis. *Recent Advances in Inflammation & Allergy Drug Discovery*, 20. https://doi.org/10.2174/0127722708496311260911114837	Sep 2026	Bentham Science	2772-2716
4	Dr. Indu Singh	Mittal, S., Singh, I., Verma, R., Gupta, M., Chauhan, S. B., & Talegaonkar, S. (2026). Capsaicin and diclofenac coloaded nanoemulsion gel optimized by quality by design approach of for the treatment of rheumatoid arthritis. *Therapeutic Delivery*, 17(7), 675–692. https://doi.org/10.1080/20415990.2026.2700163	Aug 2026	Taylor & Francis	2041-5990
5	Dr. Ravi Rawat	Dişli, A., Tan, B., Adem, Ş., Akdoğan, N., Rawat, R., & Eyüpoğlu, V. (2026). Phenothiazine-tetrazole hybrids as potent cholinesterase inhibitors: Integrated experimental and computational insights for Alzheimer's therapy. *Bioorganic Chemistry*, 181, 110350. https://doi.org/10.1016/j.bioorg.2026.110350	Aug 2026	Elsevier	0045-2068
6	Dr. Ravi Rawat	Upadhyay, B., Akhtar, A., Rawat, R., & Jain, M. (2026). Drug-Induced Reduction in 80Q Aggregates in a *Dictyostelium discoideum* Model of PolyQ Disease. *Biomedicines*, 14(9), 1931. https://doi.org/10.3390/biomedicines14091931	Aug 2026	MDPI	2227-9059
7	Dr. Ravi Rawat	Rawat, R., Verma, S. M. (2026). A Computational Drug Design approach for optimization of PHGDH Inhibitors in Cancer metabolism. *In Silico Research in Biomedicine*, 2, 100460. https://doi.org/10.1016/j.insi.2026.100460	Jul 2026	Elsevier	3050-7871
8	Dr. Ravi Rawat	Rawat, R., et al. (2026). *Pongamia pinnata* (L.) Pierre leaf extract: in vitro, in vivo, and in silico approaches to combat the waterborne bacterial pathogens associated with diarrheal conditions. *Frontiers in Cellular and Infection Microbiology*, 16, 1830625. https://doi.org/10.3389/fcimb.2026.1830625	Jul 2026	Frontiers Media	2235-2988
9	Dr. Rupesh K. Gautam	GBD 2023 Human Resources for Health Collaborators. (2026). Measuring the composition and availability of human resources for health by sex in 204 countries and territories, 1990–2023, and workforce gaps for universal health coverage: a systematic analysis for the Global Burden of Disease Study 2023. *The Lancet Public Health*. https://doi.org/10.1016/S2468-2667(26)00145-3	Aug 2026	Elsevier	2468-2667
10	Dr. Rupesh K. Gautam	GBD 2023 Asia Life Expectancy Collaborators. (2026). Mapping drivers of life expectancy change in Asia from 1990 to 2023. *Nature*, 656(8129), 971–979. https://doi.org/10.1038/s41586-026-10739-6	Jul 2026	Nature Portfolio	0028-0836

BOOK CHAPTERS

S. No.	Author Name	Book chapter details	Month and Year	Publisher	ISBN
11	Dr. Rupesh K. Gautam	India State-Level Disease Burden Initiative Stillbirth Collaborators. (2026). Stillbirths at 22- and 28-weeks' gestation or longer for the states in India: findings from the Global Burden of Disease Study 2023. *The Lancet Regional Health - Southeast Asia*. https://doi.org/10.1016/j.lansea.2026.100819	Jul 2026	Elsevier	2772-3682
12	Dr. Rupesh K. Gautam	GBD 2023 HIV Collaborators. (2026). Global, regional, and national burden of HIV/AIDS, 1990–2023, with the estimated burden attributable to intimate partner violence and forecasted impacts of funding cuts through 2030: results from the Global Burden of Disease Study 2023. *The Lancet HIV*. https://doi.org/10.1016/S2352-3018(26)00147-5	Aug 2026	Elsevier	2352-3018
13	Dr. Rupesh K. Gautam	Dhankhar, S., et al. & Gautam, R. K. (2026). Role of Non-Pharmacological Cognition Building Techniques in Delayed Progression of Alzheimer's Disease: A Matter of Blood-Brain Barrier Dysfunction. *Scripta Medica*, 57(4). https://scriptamedica.med.unibl.org/wp-content/uploads/2026/09/13-SM-574-DHANKHAR-et-al.pdf	Sep 2026	Faculty of Medicine, University of Banja Luka	2490-3329
14	Dr. Rupesh K. Gautam	GBD 2023 Mental Disorders Collaborators. (2026). Burden of 10 mental disorders in low- and middle-income countries, 1990–2023, with forecasts to 2050: a Global Burden of Disease Study. *Med*. https://doi.org/10.1016/j.medj.2026.101224	Aug 2026	Elsevier	2666-6340
15	Dr. Rupesh K. Gautam	Gautam, R. K., Shen, B., & Kamal, M. A. (2026). Role of Phenolic Nanocompounds in Inflammatory Disorders: Current View and Future Aspects. *Current Pharmaceutical Design*. https://doi.org/10.2174/0113816128529368260701073841	Aug 2026	Bentham Science	1381-6128
16	Dr. Rupesh K. Gautam	GBD 2023 LDL Cholesterol Collaborators. (2026). Global Burden of Elevated LDL-C: Findings From the Global Burden of Disease Study 2023. *JAMA*, 336(8), 673–698. https://doi.org/10.1001/jama.2026.8628	Jul 2026	American Medical Association	0098-7484
17	Dr. Shikha Baghel chauhan	Chaudhary, R., Chauhan, S. B., Jain, C., & Singh, I. (2026). Chemical Systems Biology of Herbal Medicines: Integrating AI and Systems Chemical Biology for Personalized Phytotherapy: A Review Article. *Current Chemical Biology*, 18. https://doi.org/10.2174/0122127968469219260821090015	Sep 2026	Bentham Science	2212-7976
18	Dr. Shikha Baghel chauhan	Chauhan, S. B., Singh, M., Jain, C., & Singh, I. (2026). Smart Biopolymer Packaging for Food Sustainability: Integrating Chitosan–alginate Nanoparticles with RFID and Biosensor Technologies. *Current Nanomaterials*, 11. https://doi.org/10.2174/0124054615465403260615154927	Jul 2026	Bentham Science	2405-4623
19	Dr. Shikha Baghel chauhan	Chauhan, S. B., Jain, C., & Singh, I. (2026). Designing Photostable Hair Dyes with UV-Blocking Properties: Molecular Docking Approaches for Targeted Hair Protection. *Current Pharmaceutical Design*, 32. https://doi.org/10.2174/0113816128464711260701164206	Aug 2026	Bentham Science	1381-6128
20	Dr. Shikha Baghel chauhan	Arora, S., Chauhan, S. B., Jain, C., & Singh, I. (2026). Hyaluronic Acid-based Hydrogels as Anti-inflammatory Drug Delivery Platforms for Osteoarthritis: Design Strategies, Mechanisms, and Translational Perspectives. *Anti-Inflammatory & Anti-Allergy Agents in Medicinal Chemistry*. https://doi.org/10.2174/0118715230472714260810073857	Aug 2026	Bentham Science	1871-5230

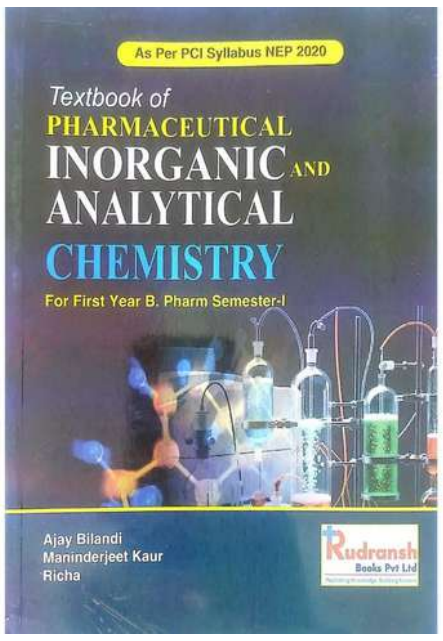
BOOK CHAPTERS

S. No.	Author Name	Book chapter details	Month and Year	Publisher	ISBN
21	Dr. Shikha Baghel chauhan	Chauhan, S. B., Bhardwaj, A., Jain, C., & Singh, I. (2026). Nano-Magnetism for Precision Neuroscience: Biohybrid Magnetoelectric Nanocarriers as Next-Generation Neural Drug Delivery Platforms. *CNS & Neurological Disorders - Drug Targets*. https://doi.org/10.2174/0118715273397455251030094458	Aug 2026	Bentham Science	1871-5273
22	Dr. Shikha Baghel chauhan	Sisodia, P., Chauhan, S. B., & Jain, C. (2026). Navigating the Mucosal Frontier: Mucus-penetrating Nanocarriers for Precision Pulmonary Drug Delivery and Respiratory Therapeutics. *Current Respiratory Medicine Reviews*, 22. https://doi.org/10.2174/011573398X477844260824095418	Aug 2026	Bentham Science	1573-398X

BOOKS PUBLISHED



Dr. Richa Dhingra



Editors: Ajay Bilandi, Maninderjeet Kaur, Richa

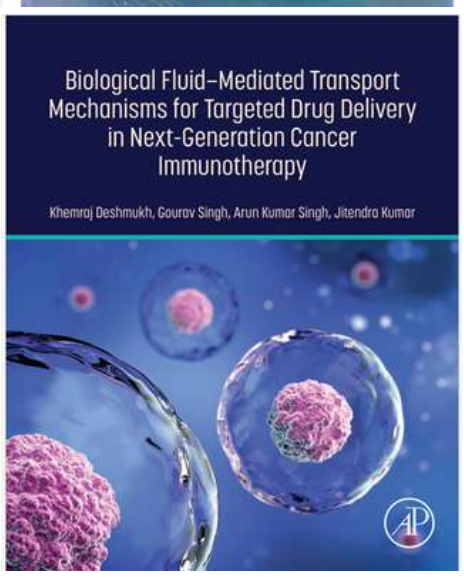
Title: Textbook of Pharmaceutical Inorganic and Analytical Chemistry

Published by: Rudransh Books Pvt. Ltd.

This book is designed for first-year B. Pharm students studying Semester I as per the PCI syllabus and NEP 2020. It covers the fundamental concepts of pharmaceutical inorganic chemistry and analytical chemistry. It explains important topics, chemical principles, and pharmaceutical applications in a clear and systematic manner. It includes basic concepts of acid and bases, different types of titrations, radioactive compounds used in pharmaceuticals. Along with this it includes limit test of various ions, the concept of impurities and errors.



Dr. Gourav Singh



Editors: Khemraj Deshmukh, Gourav Singh, Arun Kumar Singh, Jitendra Kumar

Title: Biological Fluid–Mediated Transport Mechanisms for Targeted Drug Delivery in Next- Generation Cancer Immunotherapy

Published by: Academic Press

This book aims to provide a comprehensive and interdisciplinary overview of the rapidly evolving field of biologically guided transport systems in cancer treatment. The chapters explore the fundamental principles of fluid dynamics in biological systems, tumor-associated transport barriers, nanoparticle trafficking, lymphatic targeting, exosome-mediated communication, biomimetic carriers, and immune-responsive delivery platforms. Emerging topics such as microfluidic modeling, AI-assisted carrier design, personalized nanomedicine, and stimuli-responsive immunotherapeutic systems are also discussed to provide readers with insights into future translational opportunities.

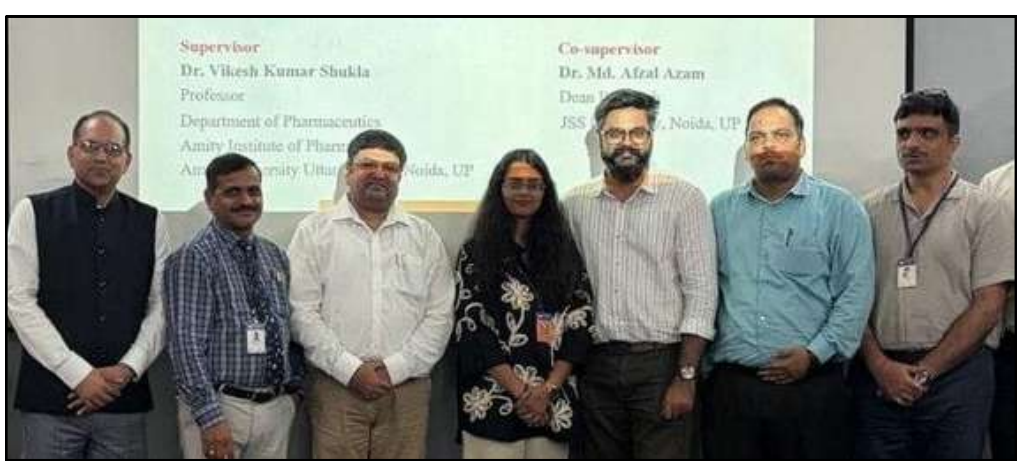
Ph.D Awarded /ODC/Pre-Ph.D

Ph.D. Scholars

S. No.	Name of the scholar	Guide Name	Thesis Title	Status	Date of ODC/Pre Ph.D
1	Ms NIDHI PANDEY	Dr. Ramanpreet Walia	Quality and Regulation Standards of High Risk Medical devices in India	Pre PhD Seminar	11/9/2026

Ph.D. Scholars

S. No.	Name of the scholar	Guide Name	Thesis Title	Status	Date of ODC/Pre Ph.D
1	Ms. ARCHITA KATROLIA	Dr. Vikesh Kumar Shukla	MITOCHONDRIA-TARGETED POLYMERIC MICELLES FOR OXIDATIVE STRESS MANAGEMENT	ODC	16/09/2026
2	Mr. N RAVEENDRA BABU	Dr. Dheeraj Nagpal	Synthesis and Evaluation of Hydroxy Propyl Methyl Cellulose Phthalate Succinate Polymer for Solubility Enhancement of Poorly Soluble Drugs	Pre PhD Seminar	20/07/2026
3	Ms. ARCHITA KATROLIA	Dr. Vikesh Kumar Shukla	MITOCHONDRIA-TARGETED POLYMERIC MICELLES FOR OXIDATIVE STRESS MANAGEMENT	Pre PhD Seminar	20/07/2026
4	Mr NISHANT KUMAR GAUR	Dr Kalpana Nagpal Chaswal	Development of Topical Drug Delivery System for the Treatment of Trichophyton verrucosum Fungal Infection	Pre PhD Seminar	13/07/2026
5	Ms ANJALI	Dr Kalpana Nagpal Chaswal	FORMULATION AND OPTIMIZATION OF NANOGEL BASED DELIVERY SYSTEMS FOR TREATMENT OF CANDIDA ALBICANS INFECTION	Pre PhD Seminar	13/07/2026



Group Photograph of Ms. Archita Katrolia with External Examiners and AIP Faculty Members on the day of ODC.

Sanctioned/Ongoing Funded Research Projects

#	Name of the Investigator	Project No.	Funding Agency	Title of the project and duration	Sanctioned Amount (in Rs.)
1	Dr. Maryam Sarwat	3-158/2022-ccrum/Tech	CCRUM	To study the Immunomodulatory effect of Khamira-e-Gaozaban Sada (KGS) and Sugar Free KGS (sf KGS) on D-amphetamine (AMPH) Induced Mania Model of Bipolar Disorder (BD)	3,053,690
2	Dr. Maryam Sarwat (Co-PI)		CCRUM	In-vitro evaluation of antiviral activity of Unani Drugs and their green nanoparticles against Dengue virus	2,480,000
3	Dr. Annie Gupta	2655	CST, UP	Metabolomics based bioprospection of medicinal weed plant-*Achyranthus aspera* in search of elite chemotype in Uttar Pradesh	1,300,000

#	Name of the Investigator	Project No.	Funding Agency	Title of the project and duration	Sanctioned Amount (in Rs.)
4	Dr. Puneet Gupta	3-52/2022-CCRUM/Tech	CCRUM	Formulation Development and preclinical evaluation of novel Unani dispersible tablets for immunomodulatory activity and as adjuvant to Anticancer therapy	3,053,690
5	Dr. Nitin Sharma	3-85/2023-CCRUM/Tech	CCRUM	Colon targeting of unani medicine via gum(polysaccharide) based oral formulation for effective treatment of irritable bowel syndrome/clinical investigation by gamma scintigraphy	2,241,000
6	Dr. Havagiray R. Chitme	CST/D-786 Project ID 4000	CST, UP	Fractionation, Characterization and Identification of Diagnostic Biomarker from Follicular Fluid of Patients Diagnosed with Endometriosis	1,636,000
7	Dr. Navneet Sharma	Registration no. : TPN/77817	DST, IIT Delhi	Textile Based NBC Nuclear, Biological and Chemical Decontamination Handwear, Funded Technology Development Transfer by Division,	5,590,000
8	Dr. Navneet Sharma	Order No: 1/9/2024-9th MSG/10	MoT, IIT, Delhi	Fabrication and Evaluation of the Gamma Protective Clothing, Funded by National Technical Textile Mission,	10,000,000
9	Dr. Nitin Sharma	CRG/2023/006908	ANRF (SERB), Delhi	Extraction, physicochemical characterization and application of Opuntia ficusindica plant polysaccharide f Apigenin delivery through nanocarrier approach	41,38,000/-
10	Dr. Nitin Sharma (Co-PI)	CRG/2023/003432	ANRF (SERB), Delhi	"Comprehending the correlation between nanoinformatics data and mechanistic nanoformulations	3,19,000/-
11	Dr. Swati Madan	Z-18017/188/CSS/NGO/ Ashwagandha-Campaign/ UP-01/2024-25-NMPB	NMPB, AYUSH, GOI	National campaign on Ashwagandha -a Health Promoter	18,90,000/-
12	Dr. Navneet Sharma	F No TECH-21/9/2025-CCRUM-HQ	CCRUM	Novel Unani Medicine infused Organic Oil based in-soles for diabetic foot care	2,751,760
13	Dr. Maryam Sarwat	F. No.Z.18017/187/CSS/R&D/UP-01/2025-26-NMPB-IV A	NMPB, AYUSH, GOI	Enhancement of Salidroside Content through Various Means in Rhodiola imbricata Edgew. from the Cold Desert of Leh Ladakh”	4,000,000
14	Dr. Swati Madan	Project No. Z-18017/188/CSS/NGO/Ashwagandha-Campaign/UP-01/2024-25-NMPB.	NMPB, AYUSH, GoI	National Campaign on ‘Ashwagandha’ – A Health Promoter”, sanctioned by the National Medicinal Plants Board (NMPB), Ministry of AYUSH, Government of India	1,890,000
15	Dr. Swati Madan (Co-PI)	F. No. Z.18017/187/CSS /R&D/UP-01/2025-26-NPMB-IV A	NMPB, AYUSH, GoI	Enhancement of Salidroside Content through Various Means in Rhodiola imbricata Edgew. From the Cold Desert of Leh Ladakh’ as CoPI	3,149,000

Patents Filed/Published/Granted

Sr. No.	Inventors	Titles	Application No.	Filing Date	Publishing Date
1	Nitin Sharma, Maitrayee Ghosh AIP, AUUP Email: nsharma5@amity.edu, mghosh4@amity.edu Mob: 9897343218, 7031993524	'A pH-RESPONSIVE GRAFTED POLYSACCHARIDE COPOLYMER FOR SITE-SPECIFIC DRUG DELIVERY AND METHOD THEREOF'	202611098090	13/08/2026	-
2	Kalpana Nagpal, Subhash Chander, Sarda Ruhil AIP, AUUP Noida Email: knchaswal@amity.edu, schander@ggn.amity.edu, shardaruhil@gmail.com Mob: 8447883427, 7597586292, 9817769525	'VITAMIN E SUCCINATE-GALACTOOLIGOSACCHARIDE CONJUGATE AND PROCESS FOR PREPARING THE SAME'	202611086180	14/07/2026	-
3	Khushi Dahiya, Shikha Baghel Chauhan, Chirag Jain AIP, AUUP Lucknow Email: schauhan@amity.edu Mob: 09873495966	'CANNABIDIOL-LOADED CUBOSOMAL NANOCARRIER FOR TOPICAL MANAGEMENT OF AGE-RELATED INFLAMMAGING'	202611088327	20/07/2026	-
4	Vikesh Kumar Shukla, Archita Katrolia, Rohit Singh, Navneet Sharma AIP, AUUP, Noida Email: vkshukla@amity.edu, architakatrolia95@gmail.com, rohitsinghjssuninoida.edu.in, nsharma4@amity.edu Mob: 8447379245, 7042037574, 8847232041, 9990812841	'MITOCHONDRIA-TARGETED DELIVERY OF ANTIOXIDANT PHYTOCONSTITUENTS AND METHOD THEREOF'	202611092267	29/07/2026	-
5	Maryam Sarwat, Hemlata Nimesh, Manisha Kumari (AIP), Email: msarwat@amity.edu Mob: 9990373875	''A METHOD FOR SYNTHESIS OF SILVER NANOPARTICLES FROM ASOCA BARK HAVING ANTIPROLIFERATIVE POTENTIAL AGAINST OVARIAN CANCER CELL LINE'	201811039750	-	17/07/2026

Faculty Birthday Celebration





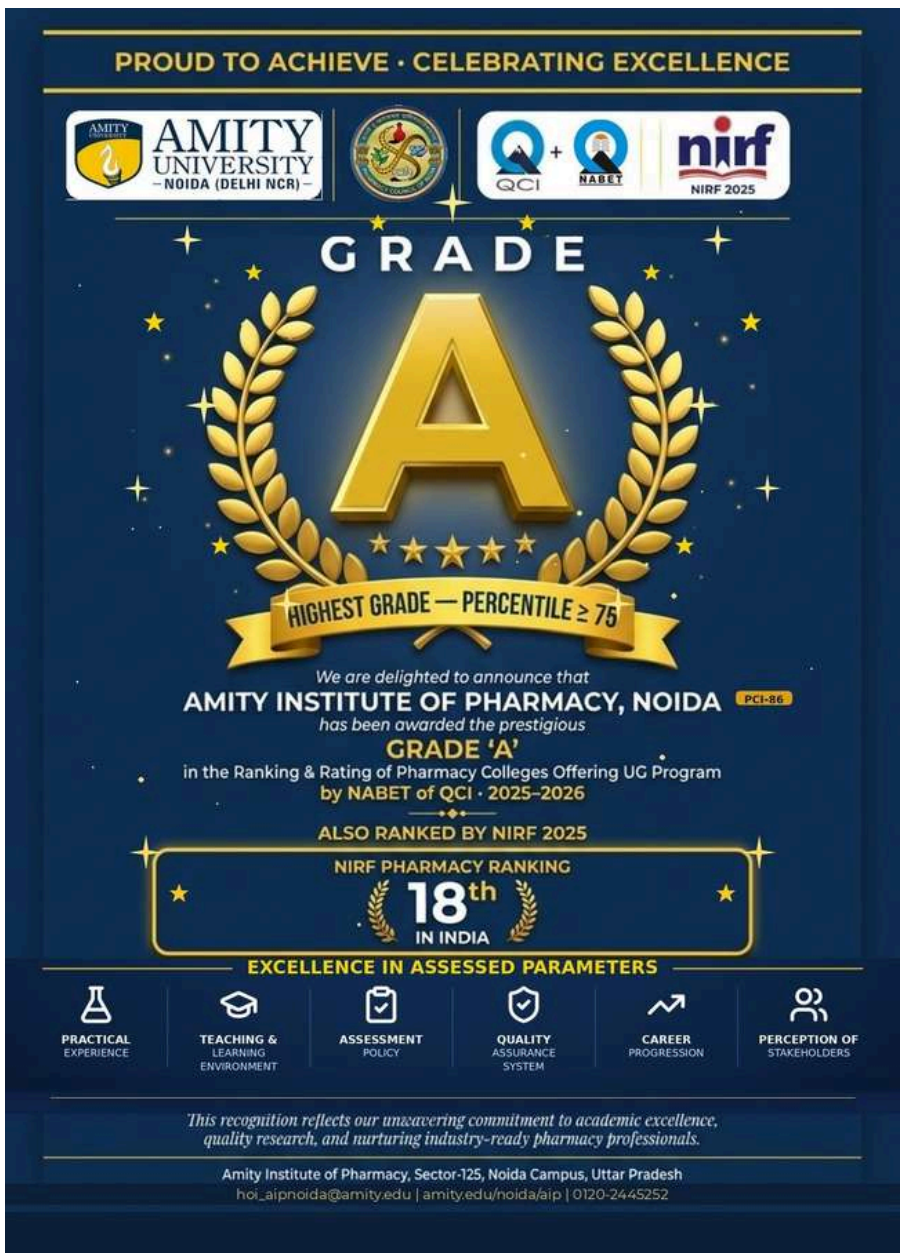






Grade A in Quality Council of India Assessment

The institution is pleased to announce that it has achieved an A Grade in the Quality Council of India (QCI) assessment/ranking, reflecting its commitment to quality, continuous improvement, and institutional excellence. This achievement recognises the collective efforts of the management, faculty members, staff, and students in maintaining high standards and fostering a culture of quality. The recognition serves as a motivation to further strengthen institutional practices and pursue excellence in education, research, and innovation. The ranking is valid for next five years.



Certificate No.
APP/25/N01578 || PCI-86

कामधेनुं दुःखतज्ञानाम् प्राप्तिनामार्तिनाशनम्

NABET®

CERTIFICATE OF RATING AND RANKING

Awarded pursuant to the Rating and Ranking exercise conducted by QCI-NABET
For the Pharmacy Council of India, vide Reference No. 14-414/2025-PCI dated 24 April 2025.

This is to certify that **Amity Institute of Pharmacy A Block Amity University Uttar Pradesh Noida** has been rated among the Pharmacy Institutions offering Undergraduate (UG) Programmes under the prescribed Rating Framework

Based on the assessment conducted by the

National Accreditation Board for Education and Training (NABET), Quality Council of India (QCI).

The institution has been awarded the rating of "**Grade - A**" in recognition of its demonstrated standards of quality, academic performance, institutional effectiveness, and compliance with the prescribed evaluation criteria.

This Certificate is valid from the academic year 2026 – 2027

Validity – 5 Years

Registrar
Pharmacy Council of India

Chief Executive Officer
National Accreditation Board for Education and Training

* College may reapply before the validity date to improve the grade

* DATE OF ISSUE – 24/07/2026

DEEKSHARAMBH STUDENT ORIENTATION PROGRAM



Havan and prayer at E2 Foyer



Lecture on campus placement



HVCO Introduction

First Year Stusents
Batch: 2026–2030
Organized by: Amity Institute of Pharmacy and Amity University,
Noida
Dates: 11th and 12th August 2026 (Offline Orientation)
Pre-Orientation Dates: 6th and 7th August 2026 (Online)
Venue: J-1 Block, Room No. 307, Amity University, Noida Campus

The Deeksharambh Student Orientation Programme for First-Year Undergraduate Students of Batch 2026–2030 was organized by Amity Institute of Pharmacy and Amity University, Noida, on 11th and 12th August 2026 at J-1 Block, Room No. 307, and other designated university-level venues. The online pre-orientation sessions were conducted on 6th and 7th August 2026. The programme aimed to familiarize students with the university environment, academic structure, examination system, student support services and institutional policies. The first day began with student registration, followed by the Havan and Prayers ceremony, ice-breaking and team-building activities, and sessions introducing students to the university, examination system, AMIZONE and academic philosophy.

On the second day, sessions covered anti-ragging measures, anti-narcotics awareness, grievance redressal, student welfare, discipline and psychological well-being. Students were also introduced to Programme Leaders, faculty mentors and course faculty and received guidance on academic planning, attendance policies, credit hours, blended learning and the ALMS platform. Information about institutional clubs, campus placements, entrepreneurship and co-curricular activities was also provided.

Overall, the programme helped students understand university procedures, interact with faculty members and fellow students, and prepare for their undergraduate academic journey in a supportive and structured environment.

The programme encouraged teamwork, promoted interaction between students and faculty members, and helped students understand the importance of discipline, academic planning and participation in extracurricular activities. It served as an effective introduction to undergraduate education and prepared the students of Batch 2026–2030 for their academic journey at Amity Institute of Pharmacy and Amity University, Noida.

Orientation Program













FACULTY DEVELOPMENT PROGRAMME

10th July 2026

Inaugural Session
The One-Day Faculty Development Programme (FDP) on "Effective Implementation of the Bachelor of Pharmacy (B.Pharm.) New Curriculum (2026) under NEP 2020" commenced with the arrival of distinguished dignitaries and delegates. The distinguished guests and dignitaries were formally received and welcomed by Vice Chancellor, Pro Vice Chancellor, Dean, Deputy Dean, Director (AIP), Amity University Uttar Pradesh;

Welcome Address
Prof. (Dr.) Balvinder Shukla warmly welcomed the distinguished guests, faculty members, delegates, and participants to the Faculty Development Programme. She highlighted the importance of the National Education Policy (NEP) 2020 in transforming higher education through multidisciplinary learning, innovation, research, and skill development. She emphasized Amity University's commitment to providing quality education that aligns with national priorities and global standards.
She appreciated the Pharmacy Council of India for introducing the revised B.Pharm. Curriculum (2026), which has been designed to meet the changing needs of the pharmacy profession. She also highlighted Amity University's academic excellence, innovative ecosystem, and student-centric approach, noting the institution's consistent achievements in national and international rankings. She concluded by expressing confidence that the FDP would equip faculty members with the knowledge and strategies required for the effective implementation of the new curriculum.

Address by the Chancellor
Dr. Atul Chauhan addressed the gathering by emphasizing that quality education should focus on developing competent professionals capable of addressing future healthcare challenges. He highlighted Amity University's continuous efforts towards academic excellence, innovation, and holistic student development.
He stressed that the successful implementation of NEP 2020 requires institutions to move beyond conventional classroom teaching and adopt competency-based, research-oriented, and outcome-driven education. He encouraged faculty members to actively embrace educational reforms, promote experiential learning, and nurture students with strong ethical values, professional competence, leadership qualities, and global perspectives. He reiterated that pharmacy education must remain dynamic and responsive to advancements in healthcare, industry, and technology.

Address by the Chief Guest Dr. Montu kumar M. Patel
President, Pharmacy Council of India, New Delhi
Dr. Montu kumar M. Patel delivered the keynote address highlighting the vision and objectives behind the B.Pharm. Curriculum (2026). He explained that the revised curriculum is the outcome of extensive consultations, zonal workshops, stakeholder meetings, and valuable feedback received from pharmacy educators, institutions, industry experts, and professional organizations across the country.
He stated that the curriculum has been redesigned to make pharmacy education more industry-oriented, competency-based, and internationally aligned while addressing the evolving needs of healthcare and pharmaceutical sciences. Dr. Patel encouraged faculty members to play a proactive role in implementing the curriculum through innovative teaching methodologies, experiential learning, continuous assessment, and student-centred education. He emphasized that the success of the curriculum depends on the dedication and preparedness of teachers in shaping future pharmacy professionals.





The speaker elaborated on the principles proposed by William Spady, emphasizing clarity of learning outcomes, learner-centered education, high expectations, and expanded learning opportunities. He demonstrated effective methods for writing measurable Course Outcomes using appropriate action verbs aligned with Bloom's Taxonomy and explained the process of CO–PO–PSO mapping for measuring outcome attainment.
Dr. Jain also discussed best practices in Continuous Internal Assessment (CIA) and End Semester Examination (ESE), emphasizing transparency, constructive feedback, balanced assessment across cognitive domains, and alignment with learning outcomes. The session provided participants with practical strategies for designing competency-based assessments and implementing continuous quality improvement through systematic evaluation and attainment analysis.

Technical Session II: Curriculum structure, NCrF, NSQF, AEC, SEC, VAC, experiential and research learning Speaker: Dr. Sarath Chandran (12.30PM to 01.15PM)
Chairman of the Policy Committee, PCI, and Co-chairman, ERC PCI
Dr. Sarath Chandran delivered an engaging session focusing on the philosophy and implementation strategies of the revised PCI B.Pharm. Curriculum (2026). He highlighted that the curriculum represents a transformational shift from content-driven education towards competency-based, patient-centred, and skill-oriented professional education.
The speaker discussed the limitations of traditional pharmacy education, including fragmented subject delivery, limited interdisciplinary integration, and reliance on rote learning. He explained how the revised curriculum promotes experiential learning, competency development, entrepreneurship, innovation, multidisciplinary collaboration, digital health, and research orientation.
Emphasizing NEP 2020, Dr. Chandran encouraged faculty members to adopt innovative pedagogical practices such as Problem-Based Learning (PBL), Objective Structured Clinical Examination (OSCE), simulation laboratories, active learning strategies, and competency-based teaching methods. He stressed that pharmacy graduates should emerge not only as healthcare professionals but also as innovators, entrepreneurs, and contributors to national healthcare advancement. At the conclusion of the morning technical session, the speakers were felicitated in recognition of their valuable contributions. The morning session concluded at 1:20 PM, followed by Lunch (1:25 PM – 2:00 PM).

Session II Need for NEP 2020 – Transforming Pharmacy Education (2:00 PM – 2:30 PM) Technical Session III: Traditional curriculum limitations, changing pedagogical paradigms, competency-based learning, vision of NEP 2020
Speaker: Dr. Ranjit Singh Dean Health Sciences and Director AVIPS, Shobhit University, Saharanpur
Dr. Ranjit delivered an informative lecture on the integration of Artificial Intelligence (AI), Machine Learning (ML), and Digital Health into pharmacy education and healthcare practice. He highlighted the growing importance of AI-enabled clinical decision support, predictive analytics, personalized medicine, and digital healthcare technologies in transforming pharmaceutical education and patient care.
The session introduced participants to applications of Natural Language Processing (NLP), knowledge graph construction, named entity recognition, text mining, and AI-assisted literature analysis. The speaker also demonstrated concepts such as Term Frequency–Inverse Document Frequency (TF-IDF) and explained their applications in biomedical text mining and research. Faculty members gained insights into incorporating AI tools within teaching, research, and clinical pharmacy practice while maintaining ethical and professional standards. The afternoon session commenced with the felicitation of Dr. Ranjit by Dr. Chitme and Dr. Swati Madan.





Felicitation Ceremony

Following the inaugural addresses, the distinguished dignitaries were felicitated by the university as a token of appreciation for their valuable contributions to pharmacy education and their continued support in strengthening academic excellence. The ceremony recognized their leadership and commitment towards advancing pharmacy education in India and promoting the effective implementation of the B.Pharm. Curriculum (2026). The felicitation was followed by a group photograph with the dignitaries, invited guests, and organizing committee members.

Vote of Thanks

The inaugural session concluded with a Vote of Thanks delivered by Dr. Shikha Saxena, who expressed her sincere gratitude to the Chancellor, Chief Guest, distinguished dignitaries, invited speakers, faculty members, delegates, organizing committee, volunteers, and participants for their valuable presence and contributions. She acknowledged the collective efforts of the organizing team in making the Faculty Development Programme a meaningful platform for academic interaction and professional development. She expressed confidence that the deliberations throughout the FDP would significantly contribute to the successful implementation of the Bachelor of Pharmacy (B.Pharm.) Curriculum (2026) under the framework of NEP 2020.

The inaugural session concluded with a group photograph, followed by high tea and networking, providing participants with an opportunity to interact with the dignitaries and fellow educators before the commencement of the technical sessions.

TECHNICAL SESSIONS IN FDP

Industry-Academia Synergy (11:30 AM – 1:30 PM) Session Chair: Dr. Lalthlenmawia

The first technical session was chaired by Dr. Lalthlenmawia, who welcomed the speakers and emphasized the importance of aligning pharmacy education with the competency-based framework envisioned under the Pharmacy Council of India (PCI) B.Pharm. Curriculum (2026). The session focused on outcome-based education, assessment strategies, curriculum implementation, and future-ready pharmacy education.

Technical Session I: Need of Industry and Academia synergy in the context of NEP 2020 Speaker: Dr. Sanjay K. Jain (11.45AM to 12.30PM) Director (Research & Development), BTIPS, Sagar; Ex. Prof. and Head, Department of Pharmaceutical Sciences, Dr. H S. Gour University, Sagar

Dr. Sanjay K. Jain delivered an insightful session on the principles and implementation of Outcome-Based Education (OBE) within pharmacy education. He explained the hierarchy of educational outcomes, including Vision, Mission, Program Educational Objectives (PEOs), Program Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs), highlighting their interrelationship in curriculum planning.









Technical Session IV: Insight into Academic Framework of the B. Pharm Curriculum (2026)
Speaker: Dr. Sandeep Arora, Professor & Dean, Faculty of Pharmaceutical Sciences, Amity University Punjab
His session focused on the implementation of the revised PCI curriculum from an institutional perspective. He emphasized that the new curriculum represents a paradigm shift from information-based teaching to competency-driven professional education. The session highlighted the importance of interdisciplinary learning, student-centric pedagogy, entrepreneurship, innovation, research commercialization, digital health, nutraceutical development, and industry collaboration.
Dr. Arora encouraged faculty members to transform traditional teaching practices into experiential and competency-based learning environments that prepare graduates to address evolving healthcare challenges while meeting national and international quality standards.
Dr. Sandeep Arora was felicitated by Dr. Chitme and the faculty members of the Amity Institute of Pharmacy before commencing his presentation.

Technical Session V: Strengthening Pharmacy Education in India Through USP Education Programs Speaker:Mr Ashok Eku Capability Building Leader, USP Education
Mr. Eku Ashok discussed the growing importance of industry-academia collaboration in developing globally competent pharmacy graduates. He presented an overview of India's expanding pharmaceutical sector and highlighted opportunities for students in quality assurance, regulatory affairs, manufacturing, clinical research, and pharmaceutical innovation. The session introduced various USP Education initiatives, including certificate programmes, Good Manufacturing Practice (GMP), pharmacopoeia standards, quality compliance, and digital learning platforms. He emphasized that stronger collaboration between academia and industry enhances workforce readiness, practical competency, regulatory knowledge, and employability. Participants were encouraged to integrate industry-supported learning resources into pharmacy education to bridge the gap between academic training and professional practice.

Technical Session VI: OBE principles, COs, POs, PEOs, CO-PO mapping, Bloom's taxonomy and CQI
Speaker: Dr. Deepthi Pandita Professor, DPSRU, New Delhi
Dr. Deepthi Pandita delivered a comprehensive lecture focusing on academic quality enhancement and effective curriculum implementation. The session highlighted learner-centred educational practices, curriculum alignment, quality assurance mechanisms, and innovative teaching-learning strategies that support competency development among pharmacy students. Faculty members were encouraged to adopt reflective teaching practices, continuous improvement measures, and evidence-based educational methodologies for enhancing learning outcomes.









Technical Session VII: CIA, ESE, rubrics, CO based question paper design and quality assurance
Speaker: Dr. Viney Lather Professor, Amity Institute of Pharmacy, Amity University Uttar Pradesh, Noida
Dr. Viney Lather concluded the invited technical sessions by discussing future directions in pharmacy education under the framework of NEP 2020. He emphasized the importance of integrating clinical competence, research aptitude, entrepreneurship, digital technologies, and interdisciplinary collaboration into pharmacy curricula. The session reinforced the need for faculty development, institutional innovation, and continuous curriculum refinement to produce globally competent pharmacy professionals.
During the session, the participant feedback forms were circulated to obtain evaluations regarding the overall programme, technical sessions, organization, and learning outcomes.

Technical Session VIII: AI Integration and Future-Focused Pharmacy Education
Speaker: Dr. Anoop Kumar, Assistant Professor, Delhi Pharmaceutical Sciences and Research University (DPSRU), New Delhi
Dr. Anoop Kumar delivered an engaging session on the integration of Python, Machine Learning, Artificial Intelligence (AI), Digital Health, Text Mining, and Knowledge Graphs in pharmacy education and research. He explained the workflow of AI-driven text mining, including corpus preparation, named entity recognition, relationship extraction, and knowledge graph construction. The session highlighted the concepts of knowledge graphs, LLM-assisted knowledge extraction, and TF-IDF for efficient literature mining and evidence synthesis. Practical examples demonstrated the applications of these technologies in biomedical research, drug discovery, clinical research, and digital health. The session concluded with an interactive discussion on incorporating AI tools into pharmacy teaching, research, and evidence-based practice.

Panel Discussion (5:00 PM)
The programme concluded with an interactive Panel Discussion moderated by Dr. Anjana Sharma. The panel included Dr. Chitra Gupta and Dr. Praveen, who engaged participants in discussions related to the implementation challenges and opportunities associated with the PCI B.Pharm. Curriculum (2026). Faculty members actively participated by sharing experiences, raising practical concerns, and discussing strategies for successful adoption of competency-based education, assessment reforms, and innovative teaching practices across pharmacy institutions.

Valedictory Session
The programme concluded with the Vote of Thanks, during which gratitude was expressed to the Chief Guest, invited speakers, dignitaries, faculty members, organizing committee, volunteers, and participants for their valuable contributions to the successful conduct of the Faculty Development Programme.
A group photograph was taken with all the speakers, dignitaries, faculty members, and participants, marking the successful completion of the One-Day Faculty Development Programme on Effective Implementation of the Bachelor of Pharmacy (B.Pharm.) New Curriculum (2026) under NEP 2020.



FRESHERS' PARTY 2026

9th September 2026









A vibrant Fresher Party 2026 was organized on 9 September 2026 at the E2 Auditorium, Amity University Uttar Pradesh, to warmly welcome the newly admitted students into the university community. The event was jointly organized by the Amity Institute of Pharmacy (AIP), Amity Institute of Horticulture Studies & Research (AIHSR), Amity Institute of Organic Agriculture (AIOA), Amity Institute of Indian System of Medicine (AIISM), and Amity Institute of Health Allied Sciences (AIHAS).

The programme commenced with an auspicious Ganesh Vandana, followed by the traditional ceremonial lamp lighting, symbolizing the beginning of a bright and enlightened academic journey. The ceremony was attended by Heads of Institutions, faculty members, senior students, and newly admitted students, creating a warm and welcoming atmosphere.

Senior students welcomed the freshers and introduced them to the spirit and culture of Amity University. The programme provided an opportunity for students from different programmes to interact, build new connections, and develop a sense of belonging within the university community.

The celebrations continued with an exciting array of dance, music, singing, and other cultural performances. Students showcased their creativity, confidence, and talent, while enthusiastic participation from both seniors and freshers made the auditorium lively and energetic.

One of the major highlights of the event was the Mr. Fresher and Ms. Fresher 2026 competition. The competition gave newly admitted students an opportunity to demonstrate their confidence, communication skills, personality, talent, and stage presence. After several rounds of evaluation by a panel of faculty judges, **Sahil Sharma, B.Sc. (Hons.) Agriculture**, was selected as **Mr. Fresher 2026,** while **Tiah Dixit, B. Pharmacy**, was selected as **Ms. Fresher 2026**.

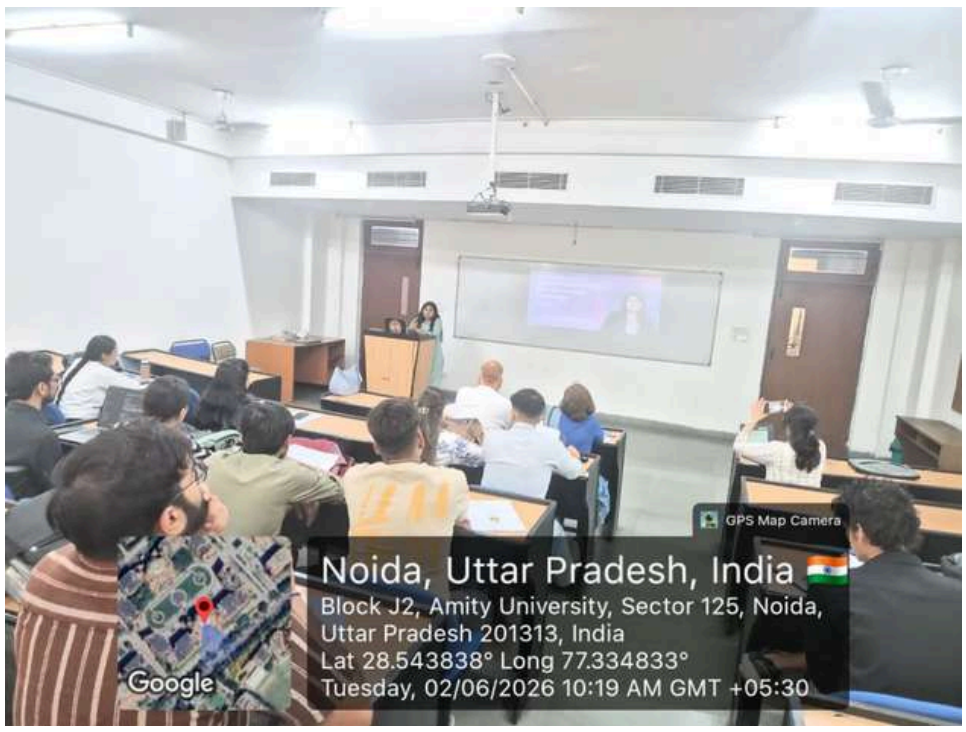
The presence and encouragement of the faculty members and Heads of Institutions added significance to the occasion. Their participation, along with that of students from all five institutes, strengthened interaction and promoted a spirit of unity, collaboration, and togetherness across the participating departments. With more than 500 participants, the programme reflected the enthusiasm and diversity of the university community.

The Fresher Party 2026 concluded as a memorable celebration of new beginnings, student talent, friendship, and togetherness. It marked the start of a new chapter for the freshers and provided them with an opportunity to begin their academic journey in an atmosphere of warmth, enthusiasm, and community.

CLUB COMMITTEE ACTIVITIES

INNOVATION & ENTREPRENEURSHIP CELL







2ND JUNE 2026

Objectives

- To understand the intersection of healthcare knowledge and business strategy.
- To equip pharmacy students with essential skills required to thrive in the digital age.
- To foster an entrepreneurial mindset among students in the healthcare sector.

Benefit in terms of learning/Skill/knowledge obtained

- Gained insights into the role of a healthcare analyst.
- Enhanced understanding of how to leverage digital tools in healthcare business models.
- Bridged the gap between clinical/pharmaceutical knowledge and corporate strategy.

Speaker Details

Speaker Name: Ms. Bhavya Dhawan
Speaker Designation: Healthcare Analyst
Speaker Affiliation: International SOS

Overall Report of the Activity

The Innovation & Entrepreneurship Cell of the Amity Institute of Pharmacy organized an insightful guest lecture titled "Transforming Healthcare Insight into Business Strategy" on 02 June 2026 at Amity University, Noida. The session aimed to guide students on gaining essential skills to thrive in the digital age, a critical step for future professionals navigating the dynamic healthcare sector.

Ms. Bhavya Dhawan, Healthcare Analyst at International SOS, delivered a comprehensive presentation. She highlighted key methodologies for integrating clinical knowledge with business acumen, emphasizing the growing demand for strategic roles in the healthcare industry. Students were introduced to digital transformation trends and data-driven decision-making processes that are currently shaping global healthcare markets.

The event saw enthusiastic participation from the students, engaging in interactive discussions regarding alternative career pathways beyond traditional pharmacy roles. The lecture successfully aligned with the Innovation & Entrepreneurship Cell's overarching vision of nurturing future leaders and innovators in the pharmaceutical domain, ensuring robust organizational growth and comprehensive event documentation.

FEUD ROYALE – SURVEY ANSWER COMPETITION

By I&E Cell







6th August, 2026

Objectives of the event

- To demonstrate enhanced knowledge of innovation, entrepreneurship, and startup ecosystems.
- To develop quick thinking, ideation, analytical skills, and the ability to respond under pressure
- To foster teamwork, collaboration, and healthy competitive spirit
- To engage students in an interactive learning experience beyond traditional classroom settings
- To encourage an entrepreneurial mindset through knowledge-based competition

Brief Description of the Activity:

Feud Royale was conducted as a team-based competitive activity in which participants were required to think like the majority and guess the most popular answers to survey questions. Teams consisted of 2–3 players. The game was designed around face-offs, buzzer-based answering, hidden survey answers, strikes and opportunities for opponents to steal the board. Each board contained five hidden answers, with higher-ranked answers carrying higher scores.

The tournament journey consisted of a common round,a revival round,knockout rounds and a grand final. Teams progressed by achieving higher scores and winning their respective matches, with the final two teams competing for the Feud Royale championship.

Winners and Runner-ups:

- The winning team was ‘Three Bad Ideas’ from AIMT.
- Runner-up team was ‘Three Brain Cells’ from AIB.

Outcome of the Activity:

- Enhanced awareness of innovation, entrepreneurship, and startup-related concepts.
- The activity provided students with an interactive platform to practice teamwork and strategic thinking.
- Participants were encouraged to make rapid decisions while considering collective/public preferences.
- The competitive format promoted communication, confidence, sportsmanship and active participation.
- The tournament structure created an engaging progression from common rounds to the championship.



AMITY ALUMNI CONNECT SESSION













13th AUGUST 2026

Objectives of the Event

- To orient newly admitted UG & PG students regarding the curriculum, academic expectations, and professional responsibilities.
- To provide first-hand insights into learning from accomplished alumni.
- To familiarize students with clinical postings, research opportunities, dissertation planning, and evidence-based practice.
- To motivate students to develop professional competencies and leadership skills throughout the programme.
- To encourage networking and mentorship between alumni and current students.
- To inspire studentsto pursue academic excellence, lifelong learning, and career advancement in Health & Allied Sciences Domain.

The Activity Conducted

On 13th August 2026, an Orientation Programme - Amity Alumni Connect Session was organised for newly admitted UG and PG students of Health and Allied Sciences. The programme was designed to familiarise students with the academic structure, curriculum, professional expectations, clinical training, research opportunities, dissertation planning and evidence-based practice. The session included addresses by institutional representatives and talks by invited alumni by the different departments of Health and Allied Sciences, who shared their academic and professional experiences with the students. The alumni interactions provided students with first-hand perspectives on different career pathways, professional development and opportunities available in the field of Health and Allied Sciences. An interactive panel discussion and question-answer session was subsequently conducted, providing students with an opportunity to clarify their queries and engage directly with the alumni. The programme concluded with the felicitation of the alumni guests, followed by the vote of thanks and closing remarks. This activity served as a platform for alumni-student interaction, orientation, mentorship and professional exposure, helping newly admitted students gain a broader understanding of their academic journey and future professional opportunities.



WORKSHOP ON "INTERVIEW PERFORMANCE READINESS PROGRAMME"







19th August 2026

Objective

To help students close the gap between what they know and what they can access and communicate when evaluation pressure arrives. The program is grounded in Organizational Psychology and behavioral science.

Eminent Speaker

Name: Ms. Ritika Kaur Keer
Designation: MSc Organisational Psychology (Distinction)
Organization: University of Manchester

Details of the Event

Programme Structure

Understanding Pressure → Building Psychological Resources → Performance Simulation → Making It Permanent

The programmer's four resource areas are grounded in the concept ofPsychological Capital, a well-established framework in Organisational Psychology.

Student Learning Outcomes

- Recognise how pressure affects attention, confidence and communication.
- Respond with greater clarity and structure under pressure.
- Recover and refocus after difficult or unexpected questions.
- Use practical strategies before, during and after interviews.

Hope, Efficacy, Resilience and Optimism

- Hope: clarity of goals, and the ability to identify an alternative route when an interview answer becomes stuck.
- Efficacy: confidence communicating experiences and thoughts clearly, including under pressure.
- Resilience: recovering composure after a difficult or unexpected question.
- Optimism: framing interviews, setbacks and weaknesses constructively.

Delivery Note

The programme was facilitated by Ritika Kaur Keer. Syed Ahmed Hussaini also attended this Amity session and contributed brief industry perspectives during selected discussions.

Outcome

The Interview Performance Readiness Programme was delivered to students at the Amity Institute of Pharmacy, Amity University Uttar Pradesh, Noida, on 19 August 2026. A total of 85 pre-session responses were received. The programme focuses on the gap between preparation and performance, helping students understand and work with the psychological processes that can affect access, communication and recovery under evaluative pressure. For







the pre/post comparison, only responses that could be matched across both forms by email address were included, resulting in 61 matched participants and allowing the same individuals to be compared before and after. Analysis of these 61 participants showed that average scores increased across all four dimensions: Hope, Efficacy, Resilience and Optimism, with an average overall shift of +4.85 points. Hope showed the largest average shift, at +1.77.

Among all 69 post-session respondents, 89.9% rated the programme Excellent and the remaining 10.1% rated it Good. Separately, 92.8% selected one of the first three readiness responses, indicating that they left either feeling more equipped to manage pressure or with greater clarity about what to work on next.

EVALUATION APPROACH

The programme used an 8-item developmental self-report indicator covering Hope, Efficacy, Resilience and Optimism. Each item was rated from 1 (Strongly Disagree) to 5 (Strongly Agree). Two items contribute to each of the four dimensions, and the eight items together produce an overall score ranging from 8 to 40.

A total of 85 pre-session responses and 69 post-session responses were received. For the pre/post outcome comparison, only responses that could be matched across both forms using the email address provided were included. This resulted in 61 matched participants.

Using matched responses allows for a direct before-and-after comparison of the same participants, rather than comparing two different respondent groups.

This indicator is intended to provide a developmental before-and-after comparison of participant self-perceptions. It should not be interpreted as a diagnostic or psychometric assessment.

All results are reported at cohort level. No individual participant scores are included in this report.

Participant Experience Data

Participant experience data (session ratings, readiness outcomes and standout components) is drawn from all 69 post-session respondents, regardless of whether a corresponding pre-session response could be matched.

FACILITATOR OBSERVATIONS

- Active Participation: Students were engaged throughout the session, completing their Interview Readiness Cards, asking genuine and thoughtful questions, and staying visibly present during discussions. Participation in the interactive quiz activity was particularly strong. Students were warm and respectful throughout, creating an open environment for practice and discussion.
- Practicing the Tools:Students practiced the breathing technique together during the session, then applied the programme's tools through structured interview simulations in groups of three.
- Extended Engagement:Although structured as a two-hour programme, the Amity session extended to approximately 3.5 hours on this occasion, with sustained student participation across the discussions, activities and interview simulations.

AMITY ALUMNI CONNECT SESSION







20th AUGUST 2026

Objectives of the Event:

- To provide M.Pharm Pharmaceutics students with an understanding of the relationship between neuropharmacology and pharmaceutical formulation.
- To explain how pharmacological action, therapeutic targets, and drug response influence the development of pharmaceutical formulations and drug delivery systems.
- To familiarize students with the relevance of pharmacological principles in the design and development of drug delivery systems for neurological disorders.
- To provide insights into the role of drug delivery in improving the therapeutic efficacy and targeted delivery of drugs acting on the nervous system.
- To encourage students to integrate pharmacological and pharmaceutics concepts in formulation and drug delivery research.
- To facilitate interaction with an experienced alumna and provide students with research-oriented perspectives on pharmaceutical sciences.

The activity conducted

The Amity Institute of Pharmacy organized an alumni knowledge-sharing and mentoring session titled “Neuropharmacology and Drug Delivery: Connecting Pharmacological Action with Pharmaceutical Formulation” for M.Pharm Pharmaceutics I and II Year students. The session was conducted by Dr Nitin Sharma, an alumnus of Amity who completed his PhD in Neuropharmacology and is currently working as an Assistant Professor at Lloyd Institute of Management & Technology. The session focused on establishing a connection between neuropharmacological principles and pharmaceutical formulation, highlighting the importance of understanding drug action and therapeutic response during the development of drug delivery systems. The alumna shared her academic and research experience and discussed the relevance of pharmacological considerations in formulation and drug delivery research, particularly in the context of drugs acting on the nervous system. The interaction provided M.Pharm Pharmaceutics students with an opportunity to understand how concepts from pharmacology can be integrated with pharmaceutics for the rational development of pharmaceutical formulations and drug delivery systems. Students actively participated in the discussion and raised questions related to pharmacological action, formulation approaches, drug delivery, and research opportunities. The session provided valuable research-oriented insights and encouraged students to develop an interdisciplinary perspective towards pharmaceutical formulation and drug delivery research.

LIVE SESSION ON "INDIA'S IPR POLICY FOR STARTUPS, INVENTORS & INNOVATORS: STRENGTHENING IP IN HEIS"

By I&E Cell







24TH AUGUST 2026

Objective of the Activity:

- To create comprehensive awareness among higher education institutions (HEIs) regarding national IPR policy reforms, patent filing procedures, and government support mechanisms.
- To guide academic researchers, faculty, and student innovators on protecting thesis/dissertation research outputs and commercializing IP.
- To explain the eligibility criteria, application process, and funding/reimbursement scopes of flagship schemes like KAssistant ProfessorILA, SIPP, NISP, and PCT international filings.
- To assist higher educational institutions in integrating research, IP, incubation, and startup frameworks under a unified institutional policy.

Activity Lead by: Ministry of Education's Innovation Cell (MIC) & Institution's Innovation Council (IIC) Network

Expert/Speaker Details:
Name: Prof. (Dr.) Unnat P. Pandit
Designation: Controller General of Patents, Designs and Trade Marks (CGPDTM), Government of India

Brief Description of The Activity: The online livestream commenced with introductory remarks by Dr. Deepan Sahu, Assistant Innovation Director at MIC, highlighting India's milestone achievement of exceeding 2.2 lakh DPIIT-registered startups and reaching over 1.1 lakh patent filings in FY 2024–25, with Higher Educational Institutions (HEIs) contributing over 35% of total domestic filings across 17,300+ Institution's Innovation Councils (IICs).

Prof. (Dr.) Unnat P. Pandit delivered a keynote address detailing the evolution of India's IP framework following the National IPR Policy 2016 and NEP 2020. He presented key statistical growth metrics, noting that patent grants increased from 6,500 in 2014–15 to over 100,000 annually, with domestic filings rising to 69% of overall filings. He highlighted a critical gap where university researchers abandon patent applications post-filing and strongly advised institutions to adopt expedited publication and expedited examination so patent decisions are granted before students finish their academic tenure.

Key programs and frameworks discussed in detail included:

• KAssistant ProfessorILA Scheme: Reimbursement of official patent filing fees across 40,000+ academic applications covering UGC, AICTE, and state university systems.

• SIPP Scheme & IP Mitra Diagnostic Tool: Access to specialized IP Mitras and automated diagnostic tools on the IP India portal to facilitate techno-legal drafting and filing support.



- PCT International Filings: Utilizing the Patent Cooperation Treaty and NIPAM-PCT series to safeguard domestic academic IP across global jurisdictions.
- Institutional Policy Synergy: Integration of NISP frameworks, mandatory AICTE R&D cells, and 12 regional AICTE Innovation Centers offering TRL/MRL evaluation and commercialization mentorship.

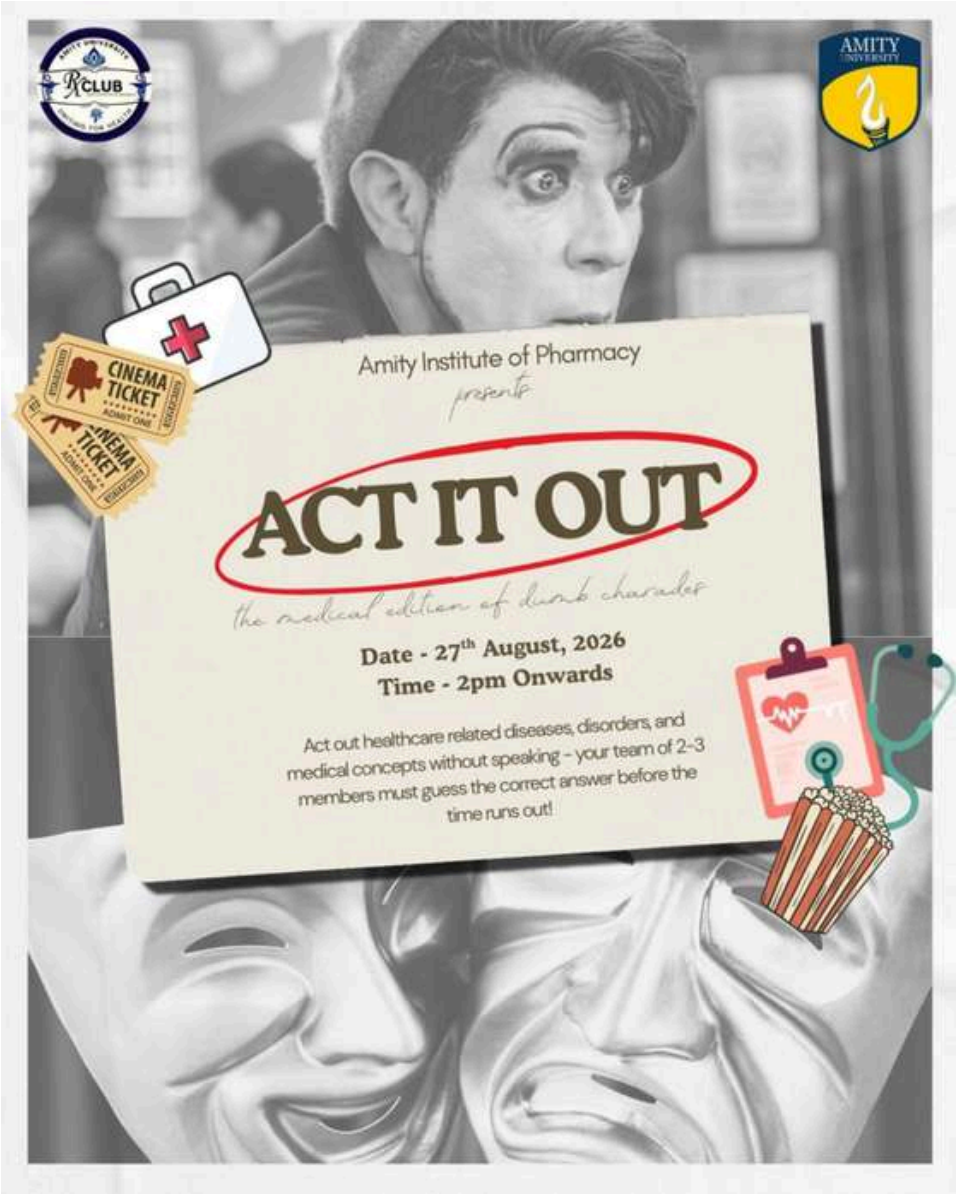
The session concluded with an interactive Q&A session addressing patent attorney fee structures, IP Mitra ratings, examination timeline reductions targeting under 24 months, and plans for 12 physical zonal IP policy formulation workshops for HEIs.

Outcome of the Activity:

- Understood key national IP policy reforms, fee concessions, and procedures to accelerate patent grants for academic research outputs.
- Identified funding, reimbursement, and advisory mechanisms including KAssistant ProfessorILA, SIPP 2.0, NISP framework, and IP Mitra diagnostic tools.
- Learned how to integrate campus R&D, IP ownership, technology transfer, and startup policies into a cohesive institutional ecosystem.

ACT IT OUT

By RX Club







27th AUGUST 2026

Act It Out: Medical Edition was an interactive, team-based healthcare charades competition designed to merge clinical awareness with experiential learning. Moving away from conventional pedagogy, the event challenged student teams to communicate complex medical equipment, pathological conditions, and high-stakes emergency scenarios—such as myocardial infarctions and acute allergic reactions—solely through non-verbal gestures under strict time limits. Across three progressively demanding rounds, the initiative successfully promoted quick clinical recall, non-verbal communication, and collaborative problem-solving in a vibrant, engaging atmosphere.

Objectives of the Events:

- Promote Healthcare Literacy and Awareness: Reinforce key clinical concepts including, diagnostic tools, disease pathologies, and emergency scenarios in an interactive, non-academic setting.
- Cultivate Team Collaboration and Quick Thinking: Foster teamwork, trust, and real-time problem-solving under time constraints through competitive, multi-round group dynamics.
- Encourage Experiential Learning: Move beyond conventional textbook learning by utilizing dramatization and simulation to improve conceptual recall and engagement among peers.

Details of the Event:
Date: 27-08-2026
Time: 14:00 hrs. / 2:00 p.m

Eminent Guests:
Dr. Tanveer Naved sir, Deputy Dean of Health and Allied sciences, Amity University
Prof.(Dr.) Havagiray Chitme, Head of Institute, Amity Institute of Pharmacy
Prof.(Dr.) Viney Lather, Professor, Amity Institute of Pharmacy

Distribution of awards.
1st Position: Team Gene Girls (Agrima Shukla and Mannat)
2nd / Runner up: Zero Words (Rajvardhan Suryavanshi, Dr. Bhanjana Mathur, Shivangi Bhardwaj)
3rd Position: Bihari Cube (Aqsa Akhtar, Pragati, Shifa akhtar)
And, Best Performance: Anshika

Organising team:
Faculty co-ordinators-
Dr. Swati Madan
Dr. Shikha Saxena
Dr. Ramanpreet Walia





Student co-ordinators-
President: Ms.Anushka Sharma
Vice-President: Mr. Akshay Pandey
General Secretary: Mr. Alok Kumar
Joint Secretary: Ms. Sagun Rai
Treasurer: Ms. Arushi

Outcome of the Event:

- Enhanced Applied Recall: Participants demonstrated quick cognitive retrieval of core healthcare terminology, medical equipment, and pathologies under competitive time constraints.
- Strengthened Team Dynamics: The fast-paced structure fostered active listening, peer coordination, and rapid collective problem-solving across all three rounds.
- High Student Engagement: The gamified format successfully bridged academic concepts with co-curricular recreation, driving peer-to-peer learning in an accessible, low-stress environment.

THE ROLE OF THE PHARMA EXECUTIVE: BRIDGING INNOVATION, STRATEGY, AND MARKET EXECUTION

By I&E Cell







11TH SEPTEMBER 2026

Aim: To provide students with practical insights into the pharmaceutical industry's business and management functions and to bridge the gap between academic learning and industry expectations.

- To familiarize students with the evolving role of pharmaceutical executives in today's healthcare ecosystem.
- To understand how scientific knowledge and innovation is translated into business strategies and market success.
- To expose students to product management, marketing strategies, and commercial execution in the pharmaceutical sector.
- To provide guidance on career opportunities and skill requirements for aspiring pharmaceutical professionals.
- To facilitate interaction between students and successful alumni working in the pharmaceutical industry.

Expert / Speaker Details

Name: Mr. Karan Chopra
Designation: Product Manager, Simkare Lifesciences
Brief Profile: Mr. Karan Chopra is a Product Manager at Simkare Lifesciences and a Distinguished Alumnus of the Amity Institute of Pharmacy.

Brief Description of The Activity

The session, led by Mr. Karan Chopra, provided a deep dive into the practical aspects of pharmaceutical innovation, marketing and sales. The discussion highlighted the importance of Customer Relationship Management (CRM) in building client relationships, keeping updated with market surveys. The speaker also outlined significant sales challenges, including competition for the same formulations, reducing margins, and government policies. Finally, he discussed the "Why" of entering the business side of pharma, noting the immense potential for income, growth, and the creation of a brand image, while stressing the rule to never compromise on quality over profits.

Outcome of the Activity

- Enhanced awareness of the roles and responsibilities of pharmaceutical executives.
- Better understanding of the relationship between innovation, marketing, and business strategy in the pharmaceutical industry.
- Improved knowledge of product lifecycle management and market execution.
- Increased industry readiness and career awareness among pharmacy students.
- Strengthened alumni–student engagement and networking opportunities.
- Students gained practical knowledge on how to conduct themselves as a professional brand in the pharma industry.

INDUSTRY EXPERT TALK
DRUG PRODUCT DEVELOPMENT: REGULATORY PERSPECTIVE

By R&W Cell





17th SEPTEMBER 2026

The Industry Expert Talk was organized by the Research and Writing Cell, Amity Institute of Pharmacy, to provide students with an understanding of drug product development from a regulatory perspective. The session focused on the principles involved in designing a quality pharmaceutical product, establishing a consistent manufacturing process, identifying critical quality attributes and process parameters, and understanding the regulatory considerations involved throughout product development. DETAILS OF THE EVENT The Industry Expert Talk was conducted on 17 September 2026 from 12:00 PM onwards at J1 Block 307. The session provided an overview of the various stages and considerations involved in pharmaceutical development, with particular emphasis on the regulatory perspective.

The session began with Dr. Piush Khare (Senior Manager, Global Regulatory Affairs and Strategy, FS Solution Pvt. Ltd) discussing Quality by Design (QbD) and its role in designing quality products and establishing a consistent manufacturing process. Dr. Khare explained that pharmaceutical development involves identifying critical quality attributes and process parameters and using this knowledge to minimize unexpected outcomes. The discussion also highlighted the advantages of a knowledge-and risk-based approach, including improved manufacturing processes, risk-based regulatory decisions, reduction in post-approval submissions, and opportunities for real-time quality. control. The speaker then discussed the major components of pharmaceutical development, including the active pharmaceutical ingredient (Assistant ProfessorI), excipients, and container closure. system.

The importance of understanding Assistant ProfessorI characteristics such as solubility, permeability, water content, particle size, crystal properties, biological activity, polymorphism, impurities, and degradation was explained. The session also emphasized the need for an initial risk assessment of drug substance attributes and their potential impact on product quality. The discussion further covered the selection and evaluation of excipients, including their effect on product quality, safety considerations, compatibility, and appropriate documentation. Examples of regulatory considerations associated with certain excipients and their use in specific populations were also discussed. Another major focus of the session was the Quality Target Product Profile (QTPP) and Critical Quality Attributes (CQAs). The speaker explained how parameters such as dosage form, route of administration, dosage strength, pharmacokinetics, stability, identification, assay, content uniformity, dissolution, disintegration, degradation products, viscosity, and microbial evaluation contribute to defining and evaluating the quality of a drug product. The session also addressed risk assessment, design space, and control strategy. Different approaches to formulation optimization, including prototype formulation,



factorial design, and artificial neural networking, were discussed. The potential role of artificial intelligence in future optimization of pharmaceutical development was also highlighted. Further discussion focused on drug product development reports, dissolution studies, manufacturing process development, container. closure systems, scale-up and scale-down, and microbiological attributes. Particular attention was given to areas that may attract regulatory queries, such as dissolution conditions, excipient safety and compatibility, container closure permeability. extractables and leachables, measuring devices, and scale-up parameters. Towards the conclusion, Dr. Khare summarized the crucial aspects of drug product development, including the rationale for product development, consideration of the reference listed drug or comparator product, Assistant ProfessorI properties, formulation optimization, excipient safety and compatibility, container closure selection, reproducible manufacturing, and drug product evaluation. The importance of dissolution, preservative evaluation, microbial parameters, and sterility testing, where applicable, was also emphasized. The presentation concluded with a summary of the key considerations required to support the development of a quality pharmaceutical product.

ORGANISING TEAM

The Industry Expert Talk was organized under the guidance of Dr. Havagray R. Chitme, Head of Institute, Amity Institute of Pharmacy, and Dr. Tanveer Naved, Deputy Dean, Health and Allied Sciences. The event coordinators were Dr. Rimpy Pahwa, Assistant Professor-I, Amity Institute of Pharmacy, and Dr. Neha Kukreti, Assistant Professor-1, Amity Institute of Pharmacy.

OUTCOME

The session provided students with an understanding of how pharmaceutical development relates to regulatory expectations and quality considerations. The discussion helped highlight the importance of systematic product development, scientific understanding of Assistant ProfessorIs and excipients, formulation and process optimization, and risk. assessment, quality attributes, stability, manufacturing, and appropriate evaluation of the final drug product. The session also gave students exposure to the role of regulatory considerations in pharmaceutical product development and demonstrated how development knowledge can support effective regulatory evaluation and decision-making.

PHARMACOVIGILANCE WEEK 2026

17th- 23rd September 2026









The Rx Club of Amity Institute of Pharmacy organized Pharmacovigilance Week 2026 from 17 to 23 September 2026, focusing on the importance of drug safety, adverse drug reaction (ADR) monitoring, risk assessment, and the role of pharmacists in promoting safer healthcare practices. Through a series of engaging academic and extracurricular activities, the initiative encouraged students to connect theoretical knowledge with real-world healthcare challenges.

Departmental Lecture

The week began on 17 September with a departmental lecture by Dr. Onkar S. Nayal on “Bio-inspired Small Molecules for Inhibition of Lipid Peroxidation.” Held at the J1 Block, the session brought together faculty members and M.Pharm students for an informative academic interaction. The lecture encouraged active participation, discussion, and questioning, providing students with an opportunity to engage with contemporary areas of pharmaceutical research.

Canvas of Care – Drawing Competition

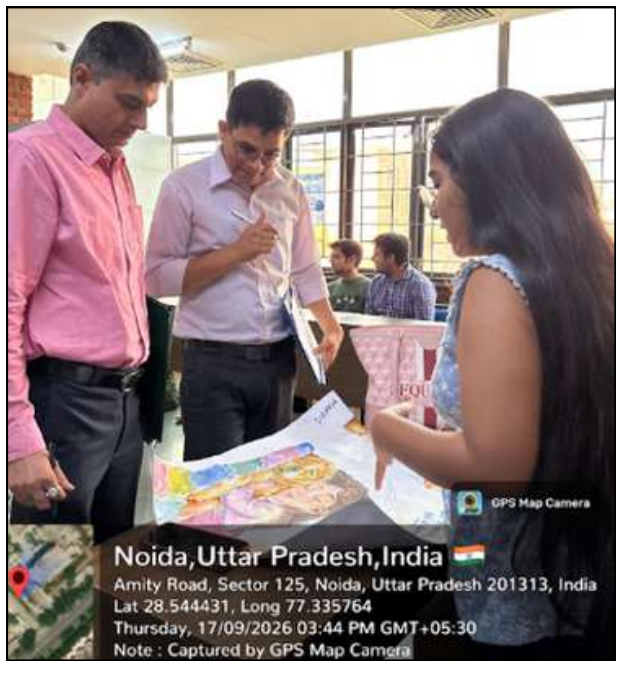
Later that day, the Rx Club hosted “Canvas of Care,” a poster and drawing competition that combined pharmaceutical knowledge with creative expression. Students explored themes related to pediatric and veterinary drug safety, geriatric polypharmacy, artificial intelligence in drug development, and healthcare communication barriers.

The competition received enthusiastic participation, with students presenting both individual and paired entries in a variety of artistic formats. The entries were evaluated on thematic relevance, visual appeal, messaging impact, and scientific accuracy. Yashika and Anshika secured a tie for first place, while Manshi was awarded second place for her presentation.

Debate & Discussion Competition

The week concluded on 23 September with a Debate and Discussion Competition, providing students with a platform to explore pharmaceutical ethics and contemporary healthcare issues. Participants addressed topics including healthcare economics, traditional medicine, and the risks associated with self-medication. The competition emphasized preparation, critical thinking, factual accuracy, effective communication, and the ability to respond to opposing arguments.

Top honours were awarded to Swatika for “From Ayurveda to Antibiotics,” Bhumija Kanwar for “Self-medication does more harm than good,” and Charvi Tandon for “When healthcare becomes business.” Arpit received a Certificate of Appreciation for his commendable performance.



A Week of Learning and Engagement

Pharmacovigilance Week 2026 brought together academic learning, creativity, critical thinking, and student participation. From discussions on pharmaceutical research and drug safety to creative poster presentations and debates on healthcare ethics, the activities helped students explore pharmacovigilance beyond the classroom and appreciate its relevance to everyday healthcare practice. Pharmacovigillance week,26

The Rx Club expressed its gratitude to Dr. H.R. Chitme, Head of the Institution, faculty coordinators Dr. Swati Madan, Dr. Shikha Saxena, and Prof. Dr. Ramanpreet Walia, and convener Dr. Tanveer Naved for their guidance and support. The enthusiastic participation of students played a central role in making the week a meaningful academic and co-curricular experience.

WORLD PHARMACISTS DAY, 2026

By Rx Club







25th SEPTEMBER 2026

Executive Summary

World Pharmacists Day was celebrated on 25th September 2026 to honor the contributions of the pharmacy profession to global health and patient care, centering on this year's theme: Combating Anti-microbial Resistance (AMR). To mark this occasion, [Insert Institute Name] collaborated with the Rx Club to organize a series of engaging activities. The overarching goal of these four events—a Rangoli competition, a slogan competition, an awareness rally, and a plantation drive—was to foster a sense of community among future healthcare professionals while spreading awareness about the critical role of pharmacists in preventing AMR and the importance of environmental stewardship in health.

Event 1: Logo & Rangoli Competition

Objective: To encourage students to creatively express themes related to healthcare, medicine, and the pharmacy profession through traditional visual arts.

Overview:

The day commenced with a vibrant Rangoli competition where participants showcased their creativity by designing intricate patterns. Student teams utilized various colors and materials to depict the indispensable role of pharmacists in society, setting an energetic and positive tone for the rest of the day. The event was judged based on thematic relevance and artistic execution.

Key Outcomes:

- Successfully visually communicated the core values of the pharmacy profession and the theme of combating AMR.

Winners: Team Kalakriti (Jyoti, Tannu, Pari, Drishti) – Bachelor of Pharmacy, 3rd semester. Successfully visually communicated the core values of the pharmacy profession

Event 2: Slogan Competition

Objective: To challenge students to craft impactful and memorable messages that encapsulate the essence of patient care and pharmacy practice.

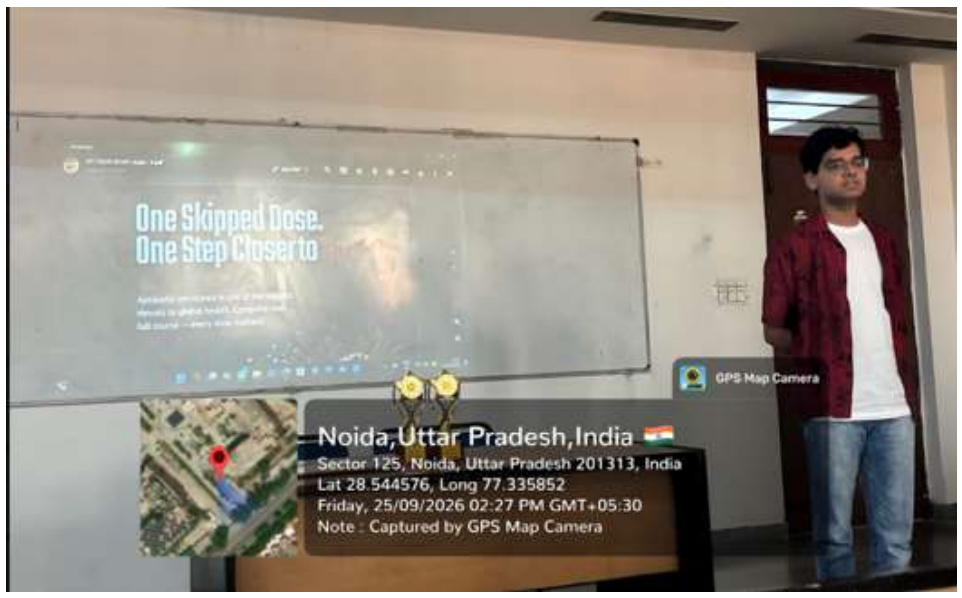
Overview:

Following the visual arts segment, students engaged in a slogan competition aimed at producing catchy and meaningful phrases. The submissions reflected a deep understanding of the responsibilities held by pharmacists in improving global health outcomes and tackling antibiotic misuse. The winning slogans were subsequently selected to be showcased during the campus rally.

Key Outcomes:

- Generated numerous creative slogans that were later utilized for campus awareness.
- Encouraged critical thinking regarding the pharmacist's role in preventing AMR.

Winners: Tanuj Kumar and Darshil Jha.









Event 3: Awareness Rally
Objective: To publicly highlight the importance of the pharmacy profession and draw the campus community's attention to health awareness.
Overview: A major highlight of the celebration was the Awareness Rally. Students and faculty marched enthusiastically from the J1 Block all the way to the University Herbal Garden. Carrying banners and actively chanting the winning phrases from the earlier slogan competition, the rally successfully engaged onlookers and spread a positive message about the profession across the campus.
Key Outcomes:

- Successfully mobilized a large group of students for a unified cause
- Increased visibility of the Rx Club and the pharmacy department across the broader university campus

Event 4: Small Plantation
Drive Date: 25/09/2026
Time: 04:30 PM
Venue: University Herbal Garden
Target Audience: Pharmacy students, faculties

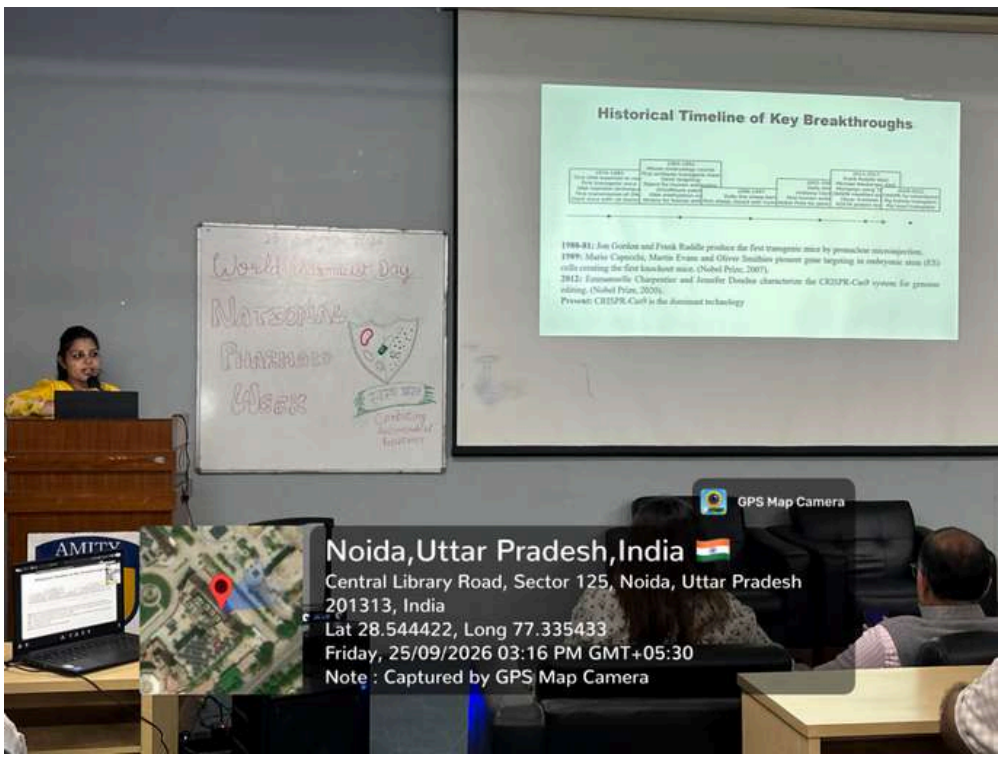
Objective: To promote environmental stewardship and highlight the natural botanical origins of many modern pharmaceuticals.
Overview: The rally concluded at the University Herbal Garden, where a small plantation drive was conducted. Participants collaboratively planted a variety of saplings, with a special focus on medicinal plants. This hands-on initiative not only contributed to campus greenery but also served as a practical reminder of the link between nature and pharmaceutical sciences.
Key Outcomes:

- Successfully planted medicinal saplings in the herbal garden
- Fostered a sense of environmental responsibility among the future healthcare professionals

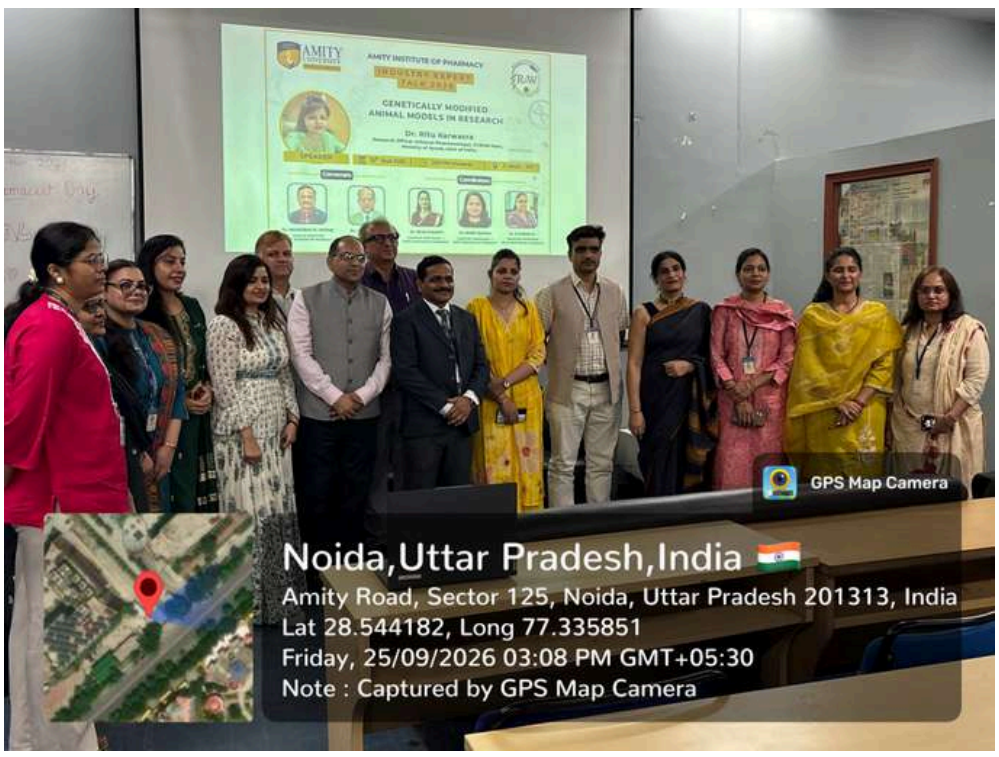


PANEL DISCUSSION SESSION

By R&W Cell







25th SEPTEMBER 2026

INTRODUCTION

On September 25, 2026, the Research & Writing Cell at the Amity Institute of Pharmacy, Amity University, organized a special academic event to celebrate World Pharmacist Day, emphasizing the vital role of pharmacists in advancing global healthcare, patient well-being, and research innovation. The program was anchored by Ms. Anushka Sharma (B.Pharm, 5th Semester) and Ms. Anvesha Rawat (B.Pharm, 1st Semester), who warmly welcomed the dignitaries, faculty members, and students. The ceremony honored key leadership, including Prof. (Dr.) H. R. Chitme, Head of the Institute, and Prof. (Dr.) Tanveer Naved, Deputy Dean of Health & Allied Sciences, alongside the distinguished guest speaker, Dr. Ritu Karwasra, Research Officer (Clinical Pharmacology) at CCRUM, Ministry of AYUSH, Government of India.

The scientific proceedings opened with an interactive panel discussion focused on Antimicrobial Resistance (AMR), moderated by Prof. (Dr.) Ramanpreet Walia. The expert panel featured Prof. (Dr.) Vinay Lather, Prof. (Dr.) Rupesh Gautam, Prof. (Dr.) Nitin Sharma, Dr. A. Porselvi, Dr. Sangeeta Gupta, and Dr. Ritu Karwasra, who deliberated on multi-disciplinary strategies, clinical stewardship, and novel pharmacological interventions.

Following the panel discussion, Dr. Ritu Karwasra delivered an expert guest lecture on genetically modified (GM) animal models in research. She comprehensively covered their definition, historical evolution from microinjection to CRISPR-Cas9, core genetic techniques, model categories, preclinical applications, and strict adherence to the ethical 3Rs Principle.

PANEL DISCUSSION

The interactive panel discussion on Antimicrobial Resistance (AMR) opened with introductory remarks from the moderator, Prof. (Dr.) Ramanpreet Walia (Professor and Center Head). She extended World Pharmacist Day greetings to all participants and highlighted drug-resistant infections as a rapidly escalating global mortality threat, emphasizing that improper prescribing practices, unnecessary prescriptions, and patient non-compliance create exposure cycles that allow pathogens to mutate and develop resistance.

Setting the foundation on challenges and strategic interventions, Prof. (Dr.) Vinay Lather (Professor and Center Head) noted that bacterial resistance has been documented for over a decade due to rapid microbial evolution. He identified key drivers such as over-the-counter self-medication and premature discontinuation of prescribed antibiotics. He also urged doctors and pharmacists to jointly educate patients and advocated for stronger diagnostics, infection control, and targeted public awareness campaigns on rational drug usage.

Expanding on systemic and regulatory frameworks, Dr. Ritu Karwasra (Research Officer, Clinical Pharmacology) emphasized that patient non-compliance catalyzes resistance, noting that antibiotics are ineffective against viral infections. She then outlined India's National Action Plan (NAssistant Professor) 2.0, which focuses on strengthening nationwide AMR surveillance, minimizing environmental risks, and exploring traditional medicine as viable adjuvant therapies.

Contributing to clinical perspectives, Prof. (Dr.) Rupesh Gautam (Professor of Pharmacology) called for strict pharmacovigilance and eliminating unnecessary prescriptions. Dr. Sangeeta Gupta (Assistant Professor) highlighted environmental contamination and the need to optimize PK/PD parameters for novel antimicrobials. Dr. A. Porselvi (Associate Professor) warned against redundant antibiotic formulations, agricultural misuse, and improper pharmaceutical waste dumping, asserting that NAssistant Professor 2.0 requires collective societal effort, grassroots health literacy, and greater professional recognition for pharmacists.

Concluding the session, Prof. (Dr.) H. R. Chitme, Head of the Institute, emphasized rational drug use based on sensitivity testing rather than broad-spectrum switching. The panel discussion was formally brought to a close by Prof. (Dr.) Tanveer Naved, Deputy Dean of Health & Allied Sciences, who extended compliments to the panelists, faculty, and guest speaker Dr. Ritu Karwasra for addressing this critical global health challenge.

LECTURE BY Dr. RITU KARWASARA

Following the panel, Dr. Ritu Karwasra, Research Officer (Clinical Pharmacology) at CCRUM, Ministry of AYUSH, Government of India, delivered an expert lecture titled "Genetically Modified Animals in Research: Models, Mechanisms and Ethical Considerations".She defined GM animals as organisms whose genetic composition is artificially altered via recombinant DNA technology to introduce advantageous novel traits or disrupt physiological characteristics for agricultural productivity and preclinical biomedical modeling.

Tracing historical developments, she then highlighted key scientific milestones: Jon Gordon and Frank Ruddle's first transgenic mice via pronuclear microinjection (1980–81), Mario Capecchi, Martin Evans, and Oliver Smithies' gene targeting in embryonic stem (ES) cells to generate knockout mice (1989, Nobel Prize 2007), and Emmanuelle Charpentier and Jennifer Doudna's characterization of CRISPR-Cas9 (2012, Nobel Prize 2020).

She continued by detailing seven principal genetic engineering techniques: pronuclear microinjection, ES cell-mediated gene transfer, Somatic Cell Nuclear Transfer (SCNT, famously used for Dolly the sheep), CRISPR-Cas9 double-strand break repair, viral-mediated transfer (retroviruses/lentiviruses), RNA interference (RNAi via siRNA/shRNA), and transposon-mediated gene transfer (Sleeping Beauty system).

Categorizing engineered models, she showcased Transgenic Models (Oncomouse, GFP-zebrafish), Knock-out Models (p53 knockout for tumorigenesis, ApoE for atherosclerosis, immunodeficient xenograft models like Nude, SCID, NOD-SCID, NSG, and NOG), Conditional Models using Cre-LoxP/FLP-FRT or Tet-On/Tet-Off systems (conditional BRCA1, Tet-On c-Myc), Knock-in Models (Huntingtin knock-in), Humanized Models (NSG with human immune cells, humanized liver mice), Reporter Models (Rosa26-LacZ), Mutagenized Models (ENU-induced), and Chimeric Models.

Highlighting translational utility, Dr. Ritu explained applications across species: rodents for oncology and metabolic diseases, transgenic rats for cardiovascular and neurodegenerative disorders (Parkinson's, Alzheimer's), Zebrafish (Danio rerio) for toxicology, Drosophila melanogaster for genetics, C. elegans for aging, and large animals (pigs, rabbits, non-human primates) for xenotransplantation, hypercholesterolemia, and complex brain disorders like autism.

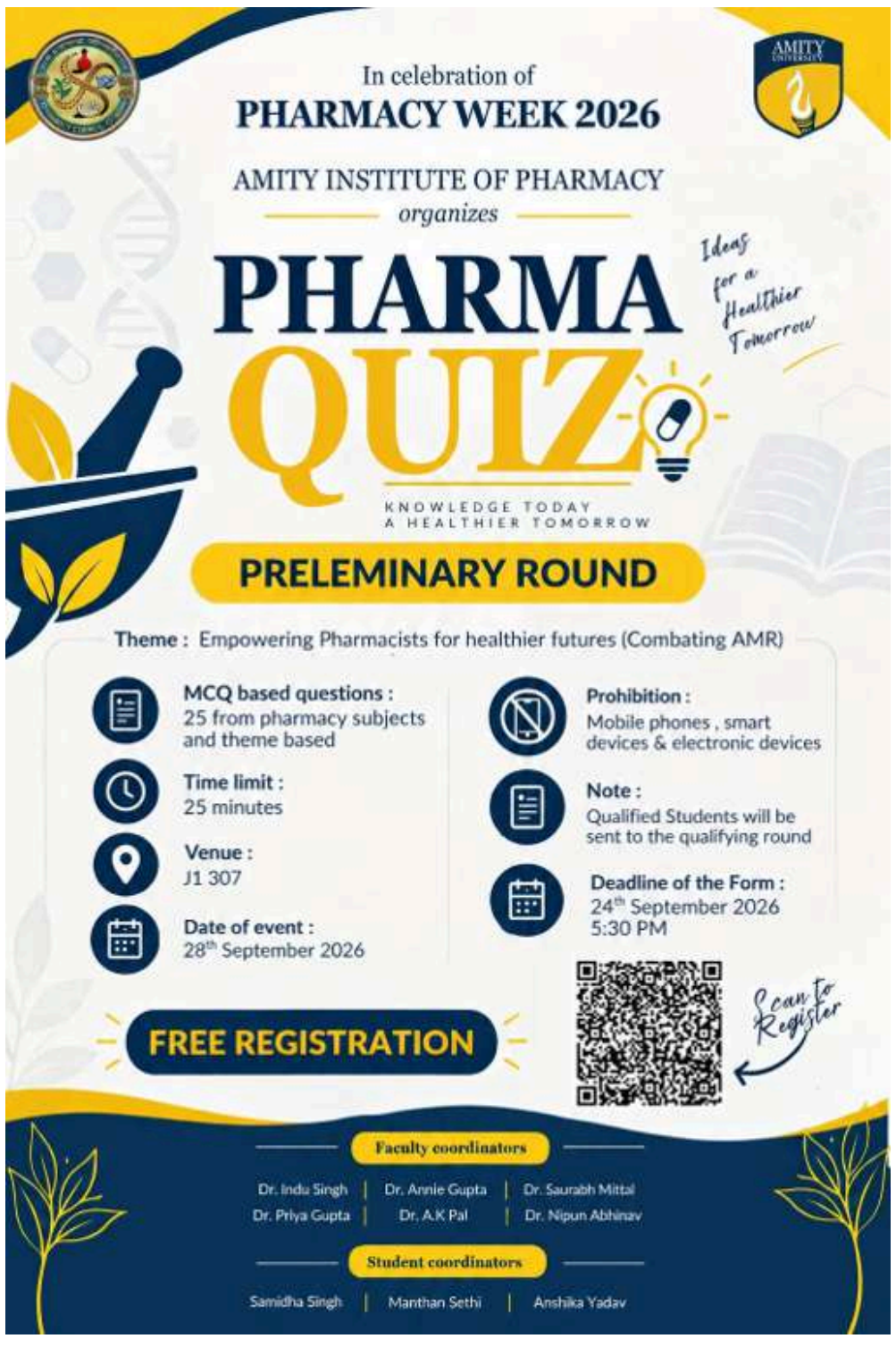
Concluding her presentation, she addressed animal welfare frameworks (Ormandy et al., 2011) and emphasized strict adherence to the 3Rs Principle: Replacement (in silico/in vitro methods), Reduction (sample size optimization via power analysis), and Refinement (enhanced housing, analgesia, and humane endpoints). In her concluding remarks, she stated that genetically engineered animals remain foundational to modern biomedical research. She expressed that while advances in genome-editing technologies continue to expand their potential—particularly toward developing complex, human-relevant models in large animals—this scientific power must be exercised with profound responsibility. Dr. Ritu Karwasra concluded the lecture by reiterating the absolute necessity for strict ethical review and an unwavering commitment to the 3Rs framework.

CONCLUSION

The celebration of World Pharmacist Day 2026 at Amity Institute of Pharmacy successfully brought together eminent academicians, researchers, and students for an enriching day of high-caliber scientific discourse. Following the guest lecture, a formal felicitation ceremony was held where Dr. Ritu Karwasra was presented with a certificate and a token of appreciation by Prof. (Dr.) H. R. Chitme, Prof. (Dr.) Tanveer Naved, and other dignitaries in recognition of her valuable expertise and contribution. A formal vote of thanks was subsequently delivered, expressing deep gratitude to the leadership, the organizing committee of the Research & Writing Cell, student anchors Ms. Anushka Sharma and Ms. Anvesha Rawat, faculty members, and attendees who contributed to the seamless execution of the event.

By seamlessly bridging clinical stewardship with advanced preclinical innovation, the commemoration offered a comprehensive overview of modern pharmaceutical challenges and solutions. The dual focus—ranging from actionable clinical and regulatory strategies against Antimicrobial Resistance to the precise methodologies and ethical frameworks governing Genetically Modified Animal Models—empowered participants with vital perspectives on rational drug use, targeted delivery systems, and responsible research practices. Ultimately, the event reinforced the institution's steadfast commitment to advancing healthcare education, fostering clinical responsibility, and inspiring scientific excellence among future pharmaceutical leaders.

QUIZ COMPETITION





28TH SEPTEMBER 2026

Objective

The Pharma Quiz 2026 was organised by Amity Institute of Pharmacy as part of the celebrations of World Pharmacist Day and Pharmacy Week 2026, on the theme “Swastha Bharat: Combating Antimicrobial Resistance (AMR)”. The quiz aimed to test and strengthen students’ conceptual knowledge of core pharmacy subjects, to create awareness about antimicrobial resistance and the role of pharmacists in combating it. The preliminary round also served to identify meritorious students for the qualifying round.

Details of the Event

The preliminary round of the Pharma Quiz 2026 was held on Monday, 28th September 2026 at 12:00 PM in Room No. 307, J-1 Block, Amity University, Noida, in celebration of World Pharmacist Day and Pharmacy Week 2026. The event was conducted in the following stages:

·Registration: A Google Form was circulated among the students to invite registrations. Registration was free, and the form closed on 24th September 2026 at 5:30 PM. The call received an encouraging response for the quiz.

·Preliminary round: The preliminary round was conducted as a pen-and-paper (hardcopy) test of 25 multiple-choice questions to be answered in 25 minutes. The questions were drawn from core pharmacy subjects and from the theme of the event, antimicrobial resistance, including the rational use of antibiotics, antimicrobial stewardship and the role of pharmacists in combating AMR. Mobile phones, smart devices and other electronic devices were not allowed in the examination hall, and the test was invigilated by the faculty coordinators.

·Evaluation and selection: The answer sheets were checked by the faculty coordinators, and on the basis of the scores obtained, 26 students were selected for the qualifying round of the competition.

The event concluded with a vote of thanks to the participants, the faculty coordinators and the student coordinators for their enthusiastic involvement in making the event a success.

Organising team

Faculty Coordinators (Amity Institute of Pharmacy):

·Dr. Indu Singh
·Dr. Annie Gupta
·Dr. Saurabh Mittal
·Dr. Priya Gupta
·Dr. A. K. Pal
· Dr. Nipun Abhinav

Student Coordinators:

·Samidha Singh
·Manthan Sethi
· Anshika Yadav
· Kanika
· Chaitanya



Outcome

The Pharma Quiz 2026 proved to be an enriching experience for the participants. The key outcomes of the event were:

·Participants revised and consolidated fundamental concepts across the major subjects of the pharmacy curriculum.

·Students gained awareness of antimicrobial resistance as a public-health challenge and of the pharmacist's role in promoting the rational use of antimicrobials, in line with the theme "Swastha Bharat: Combating AMR".

·Students gained practice in attempting time-bound MCQ tests, building speed, accuracy and confidence for competitive examinations such as GPAT and NIPER-JEE.

· The 26 best-performing students were identified and selected for the qualifying round of the competition.

Student Achievements

New Delhi Global Youth Summit 2026

Name & Program.	Details	Student Photo	Certificate
Jivika Gupta 2nd Year B. Pharm A4513325032	secured 2nd position at NEW DELHI global youth summit 2026 held at shaheed sukhdev college of buisness studies under BEAT BREAKOUT western dance		

CSI After Hours: Episode 2

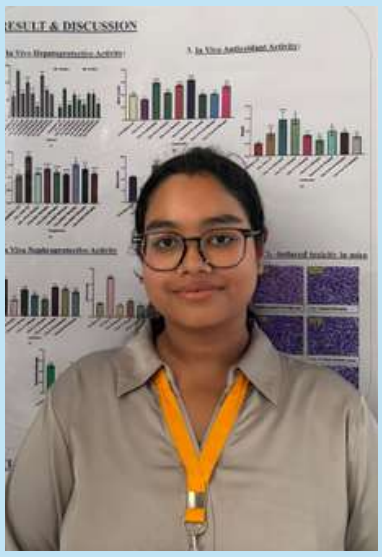
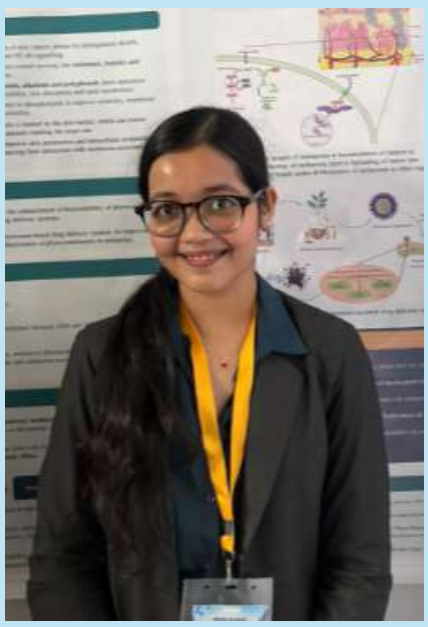
Name & Program.	Details	Student Photo	Certificate
Vanshika Bhagat 2nd Year, B. Pharm A4513325038	Secured 3rd position in the CSI After Hours Episode 2: Digital Shadow competition, organized by the Amity Institute of Forensic Sciences.		
Hemanshi Choudhary 2nd Year, B. Pharm A4513325007	Secured 3rd position in the CSI After Hours Episode 2: Digital Shadow competition, organized by the Amity Institute of Forensic Sciences.		
Saloni 2nd Year, B. Pharm A4513325045	Secured 3rd position in the CSI After Hours Episode 2: Digital Shadow competition, organized by the Amity Institute of Forensic Sciences.		

SPSR International Webinar

Name	Details	Student Photo	Certificate
Umang Bansal 3rd Year, B.Pharm A4513324076	Participated in the 107th SPSR International Webinar on “A Food-Compatible Polysaccharide–Iron Complex with Enhanced Stability and Clarity for Beverage Fortification,” organized by the Society of Pharmaceutical Sciences and Research (SPSR), India, in association with the Malaysian Society for Molecular Biology and Biotechnology (MSMBB) on 30 August 2026.		

Poster Presentation at DIPSAR

Name	Details	Student Photo	Certificate
Manosheeta Sarkar 2nd Year, B.Pharm A4513325019	Participated in Poster Presentation at DIPSAR for the Conference cum Workshop on Drug Delivery of Complex Molecules		
Asmita Saxena 2nd Year, B.Pharm A4513325016	Presented poster for conference-cum-workshop on Drug Delivery of Complex Molecules held from 24th to 25th September,2026 at DPSR University, New Delhi		

Name	Details	Student Photo	Certificate
Richa Rajnish 2nd Year, B.Pharm A4513325085	Participated in Poster Presentation at DIPSAR for the Conference cum Workshop on Drug Delivery of Complex Molecules		
Anshika Mishra 2nd Year, B.Pharm A4513325075	Presented poster for conference-cum-workshop on Drug Delivery of Complex Molecules held from 24th to 25th September,2026 at DPSR University, New Delhi		

Expert sessions on “AI for Drug Discovery and Clinical Research”

Name	Details	Student Photo	Certificate
Saiyam 2nd Year B.Pharm A4513325098	Participated in expert sessions on “AI for Drug Discovery and Clinical Research,” gaining exposure to the applications of artificial intelligence in modern pharmaceutical research and clinical development.		

Rangoli Competition

Name	Details	Certificate
Drishti Jyoti Tannu 2nd year, B.Pharm	Received 1st position in rangoli competition organized by Rx Club	

Expert session on “The Complete Package: Bridging the Gap Between Mastery and Empathy,”

Name	Details	Student Photo	Certificate
Saiyam 2nd Year B.Pharm A4513325098	Participated in expert sessions on “The Complete Package: Bridging the Gap Between Mastery and Empathy,” gaining insights into professional excellence, communication, and empathetic practice.		

Logo and Slogan competition

Name	Details	Student Photo	Certificate
Tanuj Kumar 1ST Year, B.Pharm A4513326100	Received 1st Position in Logo and Slogan competition by Rx Club		

Articles by Students

Antimicrobial Resistance: A Global Threat

Antimicrobial resistance (AMR) occurs when microorganisms no longer respond to antimicrobial medicines . As a result , infection becomes harder or sometimes impossible to treat. It establishes a major global health concern. The article aims to overview the types and mechanisms of antimicrobial resistance. The cause, spread and what the impacts. There are various strategies taken including antimicrobial stewardship, infection prevention and one health approach.
Keywords:Antimicrobial resistance, Antimicrobial stewardship, One health approach.

Introduction

Antimicrobial resistance occurs when the microbes such as virus , fungi , bacteria , parasites do not respond to the antimicrobial treatment in humans and animals.
Due to this the microorganisms become resistant and stay in the body of humans or animals and because of that infection persists causing the disease harder to treat. Nowadays, AMR is considered a major health concern due to the misuse and overuse of antibiotics which increases the global burden of AMR.

Types of antimicrobial resistance

Drug resistance can be classified into three categories -

1. Intrinsic resistance - when the microorganisms inherit traits that make it resistant to particular antibiotics.one of the common examples is gram negative bacteria whose cell membrane is made up of lipid . This resistance is due to the structure of characteristics of bacteria.
2. Adaptative resistance - It is temporary in nature to make the bacteria resistant due to the presence of certain kinds of environmental conditions such as temperature, ph , concentration of ions, nutrients availability. But when the environmental conditions recover, the bacteria will revert to their original susceptibility to antibacterials.
3. Acquired resistance - Develops due to the mutation of genetic materials , these mutations occur due to physical or chemical changes in the structure of bacteria.

Mechanism of antimicrobial resistance

Normally, antibiotics reach the bacteria and act on the target site of the bacteria, which treats the infection but in case of AMR ,there are four major ways to restrict the work of antibiotics.

1. Enzymatic inactivation - Bacteria can produce some kind of enzyme which destroys the antibiotics or reduces its effects. One of the examples is beta - lactamase enzyme produced by bacteria to reduce effects of penicillin.
2. Target modification - Antibiotics bind to the specific site of the bacteria for action but in this case,bacteria changes its location of target site so the antibiotics are unable to bind to target site.
3. Reduce entry- Some antibiotics need to enter the bacterial cell to work,but in AMR bacteria restrict the entry of antibiotics by changing the structure of cell membrane. So a negligible amount of antibiotics enters and can't work properly.
4. Efflux pump - there is a pump inside the bacteria which pushes out the antibiotics from the bacteria causes the decrease in concentration of drug and antibiotics can't work accordingly.

Cause spread and impact of antimicrobial resistance

AMR develops naturally from changes in genetic but it is greatly accelerated by inappropriate use of Antimicrobial drugs.

1. Overuse & misuse of antibiotics -most of the people take antibiotics when there is no need.
2. Wrong prescription of Antimicrobial dose.
3. Lack of awareness in the group of people.
4. Use of Antimicrobial in animals and agriculture.
5. Hygiene - poor access to clean water and sanitation.

When the resistant microorganisms develop it can easily spread through many ways such as by coming in close contact with people it can spread from people to people, it can also spread from animals to human, by contaminated food or water . Poor hygiene is also an important parameter that can easily be transmitted. Also environmental factors such as soil or water can act as reservoirs for resistant microorganisms.

The One Health approach recognizes the close connection between human, animal, and environmental health. It encourages coordinated efforts across these sectors to address antimicrobial resistance.

Global concern

It is not only limited to one country,one microorganisms,one human. It spreads through interconnected humans, animals, food, and the environment.

1. Health impact-AMR makes infection harder to treat,increases the risk of complications, may cause the death of people,and the mortality rate is higher due to this.
2. Social impact-it affects a large number of the population and causes the threat to modern medicine and disbelief in people.also the cost to treat the antibacterial resistant is too high,which causes the loss.

Prevention

1. Encourage one health approach.
2. Use of antibiotics only when it is needed,and it should be prescribed by the healthcare professionals
3. Do not share your medication with others and complete the prescription dose and consult the medical profession before changing or stopping.
4. maintain proper hygiene, sanitation and a safe environment.
5. Reduce unnecessary use of antibiotics to animals or agriculture also.

Articles by Students

Conclusion

Antimicrobial resistance is a growing challenge that can reduce the effectiveness of medicines used to treat common infections. The problem can be controlled by using antimicrobials only when necessary and under proper medical guidance. Along with responsible antibiotic use, maintaining hygiene, preventing infections, improving awareness, and promoting research for new treatments are equally important. Therefore, timely action and cooperation between healthcare professionals, patients, researchers, and society are essential to slow the spread of AMR and protect the effectiveness of antimicrobial medicines for the future.

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The Young Heart Under Attack: Growing cardiac risk among young adults

Abstract

A heart attack (medically known as a myocardial infarction) occurs when blood flow to a part of the heart muscle is suddenly reduced or blocked. The blockage is usually due to a buildup of fat, cholesterol and other substances in the heart (coronary) arteries. What was once considered an older person's disease is increasingly affecting individuals in their 20s, 30s, and 40s. This article emphasizes the major traditional and emerging risk factors for heart attack in younger people, explains common warning signs, and states approaches to prevention and early response. The major factors contributing to these are Tobacco smoke, nicotine, increase in blood pressure, stimulants like methane, ecstasy and other substances. Genetic history of cardiovascular diseases, chronic stress levels and other inflammatory conditions may also be relevant for some individuals. Early recognition and long-term risk-factor assessment is essential.

Keywords: Myocardial infarction, emerging risk factors, cardiovascular diseases, early recognition, risk-factor assessment.

1. Introduction

A heart attack, also known as myocardial infarction (MI), happens when the blood supply to a part of the heart suddenly gets blocked. When the heart does not receive enough blood and oxygen, the function of the heart is disturbed. The main reason for the occurrence of such a complication is the problems and blockage of the coronary arteries of the heart. Coronary artery occlusion or CAD is known as the main cause of heart attack.[1]

Heart attacks among young adults (ages 20 to 40) are rising globally, with roughly 1 in 5 heart attacks now occurring in people under the age of 40. During the 16 years study period (2000-2016), the proportion of very young people having a heart attack has been increasing, rising by 2 percent each year for the last 10 years.[2]

This article discusses the risk factors, warning signs, diagnosis and practical prevention strategies.

2. Heart Attack in Young Adults

2.1 Risk Factors

The recent increases of Heart Attacks among young adults can be attributed to a range of factors including:

1. Unhealthy lifestyle choices: Young adults today often lead sedentary lives, spend extended periods sitting, and consume diets high in processed foods, added sugars, and unhealthy fats. These habits can lead to obesity, high blood pressure, and diabetes, all of which are risk factors for heart failure.[3]

2. Substance Abuse: Excessive alcohol consumption and illicit drug use, particularly stimulants like cocaine, methamphetamine, can have detrimental effects on the heart. These substances can lead to cardiomyopathy, a condition where the heart muscle weakens, which can lead to a heart attack.[3]

3. Smoking: The chemicals inhaled while smoking causes damage to the heart and blood vessels that makes it more likely to develop atherosclerosis, or plaque buildup in the arteries. Smoking also increases risk for peripheral artery disease (PAD). PAD is when plaque builds up in the arteries that carry blood to your head, organs, arms and legs. People who have PAD have an increased risk for heart attack and stroke. [4]

4. Chronic stress: Long term or chronic stress can cause higher levels of inflammation in the body that contributes to increase in plaque buildup in the arteries- and that can lead to such problems as coronary heart diseases. Coronary artery diseases can lead to heart attack, abnormal heart rhythms, and heart failure.[5]

5. Undiagnosed conditions: Congenital heart defects, valvular abnormalities, and arrhythmias may go undiagnosed in young adults. These conditions can progressively weaken the heart and eventually lead to heart failure if left untreated.[3]

6. Environmental Factors: Exposure to harmful environmental pollutants, such as air pollution and toxins, can increase the risk of heart diseases and heart failure.

Articles by Students

2.2 Diagnosis

Diagnosis of a heart attack includes checking blood pressure, pulse and temperature. Tests are done to officially confirm a Myocardial Infarction.

Tests done are:Electrocardiogram (ECG or EKG): Sticky patches (electrodes) are attached to the chest and sometimes the arms and legs. Signals are recorded as waves displayed on a monitor or a printed paper. Blood Tests: Certain heart proteins slowly leak into the blood after heart damage from a heart attack. Blood tests can be done to check for these proteins (cardiac markers). Chest X-ray: this shows the condition and size of the heart. Echocardiogram: Sound waves (ultrasound) create images of the moving heart. This test can help identify whether an area of your heart has been damaged.[6]

2.3 Treatment

Urgent treatment is needed to fix blood flow and restore oxygen levels. Oxygen is given immediately. Specific heart attack treatment is given depending upon whether there's a partial or complete blockage of the blood flow. Certain medications provided by a clinicians can be Aspirin, Clot busters (thrombolytics or fibrinolytics), blood thinning medications, Nitroglycerin, beta blockers etc. [6]

2.4 Practical prevention strategies

Prevention is always better can than cause. Preventing heart attack requires self-care in every form. Regular exercises, eating heart healthy diets, maintaining a healthy weight according to BMI, avoiding smoke, limiting alcohol, management of blood pressure and cholesterol and controlling stress are some of the major preventive steps for a healthy heart.[6]

2.5 Reported cases of heart attacks in children

A 14-year-old student of a municipal school died after suffering a heart attack at a well-known theme park where he had gone on a trip with other pupils in Maharashtra's Raigad district, police said on Wednesday. A post-mortem was conducted in the presence of a government medical officer, in which it was ascertained the boy died due to a heart attack.[7]

A 24-year-old UPSC aspirant suffered a heart attack and underwent angioplasty at a Delhi-NCR hospital after doctors found double-vessel coronary artery disease, highlighting the risk of serious heart disease even among younger adults. The doctor attributed the young man's cardiovascular risk to a combination of smoking, lifestyle factors, a strong family history, and high LDL cholesterol and Lipoprotein(a) levels.[8]

A 15-year-old girl suffered from a Myocardial infarction with non-obstructive coronary arteries. Investigations showed multiple genetic variations associated with thrombosis risks.[9]

Conclusion

Heart attacks should not be limited to older adults only. In younger adults and children, tobacco smoke, nicotine, increase in blood pressure, stimulants like methane, ecstasy and other substances, genetic history of cardiovascular diseases, chronic stress levels and other inflammatory conditions may be relevant and can be major causes.

Symptoms can vary person-to-person and the assumption that a young person is highly unlikely to have MI can delay treatment. Public health assessment and risk management systems should improve to cater the needs of rising health crisis.

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Articles by Students

Phytochemicals against AMR: Nature's way of tackling a man-made problem?

Introduction

Antimicrobial resistance (AMR) has become one of the most serious public health issues in the 21st century. It's caused by the misuse of conventional synthetic antibiotics in clinical, agricultural and industrial practices which contributes to the spread of resistance. Bacteria use several mechanisms to escape treatment. To solve this man-made crisis, Phytochemicals; which are naturally occurring bioactive compounds derived from plants, have emerged as a way to tackle antibiotic resistant bacteria.

Plants produce a diverse range of phytochemicals like flavonoids, alkaloids, phenolic compounds and terpenoids. These compounds showcase a variety of biological properties, including antibacterial activity, which might help us overcome AMR with enough research.

Keywords: Antimicrobial resistance, Antibiotics, Phytochemicals, Flavonoids, Alkaloids

Mechanism

Unlike conventional antibiotics which target specific bacterial processes, certain phytochemicals affect several cellular processes. Research has shown that they might have the ability to disrupt bacterial cell membranes, interfere with essential enzymes, inhibit protein synthesis and have an effect in bacterial growth and survival.

The potential of phytochemicals goes beyond their direct antibacterial effects. Bacteria can form biofilms, which are structured communities of microorganisms surrounded by a protective matrix, which makes infections difficult to treat. Certain phytochemicals have showcased the ability to interfere with the biofilm formation and bacterial virulence, promising a bright future in antimicrobial research.

An especially interesting possibility is their use alongside conventional antibiotics. Some act as antibiotic adjuvants, enhancing the activity of existing drugs through synergistic interactions. They enhance antibiotic activity or interfere with bacterial resistance mechanisms, including enzymes that inactivate antibiotics and efflux pumps that remove antimicrobial agents from bacterial cells, reducing their effectiveness. For example, research discussed in the review by Khameneh and colleagues explores plant-derived compounds that may restore or strengthen the activity of certain antibiotics under experimental conditions.

This approach could potentially improve existing treatments rather than relying on the discovery of entirely new antibiotics.

A promising endeavor

Despite positive findings, phytochemicals on AMR still have a long way to go. Many reported antibacterial effects come from laboratory studies and therefore, do not automatically translate into effective treatments in humans. Challenges include possible toxicity, limited bioavailability, variations in plant composition and difficulties in standardising extracts. Further research is essential to establish appropriate doses, safety, effectiveness and synergistic interactions with conventional medicines. Therefore, the natural origin of the compound shouldn't be mistaken for its safety or therapeutic value.

Conclusion

Phytochemicals represent a promising area of pharmaceutical research, offering chemically diverse compounds and potential mechanisms of antibacterial action. However, much of the available evidence is pre-clinical. Therefore, their future depends on rigorous investigation, clinical trials and development of reliable formulations. They have more potential as contributors to fight against AMR rather than replacement for responsible antibiotic use.

Ultimately, tackling antimicrobial resistance will require multiple approaches, combining infection prevention, antibiotic supervision, continued drug discovery and evidence-based research. It ultimately comes down to how nature's chemical diversity might help us develop better ways to confront this man-made challenge.

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Cosmic Radiation: How earth's medical cabinet fails in deep space

Introduction

Imagine Being millions of miles away from earth battling a severe infection inside a space craft you find the medical kit and you swallow the pill only to find the only life saving pill you just swallowed did absolutely nothing this is the silent crisis of space pharmacology Nasa researcher have found that the cosmic radiation and micro gravity rapidly strips everyday medication of their potency drastically shortening their shelf life and rendering crucial drug useless long before the expiration dates.

Keywords
Space pharmacology, Cosmic radiation, Micro gravity, Medication, Drug stability

Articles by Students

2. Main Discussion

2.1 The Crisis of Epipen in Space

Infact they not only just expire the medication they can actively rewrite their chemistry transforming everyday pain killer and antibiotics into toxic products With the fact that zero gravity alter human physiology Now to make normal drug doses accidentally lethal is a huge crisis faced by space agencies.

Epipen is the drug used for people suffering from the severe allergic reaction For an astronaut suffering from severe allergic Reaction , injecting am epipen would be the solution because epinephrine is the only first line defence against Anaphylaxis but later it was found when sample of epinephrine solution contained zero active epinephrine when flown through space.

Cosmic radiation completely breaks down the drug and 13% of it had muted into an extremely poisonous benzoic acid derivatives.

Now for astronauts suffering from severe allergic reaction injecting a compromised Epipen would be double fatal it would only be pumping pure toxins into the blood stream.

2.2 Dry Powder Formulations

It was also found instead of using fragile liquid that easily breaks down under cosmic radiation Researcher are shifting towards preservatives amorphous powder.

POWDER are more stable in space towards radiation then liquids are as liquid can lose its stability forcing the liquid molecules to split into highly reactive particles called free radicals These free radicals aggressively attack and mutate the active drug That is also how epipen is turned into toxic benzoic acid the radiation acts like a microscopic bullet smashing the drug particles Causing the molecules split open into fragments rendering like active pharmaceutical ingredients.

Once the molecules split they don't just disappear they float around and recombine in random ways the drug loses its stability creating a pure toxin.

Instead of using liquid drug in space Researchers often prefer Dry powdered drug.

2.3 Drug Degradation on Earth and in Space

On earth drug expires like a fading flower it slowly loses its colour and strength

In space a drug expire like a small chemical bomb.

Cosmic radiation damage the chemical structure transforming cure into toxin.

3. Conclusion

Science exploration isn't just an aerospace engineering problem it is a pharmaceutical science challenge too.

From the discovery that space radiation mutates standard pharmaceutical drug it has forced global space agencies To rewrite the rules of drug development.

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Vitamin D Deficiency is Very Common in Knee Osteoarthritis Patients, Especially in Obese People – A Review Article

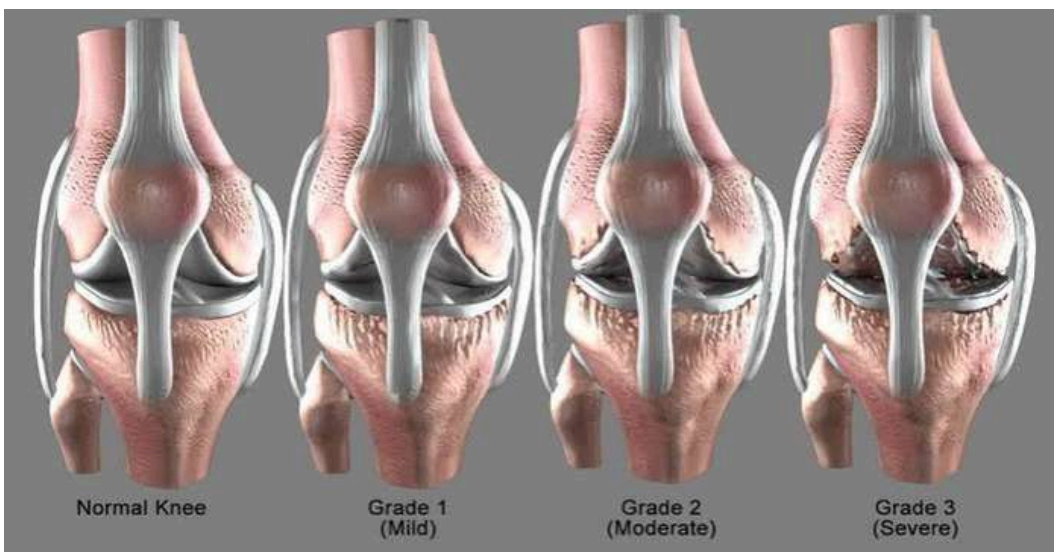
LIST OF ABBREVIATIONS:

OA : Osteoarthritis , 25(OH)D: 25-hydroxy Vitamin D , BMI: Body Mass Index ,VAS: Visual Analog Scale, WOMAC: Western Ontario and McMaster Universities Osteoarthritis Index, RCT: Randomized Controlled Trial , IU: International Unit , CI: Confidence Interval ,PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses ,PTH: Parathyroid Hormone,IL-6: Interleukin-6,MRI: Magnetic Resonance Imaging

ABSTRACT:

Osteoarthritis is a common joint disease in old age. It is not due to calcium deficiency but due to damage of cartilage. Vitamin D is important for bone and cartilage health. Many studies show that Vitamin D deficiency is common in knee osteoarthritis patients. This article reviews a systematic review and meta-analysis from 2024 which included 26 studies and 4248 patients. The result shows that 56.72% of knee OA patients have Vitamin D deficiency. Deficiency is more in obese patients with BMI ≥28 kg/m² (65.62%) compared to non-obese (37.63%). Other studies also show Vitamin D supplementation improves WOMAC pain and function scores and reduces synovial fluid. Obese people have more deficiency because Vitamin D gets stored in fat tissue and they get less sunlight. Checking Vitamin D level in knee OA patients is important. Pharmacists can play a role in counseling about diet, weight control and supplements. This review explains all points in simple language.

KEYWORDS: (Knee Osteoarthritis, Vitamin D Deficiency, BMI, Cholecalciferol, WOMAC Score, Obesity, Cartilage)



Articles by Students

1. Introduction:
Knee osteoarthritis (OA) is a very common disease in India. According to health data, about 22-39% of Indians above 40 years have knee OA. In OA, the cartilage that covers the ends of bones becomes thin and damaged. Cartilage works like a cushion. When it is damaged, bones rub together and cause pain, stiffness, swelling and difficulty in walking.
Many people in India think knee pain is due to lack of calcium. But calcium is mainly for bone hardness. OA is mainly a cartilage disease, not a calcium disease. New research shows nutrition factors like Vitamin D also play a role.
Vitamin D is also called cholecalciferol. It is a fat-soluble vitamin. Its main work is to absorb calcium from intestine and keep bones strong. But now research shows Vitamin D also controls inflammation and cartilage health.

2. What is Vitamin D and How We Get It:
There are two sources of Vitamin D.
First source is sunlight. When sunlight falls on skin, our body makes Vitamin D3. Second source is food like egg yolk, milk, fish, and fortified foods. After that, Vitamin D goes to liver and kidney and becomes active form called calcitriol.
Normal Vitamin D level in blood is 30-50 ng/mL. If level is less than 20 ng/mL, it is called deficiency. If 20-30 ng/mL, it is called insufficiency. In India, Vitamin D deficiency is very common because people stay indoors, use sunscreen, have darker skin and less outdoor work.

3. What is Knee Osteoarthritis:
Knee OA has 4 grades. Grade 0 is normal, Grade 4 is severe. Symptoms are morning stiffness less than 30 minutes, pain on climbing stairs, crepitus sound from knee, and swelling.
Risk factors for knee OA are old age, female gender, obesity, previous injury, genetics and heavy joint work. Obesity is a big risk factor because extra weight puts more pressure on knee joint. A person with BMI 30 has 4 times more pressure on knee than normal person.

4. What the Research Says – Main Meta-Analysis:
The main paper for this review is from 2024: Global prevalence of Vitamin D deficiency among patients with knee osteoarthritis: A systematic review and meta-analysis. In this paper, researchers searched 5 databases: Europe PMC, Google Scholar, Scopus, Scilit and Web of Science. They searched all studies published till 8 August 2024.
Total 1695 records were found, but after filtering only 26 studies with 4248 patients were included. Quality was checked by Newcastle-Ottawa Scale.
Pooled prevalence of Vitamin D deficiency was 56.72% with 95% confidence interval 46.93-66.25%. It means more than half patients had deficiency.[1]
They also did subgroup analysis:
- Publication period 2015-2019 vs 2020-2024: no major difference.
- BMI ≥28 kg/m²: 65.62% deficiency vs BMI <28: 37.63%. This difference was statistically significant.
- Europe: 65.92% deficiency, which was higher than USA. Asia: 60.96%, Middle East and North Africa: 63.11%.
This shows Vitamin D deficiency is a worldwide problem in knee OA patients, but more in obese patients.

5. Other Supporting Studies:
Second study is by Georgescu et al. published on 26 Sep 2024 in Clin Pract journal. PMID is 39451873. This is also a systematic review of last 10 years research. They reviewed literature according to PRISMA guidelines. They found that low Vitamin D may affect cartilage structure and function and may accelerate OA progression. Vitamin D receptors are present on cartilage cells (chondrocytes). When Vitamin D is low, chondrocytes do not work properly and cartilage degrades faster. But they also said findings are mixed, so more research is needed.[2]
Third study is by Zhao et al. It is a meta-analysis of 8 randomized controlled trials (RCTs) with 3077 patients. PMCID is PMC10433223, PMID 37601800. In RCTs, one group got Vitamin D and other group got placebo. Results: Vitamin D group had less synovial fluid volume, less VAS pain score, better WOMAC pain and function scores. Stiffness score did not improve much. Bone marrow lesions and joint space width did not change much. But in subgroup, daily dose more than 2000 IU significantly slowed synovial tissue progression. This means Vitamin D helps in pain and function, but not in structure very much.[3]

6. Obesity and Vitamin D Link – Mechanism:
Why obese OA patients have more deficiency? Two mechanisms are important:
a)Sequestration and Volumetric Dilution: Vitamin D is fat soluble. In obese people, it gets trapped in fat tissue. So even if body makes Vitamin D, it goes into fat and blood level remains low.
b)Less Sunlight Exposure: A study by Dura-Trave et al. in 2023 in Nutr Hospital journal proved this. They studied 259 obese adolescents, 249 severely obese and 251 healthy controls. Vitamin D deficiency was 55% in severe obesity and 37.1% in obesity vs only 14% in healthy group. Urban residents had more deficiency: 67.2% in severe obesity urban vs 41.5% in rural. Same for obesity group: 51.2% urban vs 23.9% rural. Urban obese patients did not show seasonal variation, meaning they never go out in sun. So behavioral factors like sedentary lifestyle and indoor stay are main reasons.[4]
c)Inflammation Link: Fat tissue releases inflammatory chemicals like leptin and IL-6. Low Vitamin D increases inflammation further. This makes OA pain worse.

7. Clinical Implications and Prevention:
From these studies, we learn that doctors should check 25(OH)D levels in all knee OA patients, especially if BMI is high. If deficiency is present, supplementation should be given.

8. Role of Pharmacist (B.Pharm Perspective):
As a B.Pharm student, we have an important role. We can counsel patients:
- Do not self-medicate with high dose calcium only. Check Vitamin D also.

Articles by Students

- Take Vitamin D after meal with some fat for better absorption.
- Reduce weight: even 5% weight loss reduces knee pain a lot.
- Encourage outdoor walk in morning sun.
- Tell about fortified foods.

We should also tell that excess Vitamin D is also harmful and can cause hypercalcemia. So lab test is important.

9. Conclusion:

Knee osteoarthritis is not just a wear and tear disease. It is linked with Vitamin D deficiency and obesity. More than half of knee OA patients have Vitamin D deficiency, and in obese patients it is 65.62%. Vitamin D supplementation improves pain and daily function but we need more research for structural improvement. Checking Vitamin D in knee OA patients is a low-cost and useful step. In India, where both OA and Vitamin D deficiency are common, this screening is very important. As future pharmacists, we should spread awareness about balanced diet, sunlight and weight control for joint health.

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ARTIFICIAL INTELLIGENCE IN PHARMACY: TRANSFORMING DRUG DISCOVERY AND HEALTHCARE

Introduction:-

Artificial Intelligence (AI) has emerged as an important technology in modern healthcare and pharmaceutical sciences. AI refers to computer-based systems that can analyse data and generate predictions, recommendations or decisions for specific objectives. Machine learning, a major branch of AI, allows computer systems to identify patterns from large datasets and improve their performance through experience.

The pharmaceutical industry generates enormous amounts of information during drug discovery, clinical development, manufacturing and post-marketing surveillance. AI can help researchers analyse this information more efficiently and support several stages of the medicine life cycle. The World Health Organization (WHO) reports that AI is already being used across many stages of pharmaceutical development and delivery.

AI IN DRUG DISCOVERY AND DEVELOPMENT

Traditional drug discovery is a lengthy and expensive process involving identification of drug targets, screening of compounds, optimization of lead molecules and evaluation of safety and efficacy. AI and machine-learning approaches can analyse biological and chemical datasets to identify patterns and predict potentially useful drug candidates.

AI can assist in target identification, virtual screening, prediction of molecular properties and optimization of lead compounds. It can also support aspects of non-clinical and clinical development. The U.S. Food and Drug Administration (FDA) has reported increasing use of AI components across nonclinical, clinical, manufacturing and post-marketing stages of the drug product life cycle.

AI IN PHARMACOVIGILANCE

Pharmacovigilance focuses on detecting, assessing and preventing adverse effects associated with medicines. AI can assist pharmacovigilance by analysing large amounts of safety information and identifying patterns that may be difficult to detect manually.

Machine learning and natural-language processing can be used to analyse medical records, adverse-event reports and other unstructured information. WHO describes ongoing work using AI and machine learning to identify potential safety signals and extract relevant information from free-text safety reports.

This can help pharmacists, researchers and regulatory professionals in the early identification of possible safety concerns and support continuous monitoring of medicines.

AI IN PERSONALIZED MEDICINE

Patients can respond differently to the same medicine because of differences in genetics, age, disease conditions, lifestyle and other factors. AI can analyse multiple types of patient information and may support more individualized approaches to treatment.

AI-based analysis can assist healthcare professionals in identifying patterns in patient data and selecting or optimizing treatment strategies. However, AI should support rather than replace appropriate clinical judgment, particularly when decisions may directly affect patient safety.

Articles by Students

AI IN PHARMACEUTICAL MANUFACTURING

AI is also being explored in pharmaceutical manufacturing and quality-related processes. It can help analyse manufacturing data, identify unusual patterns and support process monitoring.

In areas such as quality control and process optimization, AI may contribute to earlier detection of deviations and more efficient use of manufacturing data. FDA has specifically identified artificial intelligence applications in pharmaceutical manufacturing as an area of regulatory and scientific interest.

BENEFITS AND CHALLENGES

The major potential benefits of AI in pharmacy include:

- Faster analysis of large datasets.
- Support for drug discovery and development.
- Improved detection of potential safety signals.
- Assistance in personalized healthcare.
- Automation of repetitive data-analysis tasks.
- Support for pharmaceutical research and manufacturing.

However, AI also has important challenges. The quality of an AI system depends heavily on the quality and suitability of the data used to develop and evaluate it. Issues such as data privacy, bias, transparency, cyber security and inappropriate use can affect its reliability. WHO emphasizes that ethical considerations and appropriate governance are essential for responsible use of AI in healthcare.

FDA and EMA have also developed principles for good AI practice in drug development, emphasizing factors such as human involvement, risk-based assessment, data governance, appropriate model development and life-cycle management.

FUTURE PERSPECTIVES

The role of AI in pharmacy is expected to continue expanding as pharmaceutical datasets and computational technologies develop. Future applications may include more advanced drug-design systems, improved clinical-trial processes, intelligent pharmacovigilance systems and data-driven pharmaceutical manufacturing.

The pharmacist of the future may therefore need not only knowledge of medicines but also an understanding of digital technologies, data interpretation and responsible AI use. Collaboration between pharmacists, scientists, clinicians, data scientists and regulatory professionals will be important for ensuring that AI is used safely and effectively.

CONCLUSION:-

Artificial Intelligence is becoming an important tool in modern pharmacy, with applications ranging from drug discovery and development to pharmacovigilance, personalized medicine and pharmaceutical manufacturing.

AI has the potential to improve the speed and efficiency of pharmaceutical research, but its implementation must be supported by reliable data, human oversight, ethical principles and appropriate regulation.

With responsible development and multidisciplinary collaboration, AI can become a valuable technology for advancing pharmaceutical science and improving healthcare.

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AIP in News

PCI highlights UG pharmacy curriculum 2026 at Amity

PIONEER NEWS SERVICE
New Delhi



Amity Institute of Pharmacy, Amity University Uttar Pradesh (AUUP), organised a one-day Faculty Development Programme (FDP) on "Effective Implementation of the Bachelor of Pharmacy (B Pharm) Curriculum (2026) under NEP 2020".

The programme aimed to equip faculty members with a comprehensive understanding of the revised B Pharm Curriculum (2026), its alignment with the National Credit Framework (NCrF), National Skills Qualifications Framework (NSQF), evolving standards in pharmacy education, thereby strengthening Outcome-Based Education (OBE), competency-based curriculum design, learner-centric pedagogies, innovative assessment practices, and effective curriculum implementation.

The programme witnessed participation by 120 participants representing institutions such as GD Goenka College of Pharmacy, Jamia Hamdard, Hindu College of Pharmacy, Subharti College of Pharmacy, KN Modi Institute of Pharmaceutical Education and Research, and several other institutions.

Speaking about the revolutionary changes reshaping pharmacy education, chief guest, Dr Montukumar M Patel, President, Pharmacy Council of India (PCI), New Delhi, said, "The new curriculum has been designed to ensure uniform implementation across all pharmacy institutions while aligning with the objectives of the National Education Policy (NEP) 2020. The skill and outcome-based curriculum incorporates emerging domains such as artificial intelligence, medical devices, digital healthcare and other contemporary advancements that are transforming the pharmacy sector. To facilitate seamless implementation of the new curriculum, the Pharmacy Council of India is conducting Faculty Development Programmes across the country so that institutions are fully prepared to adopt the revised curriculum from this academic session itself."

Emphasising upon tech-driven initiatives, he further added, "Pharmacy Council has introduced technology-driven reforms including biometric attendance systems for faculty members to ensure greater academic accountability. The Council also conducted a drone-survey of all pharmacy colleges in India. In addition, the Council is launching a new digital portal including IT-enabled solutions to simplify academic and regulatory processes, improve transparency and strengthen institutional governance. The Council has also extended financial support to GPAT-qualified scholars (Graduate Pharmacy Aptitude Test) to foster research and academic excellence."

Highlighting the pivotal role of educators in shaping future-ready healthcare professionals, Dr Atul Chauhan, Chancellor, Amity University Uttar Pradesh, stated, "The transformative reforms introduced under the exemplary leadership of Dr Montukumar M Patel have significantly strengthened pharmacy education by making it more contemporary, skill-oriented, industry-aligned and outcome-driven."

Stressing upon the significance of implementing the New B Pharm Curriculum, Professor (Dr) Balvinder Shukla, Vice Chancellor, Amity University Uttar Pradesh, stated, "The successful implementation of the revised B Pharm Curriculum requires faculty members to embrace emerging pedagogical approaches, outcome-based curriculum design, competency-based assessment and learner-centric teaching methodologies."



FDP - AMITY UNIVERSITY

It organised a one-day Faculty Development Programme on the effective implementation of the B. Pharm Curriculum (2026) under NEP 2020, attended by 120 participants from leading pharmacy institutions. Chief Guest Montukumar M. Patel, President, Pharmacy Council of India, highlighted the curriculum's alignment with NEP 2020, NCrF and NSQF, incorporating emerging areas such as AI, digital healthcare and medical devices. He also outlined PCI's technology-driven reforms, global collaborations and initiatives to enhance employability. Chancellor. Atul Chauhan and VC, Balvinder Shukla emphasised faculty's role in implementing outcome-based, competency-driven education. The programme featured expert sessions on NEP 2020, industry-academia collaboration, assessment frameworks, curriculum implementation and emerging trends in pharmacy education.

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