

Vrittant

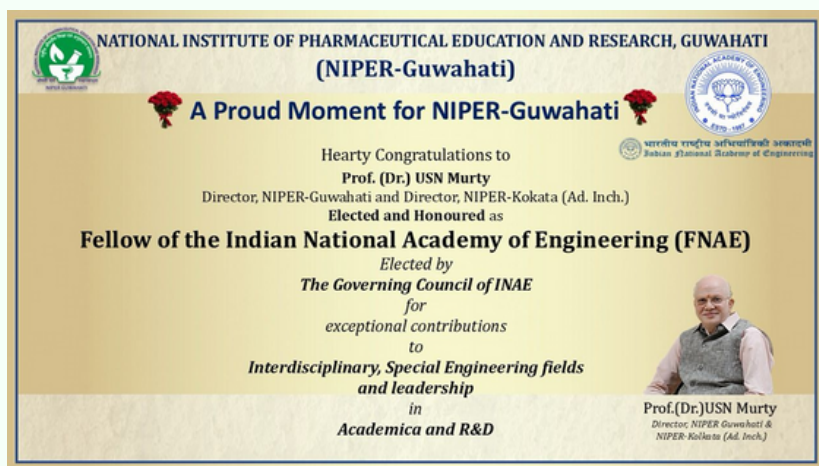
The Quarterly Newsletter of NIPER Guwahati



INSTITUTE HIGHLIGHTS

Prof. (Dr.) USN Murty, Director NIPER Guwahati, Elected as Fellow of Indian National Academy of Engineering (INAE)

NIPER Guwahati celebrated a major institutional triumph as its Director, Professor (Dr.) USN Murty, was honored with the distinguished title of Fellow of the Indian National Academy of Engineering (FNAE). The Governing Council of the Indian National Academy of Engineering (INAE) officially conferred the fellowship on Prof. Murty, recognizing his profound and lasting contributions to academia and research. The INAE, India's apex engineering body, selected Prof. Murty for his "exceptional contributions" spanning several critical areas, marking him as a leader in bridging engineering and pharmaceutical science.



Seven Faculty Members in the World's Top 2% Scientists' List in the year 2025



Prof. S Tamilvanan, Professor (Pharmaceutics), Prof. VGM Naidu, Professor (Pharmacology & Toxicology), Prof. Sanjay K Banerjee, Professor (Biotechnology), Dr. Amit Alexander, Associate Professor (Pharmaceutics), Dr. Subham Banerjee, Associate Professor (Pharmaceutics), Dr. Bidya Dhar Sahu, Assistant Professor (Pharmacology & Toxicology), and Dr. Saurabh Kumar,

Assistant Professor (Medical Devices) were recognized among the world's top 2% scientists as per the data published by Stanford University, USA, for 2025. This prestigious recognition, based on data from Elsevier, highlights the outstanding contributions of these individuals to their respective fields.

In this newsletter

Institute Highlights

Events At A Glance

Campus Visits

Awards & Achievements

Publications

EVENTS AT A GLANCE

Swachhta Hi Seva



NIPER Guwahati participated in the nationwide Swachhta Hi Seva (SHS) campaign held from September 17 to October 2, 2025, with the theme "Swachhotsav." The initiative aimed to promote cleanliness, hygiene, and environmental responsibility among students, faculty, and staff.

MD Dept represented Bharat Health 2025



Dept. of Medical Devices led by Dr. Saurabh Kumar, Assistant Professor, participated in the Bharat Health 2025 initiative recently. Bharat Health 2025 is a landmark initiative by the Government of India, aimed at showcasing the nation's growing strength in healthcare, pharmaceuticals, and medical technology. Held from September 4 to 6, 2025, in New Delhi, this prestigious event was organized by the Department of Commerce, in collaboration with the Department of Pharmaceuticals, Ministry of Health & Family Welfare, Ministry of Ayush, and key industry bodies including EPCMD, Pharmexcil, EEPC, SEPC, and Ayushexcil.

Swachhta Pakhwada



NIPER Guwahati observed Swachhta Pakhwada 2025 with a series of impactful activities aimed at promoting cleanliness, hygiene,

and environmental consciousness among its academic community. The fortnight-long campaign began on September 1 with a pledge ceremony, where students, faculty, and staff committed to maintaining a clean and healthy environment. Daily cleanliness drives were conducted across hostels, classrooms, laboratories, and common areas, transforming the campus into a model of sanitation and sustainability.

Health Camp

NIPER Guwahati hosted a Health Awareness Programme September 19, 2025 aimed at promoting wellness among its community. The initiative provided free health check-ups, medical consultations, and nutritional guidance to faculty, staff, students, and their families.

The programme featured a panel of visiting experts from GNRC Medical, North Guwahati, including Dr. Shouvik Bhatta (Cardiologist), Dr. Shahidul Hoque (General Medicine), Dr. Jivraj Kalita (Child Specialist), and a dietician who led an informative session on diet and nutrition.



Faculty visit to AIC NIPER-Guwahati Foundation

Faculty members from diverse institutions across Assam and the Northeast visited AIC NIPER-Guwahati Foundation on September 19, 2025, as part of the Faculty Skill Development Program organized by NIPER Guwahati.

During their visit, the faculty explored our incubation ecosystem, gained insights into ongoing initiatives, and learned how they can engage with our incubation programs to foster innovation and entrepreneurship within their

academic communities. They also toured our state-of-the-art facilities and equipment facilities currently accessible to Incubatees.



17th Foundation Day



NIPER Guwahati celebrated its 17th Foundation Day on September 16, 2025, marking nearly two decades of academic excellence, research innovation, and societal contribution. The event brought together faculty, students, alumni, and distinguished guests to reflect on the institute's journey since its inception. The celebration commenced with a ceremonial lamp lighting, followed by an address from the Director, highlighting key milestones, achievements, and the institute's vision for the future.

NIPERG participates Medtech Expo at Delhi



NIPER Guwahati participated in the MedTech Expo 2025, held from September 4 to 6 in New Delhi. The event served as a vibrant platform for interaction with industry leaders, academic peers from other NIPERs as well as other technical institutions including IITs, and key

stakeholders in the medical technology ecosystem.

NIPER stall attracted delegates from CDSCO, IPC, ICMR, and the Department of Pharmaceuticals (DoP) as they appreciated the innovative work being carried out at the institute. The expo fostered meaningful dialogue, strengthened networks, and showcased NIPER Guwahati's growing impact in the MedTech and pharmaceutical innovation landscape

Hands-on Training Program on Basic Principles and Analysis of Gene Sequencing



The 3-day Hands-on Training Program on "Basic Principles and Analysis of Gene Sequencing," held from 28th – 30th August 2025 by AIC NIPER-Guwahati Foundation in association with Bio-Tech Hub NIPER Guwahati, successfully equipped students with foundational and practical knowledge in genomic sequencing. Led by experts Dr. Bhabatosh Das, Professor, THSTI, Faridabad and Dr. Daizee Talukdar, Research Associate, Functional Genomics Lab, THSTI, Faridabad, the sessions covered Next-Generation Sequencing (NGS), microbial genomics, and data analysis using R-Studio and RAST.

Independence Day



The 79th Independence Day was celebrated at NIPER Guwahati on August 15, 2025, with great patriotic fervor and enthusiasm. Senior faculty members hoisted the national flag followed by the

singing of the national anthem. Faculty, staff, and students gathered to pay tribute to the freedom fighters who laid the foundation of an independent India.

Inauguration of PARAM Embryo Supercomputing Facility

On August 14, 2025, the PARAM Embryo Supercomputing Facility was inaugurated at NIPER Guwahati, marking a major advancement in the scientific and technological capabilities of Northeast India. Located within the Advanced Centre for Computer-Aided Drug Design (ACAD), PARAM Embryo is the region's first high-performance computing (HPC) facility dedicated to pharmaceutical innovation. Funded by the Ministry of Electronics and Information Technology (MeitY) and the Department of Pharmaceuticals, Government of India, the facility brings world-class computational infrastructure to accelerate drug discovery and development. The inauguration ceremony featured Jayant D Patil, former Whole-Time Director and Executive Management Committee Member of Larsen & Toubro (L&T), and Prof. USN Murty, Director NIPER Guwahati.



Anti-Ragging Day

NIPER-Guwahati observed Anti-Ragging Week from 12th to 18th August 2025 with the aim of fostering a safe, inclusive, and respectful academic environment. The week featured a variety of awareness-driven activities such as digital poster making, reel and YouTube video competitions, interactive sessions, and an anti-ragging oath ceremony. These initiatives highlighted the legal and ethical implications of ragging and

encouraged students to engage in conversations about creating a supportive campus culture.



Orientation Programme



The Orientation Programme for Semester 1 students was organised on August 4, 2025 in the Mini Auditorium. The new entrants across diverse disciplines were welcomed, offering them an introduction to the institute's vision, academic culture, and support systems. Faculty members addressed the gathering, emphasizing the importance of professional ethics, innovation, and collaboration in pharmaceutical education and research. Prof. (Dr.) USN Murthy, Director NIPER Guwahati, delivered the keynote address, encouraging students to embrace curiosity, discipline, and empathy as they embark on their academic journey.

Rashtriya Karmayogi Jan Seva Programme



NIPER Guwahati hosted the Rashtriya Karmayogi Jan Seva Programme on July 16-17, 2025. This interactive event inspired NIPER Guwahati employees toward a "Karmayogi Way" of working, emphasizing a citizen-centric approach to governance with "Seva Bhav" approach.

Workshop on “Startup Spectrum: From Idea to Company”



A workshop titled ‘Startup Spetrum: From Idea to Company’ was conducted by the BioNEST NIPER Guwahati Incubation Centre on July 29, 2025. Mr. Omkarnath S Rath, COO, Assam Startup, Guwahati, and Mr. Biman Debnath, Company Secretary, Guwahati, took the session which covered topics such as Understanding the Startup Ecosystem and Government Role, Legal & Regulatory Framework for Company Setup, and Regulatory Requirements, Compliance, and Policies.

Prototype to Product Demo Challenge



Prototype to Product Demo Challenge event was organized by Bio-NEST NIPER Guwahati

Incubation Centre on August 25, 2025. Selected participants delivered demonstration of their prototypes, products, or R&D concepts to a panel of a jury. Each team had a 15-minute time slot, with 10 minutes for their presentation and 5 minutes for a Q&A session. Winners were awarded with a pre-incubation grant of ₹90,000, six months of physical incubation at the Bio-NEST NIPER Guwahati Incubation Centre, Mentorship, access to infrastructure, and support to form a company, and a cash prize.

Bridging Traditional Knowledge and Modern Incubation



The collaboration between Bio-NEST NIPER Guwahati and the PRIME Startup-Hub in Meghalaya led to a successful one-day exposure visit and interactive session on September 4, 2025. During the event, traditional healers from Meghalaya were hosted at the Bio-NEST Incubation Centre. The program facilitated an open dialogue with faculty experts on scientifically validating and commercializing traditional medicine.

Additionally, the traditional healers were given a guided tour of the NIPER Guwahati campus and its state-of-the-art facilities. This event strengthened the partnership with the PRIME Startup-Hub and served as a crucial step toward bridging ancient wisdom with modern innovation to uplift traditional healers and medicine in the North-East of India.

Faculty Training Programme



A Faculty Training Programme was held on September 15-19, 2025 to equip participants with advanced laboratory skills and exposure to modern biotechnological tools, enhancing both their teaching and research capabilities. Faculty members from institutions across Northeast India benefited through hands-on training, improved critical thinking, and guidance on research proposal writing, which can open new opportunities for funding and collaboration. Additionally, the programme fostered networking among institutions, thereby strengthening academic and research capacity in the region and supporting the professional growth of early-career faculty.

CAMPUS VISITS



On August 18, 2025, the first batch of students from the 4-Year BS Programme in Biomedical Science & Engineering at JBMSHT, IIT Guwahati, visited NIPER-Guwahati.



On August 13, 2025, Dr. Purnima Sharma, Managing Director of Biotech Consortium India Limited (BCIL), visited the campus. She discussed about possible collaboration and establish BCIL as a Technology Transfer Office (TTO) for the institute.

New Inductees

- **Dr. Rahul Gautam Talukdar**
Assistant Professor
(Contractual)
Joining Date: 27/08/2025 (F/N)
- **Er. Srikanta Senapati**
Technical Engineer
(Consultant)
Joining Date: 04/08/2025 (F/N)
- **Mr. Tofazzul Hussain**
Junior Technical Assistant
(Contractual)
Joining Date: 14/08/2025 (F/N)

Farewell

- **Dr. Neh Nupur**
Assistant Professor (Contractual)

AWARDS & ACHIEVEMENTS

Faculty

- **Dr. Amit Alexander**, Associate Professor (Pharmaceutics), received the Best Performance Award and recognition from NIPER Guwahati on the occasion of 17th Foundation Day of NIPER Guwahati held on September 16, 2025.



- **Dr. Krishna Undela**, Assistant Professor (Pharmacy Practice), received the Best External Cash Flow Award (Funded Projects) during the 17th Foundation Day of NIPER Guwahati.



- **Dr. Purusottam Mohapatra**, Ramalingswami Fellow, received 1st Position, in "Prototype to Product Demo Challenge-2025" organised by Bio-NEST NIPER Guwahati Incubation Centre on August 25, 2025. He received cash prize and Product Development Grant for a duration of 6 months.



- Further, Dr. Mohapatra received recognition as an Editorial Board Member, Scientific Reports Journal, Springer Nature Publication on October 10, 2025.

- Dr. Saigal under the mentorship of **Dr. Kapileswar Seth**, Assistant Professor, Dept. of Medicinal Chemistry received Best Research Associate Award for the academic year 2024-2025 from NIPER Guwahati on the occasion of 17th Foundation Day.



- **Dr. Vikas Anand**, Associate Professor (Pharma Technology Formulations), handled various manuscripts for their publication/possible publication in the journal Scientific Reviews (Springer Nature) as Associate Editor, Scientific Reviews.



- **Dr. Vikas Anand**, Associate Professor (Pharma Technology Formulations), published a book "I. Singh A, Kulhari H, Saharan VA (Eds.). Formulating Pharma-, Nutra-, and Cosmeceutical Products from Herbal Substances: Dosage Forms and Delivery Systems, August 2025, Wiley. ISBN 978-1119769477" as one of the Editors.



- **Dr. VGM Naidu**, Professor (Pharmacology & Toxicology), was elected as a Fellow of Telangana Academy of Sciences.



- **Dr. Subham Banerjee**, Associate Professor (Pharmaceutics), was recognized as the 3D GEM Ambassador (2025) for extraordinary contributions in Pharm. Additive Manufacturing at the 3D Graphy Conference, J.N. Auditorium, IISc. Bengaluru in July 2025.



- **Dr. Awanish Mishra**, Assistant Professor (Pharmacology & Toxicology), received Research Grant as Co-PI from ICMR, New Delhi (under IIRPSG scheme), CoE (PRIP Scheme), DoP, MoCF, GOI, NIPER Guwahati of Rs. 47 Lakhs



for his project titled 'Preclinical efficacy of intranasal chitosan-coated mesoporous silica nanoparticles for co-delivery of donepezil and sinapic acid: A synergistic approach for enhanced Alzheimer's disease management'.

Dr. Mishra has also received a research grant from CoE (PRIP Scheme), DoP, MoCF, GOI, NIPER Guwahati for his project titled "Preclinical development and validation of Oroxylum indicum seeds formulation for management of Epilepsy" Project ID: GAP 171 E1 (Duration 5 years; Amount: INR 45 Lakh.

Students

- **Ankaj Kumar**, a PhD research scholar at NIPER Guwahati, has received a prestigious international travel support from the ANRF to attend the CRS 2025 Annual Meeting and Exposition held in Philadelphia, USA from July 14 to 18, 2025.



- **Ruby Kanasa** from Pharmacy Practice Department will attend and present research work as a poster presenter at the ISPOR—The Professional Society for Health Economics and Outcomes Research Real World Evidence Summit 2025: Through the Lens of Asia Pacific, held in Tokyo, Japan. • through the ICMR International Travel Grant.

- **Anjali Raveendran** from Pharmacy Practice Department attending the International Society for Pharmacoepidemiology (ISPE) Conference in the USA.

- **Jasirali**, PhD Scholar, Medical Devices Department was awarded the Best JRF on September 16, 2025 during 17th Foundation Day.

RAJBHASHA IMPLEMENTATION

नाईपर गुवाहाटी के हिंदी पखवाड़ा-2025 का रिपोर्ट

राजभाषा विभाग, गृह मंत्रालय, भारत सरकार एवं औषध विभाग, रसायन एवं उर्वरक मंत्रालय के नीतिगत निर्देशानुसार राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर) गुवाहाटी में दिनांक 17/09/2025 से 26/09/2025 तक हिंदी पखवाड़ा का आयोजन किया गया। इस वर्ष राजभाषा विभाग द्वारा 14 और 15 सितंबर 2025 को हिंदी दिवस का शुभारंभ गांधीनगर, गुजरात में महात्मा मंदिर सम्मेलन एवं प्रदर्शनी केंद्र में किया गया था।

हिंदी पखवाड़ा-2025 के दौरान दिनांक 17/09/2025 से 26/09/2025 तक संस्थान में विभिन्न प्रतियोगिताएं एवं हिंदी कार्यशाला आयोजित किए गए। इन प्रतियोगिताओं में हिंदी टिप्पण लेखन, राजभाषा प्रश्नोत्तरी प्रतियोगिता, पोस्टर प्रतियोगिता, एक वाक्य अनुवाद प्रतियोगिता, चित्र दृश्य लेखन प्रतियोगिता एवं वर्तनी शुद्धी प्रतियोगिता प्रमुख हैं। इन प्रतियोगिताओं में संस्थान के कर्मिकों तथा छात्र-छात्रा ने क्रमशः 46 व 32 ने भाग लिया।

हिंदी पखवाड़ा की अवधि में दिनांक 24/09/2025 को अधिकारियों एवं कर्मचारियों हेतु टिप्पण लेखन प्रतियोगिता पर एक हिंदी कार्यशाला का आयोजन किया गया। इस हिंदी कार्यशाला में नाईपर गुवाहाटी के विभिन्न अनुभागों के अधिकारियों एवं कर्मचारियों ने उत्साहपूर्वक भाग लिया। हिंदी कार्यशाला में श्रीमती दिव्या, सहायक निदेशक, हिंदी शिक्षण योजना, गुवाहाटी ने व्याख्यान दिया। व्याख्यान में हिंदी में कार्य करने की उपलब्ध सुविधाओं की भी चर्चा की गई तथा इस संबंध में आने वाली समस्याओं का निवारण भी किया गया।

हिंदी पखवाड़ा का समापन समारोह दिनांक 26/09/2025 को संस्थान के मिनी सभागार में किया गया। इस कार्यक्रम में मुख्य अतिथि के रूप में डॉ. अच्युत शर्मा, पूर्व अध्यक्ष, गौहाटी विश्वविद्यालय, को आमंत्रित किया गया था। डॉ. अच्युत शर्मा, पूर्व अध्यक्षने हिंदी दिवस एवं हिंदी साहित्य पर व्याख्यान दिया। नाईपर गुवाहाटी के निदेशक, प्रो. यू.एस.एन.मूर्ति ने हिंदी पखवाड़ा पर अपने विचार व्यक्त किया। डॉ. पवन पोरवाल, सहायक आचार्य ने सचिव, औषध विभाग के संदेश का वाचन किया। इस कार्यक्रम का मंच संचालन श्री रोहित कुमार साव, कनिष्ठ हिंदी अनुवादक द्वारा किया गया। इसके पश्चात विभिन्न प्रतियोगिताओं में भाग लेने वाले कर्मिकों तथा छात्र-छात्रा को पुरस्कार तथा प्रमाणपत्र प्रदान किया गया। इस कार्यक्रम का औपचारिक समापन डॉ. पवन पोरवाल, सहायक आचार्य के द्वारा धन्यवाद ज्ञापन कर किया गया।

हिंदी पखवाड़ा की कुछ झलकियाः-



PUBLICATIONS

- Sharma P, Choudhury S, Sahu BD*. Deciphering the Emerging Signaling Pathways That Interplay Between Chronic Kidney Disease and Heart: Therapeutic Challenges and Opportunities. *Journal of Biochemical and Molecular Toxicology*, (2025), 39 (8), e70409. <https://doi.org/10.1002/jbt.70409>. (IF-2.8/2025)
- Sarnaik S, Ahmed H, Hussain N, Kundu S, Sahu BD, Alexander A*. Folic Acid-Chitosan Conjugated Mesoporous Silica Nanoparticles for Enhanced Piceatannol Uptake in MCF-7 Breast Cancer Cells. *ACS Omega* (2025), <https://doi.org/10.1021/acsomega.5c05302>. (IF-4.3/2025)
- Gogoi N, Ahmed B, Rao S, Murty US, Pemmaraju DB. In Vitro Anti-Plasmodial Activity of *Oroxylum indicum* (L.) Kurz Stem Bark: Phytochemical Profiling via GC-MS and HRMS. *Food Bioscience*. 2025 Aug 27:107484.

-
- Darabdharma G, Borthakur P, Boruah PK, Sen S, Pemmaraju DB, Das MR. Advancements in two-dimensional boron nitride nanostructures: properties, preparation methods, and their biomedical applications. *Journal of materials chemistry. B.* 2025.
 - GULBAKE Arvind, KUMAR Ankaj, SAINI Anurag, SETHI Kalyan Kumar, SAHU Bidya Dhar. Phenylboronic Acid-Lipid Conjugate and Methods Thereof. Appl No. 202531085172. Date of filing: 08.09.2025.
 - Gupta A, Shinde PG, Jorvekar S, Humane AS, Chandrasekaran M, Borkar RM, Selvaraju S. G protein-coupled oestrogen receptor regulates branched-chain amino acid metabolism through c-Jun N-terminal kinase. *FEBS Lett.* 2025 Mar;599(6):892-900. doi: 10.1002/1873-3468.70030. Epub 2025 Mar 6. PMID: 40047196.
 - Mythri C, Jorvekar SB, Suraj N, Pruthiviraj N, Borkar RM, Selvaraju S. Thioridazine induces phospholipid accumulation and necroptosis in parental and tamoxifen-resistant breast cancer cells. *Mol Omics.* 2025 Jul 28. doi: 10.1039/d5mo00039d. Epub ahead of print. PMID: 40719011.
 - Malladi N, Hase AD, Arava S, Yadav R, Balani JK, Borthakur A, Banerjee SK. Empagliflozin attenuates liver steatosis and improves cardiac complications in choline-deficient high-fat diet-induced MAFLD rats. *Eur J Pharmacol.* 2025 Oct 15;1005:178067. doi: 10.1016/j.ejphar.2025.178067. Epub 2025 Aug 14. PMID: 40818656.
 - Alsalloum MA, Alsalloum AS, Thabit AK, Undela K. Impact of Augmented Renal Clearance on Infection Treatment Outcomes among Critically Ill Patients: A Systematic Review and Meta-Analysis. *Saudi Journal of Clinical Pharmacy* 2025;4(2):35-48
 - Mahesh R, Anjana Das K, Thomas C, Kotakonda SR, Maheshwari K, Undela K*. Identifying potential drug triggers for bullous pemphigoid: a disproportionality analysis of the FDA adverse event reporting system and systematic review of case reports. *Cutaneous and Ocular Toxicology* 2025 Sep 10. <https://doi.org/10.1080/15569527.2025.2554799> - IF 1.3
 - Ali SK, Thomas C, Rathod M, Undela K*. Efficacy and safety of capecitabine therapy in patients with Biliary tract cancer: A systematic review and meta-analysis. *Journal of Oncology Pharmacy Practice* 2025 Sep 12. <https://doi.org/10.1177/10781552251372874> - IF 0.9
 - Syed J, Pereira P, Tejaswini CJ, Avarebeel S, Ramesh K, Ramesh M, Undela K, Chalasani SH. Anticholinergic and sedative medication burden in older adults: an observational analysis. *Geriatric Care* 2025;11(2):14173
 - Syed J, Thomas C, Kaur B, Pereira P, Jayaram TC, Undela K, et al. Impact of Artificial Intelligence Assisted Drug Therapy Optimization on Drug Related Problems Amongst Older Adult Patients: A Systematic Review. *International Journal of Pharmaceutical Investigation* 2026;16(1):30-42
 - Mishra, K. A.; Kumari, N.; Carta, F.; Renzi, G.; Singh, H.; Supuran, C. T.; Sethi, K. K. Green Synthesis of Sulfonamide Derivatives as Human Carbonic Anhydrase Isoforms I, II, IX, XII Inhibitors and Antioxidants: Comprehensive Insights From Biological Evaluation. *Journal of biochemical and molecular toxicology*, 2025, 39, e70497.
 - Kalyan K. Sethi, Veena KS, Meshram Nikhil Murtikumar, Kusal Gurung, Strategies in the Discovery of Dual TRPA1-PDE4B Inhibitors Against Psoriasis. *ChemistrySelect*, 2025, 10 (38), e02712.
 - Mohit Maingle, Saigal, Insiya Icecreamwala, Sonone Sachin Madhukar, Ritwick Khanra, Kapileswar Seth. "Ru(II)-catalyzed catalytic additive-controlled selectivity switch between mono-olefination and dehydrogenative annulation of 3-aryl-4(3H)-quinazolinone: access to products of different chemotypes." *J. Org. Chem.* 2025, DOI: 10.1021/acs.joc.5c02240.
 - Shila Ashok Dhodi, Srijita Sen, Atul Pandurang Kumbhar, Sayalee Sanjay Mane, Swapnil Jayant Dengale, and Om Prakash Ranjan. Coamorphous Solid Forms of Posaconazole with Carboxylic Acid: Preparation, Characterization, and Pharmacokinetic Study. *Crystal Growth & Design Article.* July 2025; 25(15). (DOI: 10.1021/acs.cgd.5c00606)
 - Nama L, Bhushan R, Kumar P, Arumugam S, Ranjan OP, Kumar P, Kumar N. Chitosan nanoparticles of rutin mitigated histological changes induced in DNCB-induced colitis by enhanced modulation of inflammation and oxidative stress. *J Mol Histol.* June 2025; 56(4):200. (doi: 10.1007/s10735-025-10491-7)
 - Gaurav Shanbhag, Amruta Prabhakar Padakanti, Prajakta Bule, Lal Bahadur Pal, Naveen Chella. Functionalized Nanofibers: Revolutionizing Drug Delivery Systems and Biomedical Applications. *Pharmaceutical Nanotechnology.* 2025 (<https://doi.org/10.2174/0122117385372124250623054646>)
 - Jasirali Pannikkandathil, Sagar A Raut, Sreehari Errappagari, Sunanda Punnepalii, Mayur Krishna Das, Saurabh Kumar*, Insights into Laser-Scribed Graphene Device Interfaced with Paper for Electrochemical Detection of Bilirubin, *Adv. Mater. Technol.* 2025, e01348 (<https://doi.org/10.1002/admt.202501348>)
-

-
- Sagar A Raut, Sreehari Errappagari, Jasirali Pannikkandathil, Saurabh Bodake, Roshan M Borkar, Saurabh Kumar*, Conducting paper based sensor for uric acid detection in sweat, *Microchemical Journal*, 2025, 219, 116033
 - Thioridazine induces phospholipid accumulation and necroptosis in parental and tamoxifen-resistant breast cancer cells. Chandrasekaran Mythri, Sachin B Jorvekar, Nirawane Suraj, Nethaji Pruthiviraj, Roshan M Borkar and Sudhagar Selvaraju. *Molecular Omics*. DOI: 10.1039/d5mo00039d
 - Soni Navratan, Jat Sandeep, kumar Ankaj, Gulbake Arvind, Bhatt Manini, Das Bodhisatwa, Matsa Ramkishore, Vilas Gore Pratik, Dnyeswar Maykar, Kumar Pramod;
 - QbD-driven extraction and purification of piceatannol from passion fruit seeds and its cubosomes development, characterization, and neuronal cellular anal; food Bioscience, Elsevier; <https://doi.org/10.1016/j.fbio.2025.107277>
 - Chenkual, L., Lalchandani, D. S., Sathala, P. K., Rathod, M., & Porwal, P. K. (2025). Molecular-level interactions between Amlodipine besylate-Atenolol: Stability and compatibility studies. *Journal of Molecular Structure*, 1348, 143461. <https://doi.org/10.1016/j.molstruc.2025.143461>
 - Book chapter: Lalchandani, D. S., Chenkual, L., & Porwal, P. K. Stability of Herbal Formulations: Emerging Trends and Techniques. 195-217. <https://doi.org/10.1002/9781119769484.ch7>
 - Rai Nitesh, Kumar Deepak, Sharma Parul, Srikanth Pirangi, Moinuddin Shaik Khaja, Kumar Pramod, and Sukhendu Nandi, Simultaneous Bioanalytical Method Development and Validation of Navitoclax and Doxorubicin in Rat Plasma Using UHPLC-HESI-LTQ-MS, *Journal of Chromatographic Science*, 63, 8, 2025, Oxford University Press
 - Dhodi SA, Sen S, Kumbhar AP, Mane SS, Dengale SJ, Ranjan OP. Coamorphous Solid Forms of Posaconazole with Carboxylic Acid: Preparation, Characterization, and Pharmacokinetic Study. *Cryst Growth Des* [Internet]. 2025 Jul 17; Available from: <https://doi.org/10.1021/acs.cgd.5c00606>
 - Subbevarapu A, Viju AE, Londhe O, Mane S, Kumbhar A, Ranjan OP, et al. Enhancing Bioavailability of Lumefantrine: Development, Characterization, and Anti-Plasmodial Activity of a Ternary Amorphous Solid Dispersion. *J Pharm Innov* [Internet]. 2025;20(6):231. Available from: <https://doi.org/10.1007/s12247-025-10192-4>
 - Senapati, A., Sathala, P. K., Divate, M., Chenkual, L., & Porwal, P. K. (2026). Elucidating the role of thermally driven free energy modulations in the structural sustainability of solid-state transformations: Effect of thermal perturbation on structural stability of cefixime. *Talanta*, 298, 128979. <https://doi.org/10.1016/j.talanta.2025.128979>
 - PHOTOCURABLE RESIN AND METHODS THEREOF Sujata Das, Sachin B Jorvekar, Saurabh Bodake, Roshan M Borkar, Subham Banerjee, Indian patent, application number 202531094420
 - Sharon Rose, USN Murty, Subham Banerjee*. Marine polysaccharides as promising 3D printable biomaterials for potential wound healing, and antimicrobial therapeutics delivery. *International Journal of Biological Macromolecules*. 322, 147011, 2025.
 - Ankan Das, Srushti Lekurwale, Shriram Mahajan, Sanjay K Banerjee, Subham Banerjee*. Infill-Modulated, Bio-erodible, and Biocompatible Ocular Inserts for Tunable Acyclovir Release via Direct Powder Extrusion 3D Printing. SI: *Advances in Pharmaceutical Research in India*, ACS-Molecular Pharmaceutics. 22, 6092-6107, 2025.
 - Pankaj Kumar, Amritesh Kumar, Santosha Kumar Dwivedy*, Subham Banerjee*. Integrated Machine Learning Approach for Final Weight Prediction in Stimuli-responsive Four-dimensional Printed Single-layer Elastomer Strip. *Engineering Applications of Artificial Intelligence*. 162, 112756, 2025.
 - Sujata Das, Pintu Das, Subhadeep Roy, USN Murty, Subham Banerjee*. Photocurable Marine Resourced Ulvan Methacrylate Ink for High Precision CIP-3D Printing. *Materials Chemistry and Physics*. 348, 131668. 2026.
 - Pankaj Kumar, Amritesh Kumar, Santosha Kumar Dwivedy*, Subham Banerjee*. Machine Learning-Guided Tuning of Shape Memory Behavior in 4D Printed Polymers for Smart Drug Release. *4D Printing*. In Press. 2025.
 - Sharon Rose, USN Murty, Mamta Kumari, Subhadeep Roy, Subham Banerjee*. Marine Polysaccharide based Interpenetrating Polymeric Network (IPN) Microparticulate Systems with improved immunocompatibility & biocompatibility for advanced therapeutic applications. *Wiley Advanced Therapeutics*, In Press. 2025.
-

- Yogesh Chilbule, Tukaram Karanwad, Subham Banerjee*. Printability Unlocked: Enabling SLS 3D Printing with Modified Eudragit® EPO to Fabricate Immediate Release Tablets. SI: Indian National Young Academy of Sciences (INYAS), Proceedings of the Indian National Science Academy. In Press. 2025.
- Book Chapter: R. Patel, N. Trivedi, V. Pandya, A. Patel, S. Patel, A. Patel, B. Prajapati, M. Raval, M. Ra, A. Alexander, V. Sutariya, Liposomes in Targeting Macular Degeneration.
- Research Article: M. Dethe, H. Ahmed, P. A, V.V.S. Rayala, A. Priyadharshni, R. Pullapanthula, A. Alexander, A Validated Reverse-Phase High-Performance Liquid Chromatography Method for Concurrent Quantification of Ibuprofen and Resveratrol in Drug-loaded Mesoporous Silica Nanoparticles, SEPARATION SCIENCE PLUS, 8 (2025). (Impact Factor: 1.6).

UPDATES FROM KNOWLEDGE RESOURCE CENTRE

Grammarly Training Session

The Knowledge Resource Centre (KRC) organized a Grammarly Training Session on 11th July 2025 at the Institute Mini Auditorium for faculty, staff, and students. The session was conducted by Mr. Binoy Halam, who provided a concise demonstration of Grammarly's key features, including grammar correction, clarity enhancement, plagiarism checks, and academic writing support.

Participants gained practical insights into using Grammarly to improve the quality and professionalism of their academic and official documents. The session was well received and supported KRC's initiative to strengthen digital writing skills across the institute.

SciFinder Training Session

The Knowledge Resource Centre (KRC) organized a SciFinder Training Session on 18th September 2025 at the Institute Mini Auditorium for faculty, staff, and students. The session was led by Dr. Nabin Sarkar, expert from CAS (Chemical Abstracts Service), who provided an insightful demonstration on efficient literature searching, structure-based queries, and navigating chemical information using SciFinder.

Participants learned practical strategies to enhance their research workflow and access high-quality chemical and scientific data. The session was well received and supported KRC's ongoing efforts to promote research excellence within the institute.

Library Orientation Program

The Knowledge Resource Centre (KRC) conducted a Library Orientation Program on 19th September 2025, facilitated by the Library Information Officer (LIO). The session introduced newly admitted students to the library's resources, services, rules, and digital platforms, including e-resources, OPAC, and borrowing facilities.

Participants received an overview of how to effectively access and utilize the wide range of academic materials available at the KRC. The orientation aimed to help students become confident, independent users of library resources from the very beginning of their academic journey.

Editor-in-Chief

Dr. USN Murty

Editorial Board

Dr. Krishna Undela

Dr. Awanish Mishra

Dr. Arvind Gulbake

Dr. Pramod Kumar

Associate Editor

Dr. Bidya Dhar Sahu

Mr. Srikanta Sahu

Mr. Pruthviraj N

Mr. Tapan Nath

Mr. Abhijit Rajkhowa

Mr. Rohit Kr. Shaw

Editorial Board

Sub Editors (Students)

Ms. Prajakta Bule

Mr. Pavan Kr. Sathala

Mr. Rathod Mahesh

Ms. Nainsy Rajpoot

Mr. Fayiz ul Haq