

The Natural Sciences Quarterly July-September 2025

Conferences, Symposia, and Other Events



Applied Research & Industry Alliances (ARIA) Launch

The **School of Natural Sciences** launched the **Office for Applied Research & Industry Alliances (ARIA)** in July 2025. Designed to foster strategic collaborations between academic researchers and industry leaders, ARIA includes faculty representatives from each department in the school. Chaired by Prof. Colin Jamora, the Office for ARIA will act as a catalyst for translating scientific discovery into real-world applications, with a focus on improving human health and wellness.

Healthy Ageing: New Frontiers

On 8th July, the **Department of Life Sciences, Shiv Nadar University, in partnership with the Ignite Life Science Foundation**, hosted the event 'Healthy Ageing: New Frontiers' at the India Habitat Center, New Delhi. The event brought together potential donors, researchers, and stakeholders to explore impactful pathways for collaboration. The board members, advisors, and donors of Ignite Life Science Foundation also participated in an inspiring student interaction session at Shiv Nadar University on 7th July, 'Science Without Silos—Interdisciplinary Research for Societal Impact.'



Molecular Immunology Forum 2025

Between 10th-12th July 2025, the **Department of Life Sciences** hosted this year's **Molecular Immunology Forum (MIF)**, a three-day event that brought together India's leading immunologists for inspiring interaction, exchange of ideas and collaboration, and peer-reviewed discussion. **Dr. Rafi Ahmed, Emory University and Georgia Research Alliance** and **Prof. Vijay Kuchroo, Harvard Medical School** provided plenary talks on memory T-cells and T-helper cell differentiation respectively.

Undergraduate Industry Visit to Agilent Technologies

On 16th September 2025, undergraduate students from the **Department of Life Sciences** participated in an industry visit to **Agilent Technologies**, Gurugram, where students explored advanced lab technologies, had interactions with industry experts, and witnessed real-time applications relating to diagnostics, analytical chemistry, and next-generation sequencing.



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CSIR-National Physical Laboratory Visit

Students from the **Department of Physics** visited the **CSIR-National Physical Laboratory (NPL)** in Delhi on 28th August to explore advanced instruments, observe industrial applications of physics and metrology, and interact with scientific experts in the fields of time and frequency standards, precision and quantum metrology, materials science, and environmental science.

Department of Mathematics Outreach Activity

The **Department of Mathematics** conducted an outreach session on 8th August, where school students from 11th and 12th standard of **DPS Rajnagar Extension** attended sessions by Department faculty on relevant mathematical research themes.



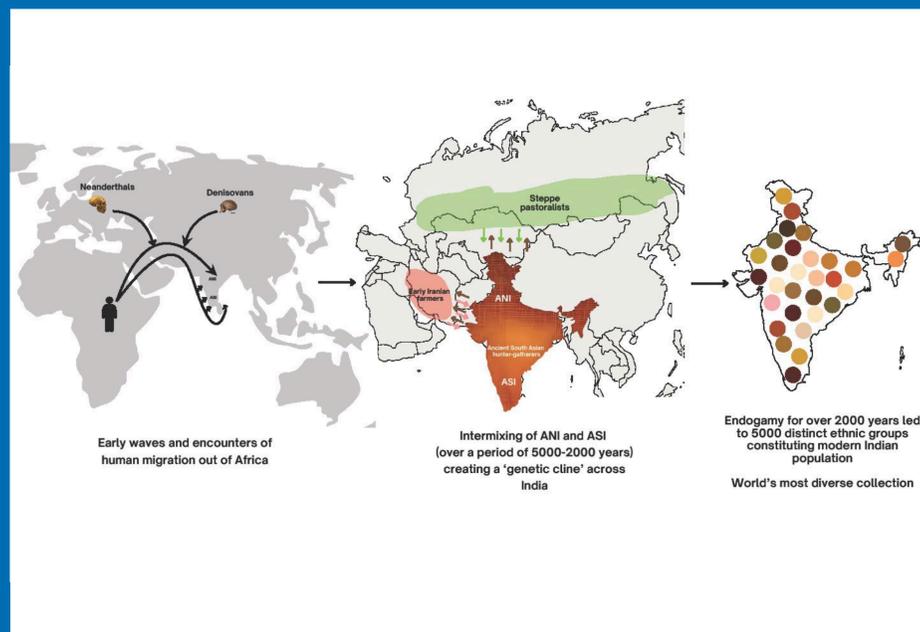
Dean's List Felicitation Ceremony

On 25th September, the Dean's List awardees for the **Spring 2025 semester** were recognized in a ceremony celebrating outstanding academic performance across undergraduate and postgraduate programs. **Bhavya Garg from the Department of Mathematics** received special recognition for achieving a perfect 10 GPA.

Faculty Spotlight

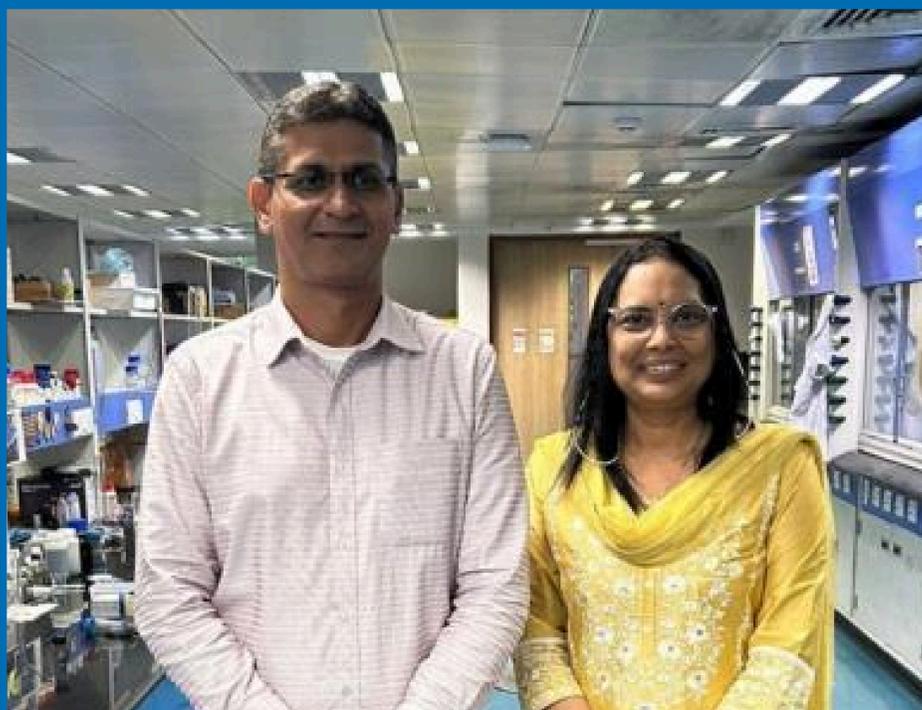


Drs. Nidhi Malhotra, Rudra Nayan Das, Sucheta Mondal, and Sujit Tandel received Certificates of Excellence for excellence and innovation in teaching pedagogy at the **Festival of Pedagogies, Faculty Professional Development Program, SNIoE**, held on 1st August 2025.



Prof. Sanjeev Galande co-authored a commentary on 'India's unique genetic legacy and its implications for health and ancestry' with Dr. Rakesh Mishra, Director of the Tata Institute of Genetics and Society (TIGS), Bengaluru. The article was published in *The Hindu* on 12th August: <https://lnkd.in/gZEEb5k8>

Faculty Spotlight



Prof. Bimlesh Lochab delivered the keynote lecture at the International Symposium on Chemistry for Sustainability, Catalysis, and Renewable Energy, jointly organised by IIT Delhi and the Royal Society of Chemistry on 26th September 2025.

She also formalised an industry alliance with Satya Cashew Chemicals Pvt. Ltd. (SCCPL®), Nanganallur, Chennai.



Prof. Priya Johari joined the Editorial Board of *Scientific Reports* from 1st September. She also served as keynote speaker and chaired a session at the 3rd Asia-Europe Symposium on Chemistry and Materials (ASCM 2025), delivering a talk titled, 'Computational Design of High-Performance Anode Materials for the Next-Generation Li-ion and Na-ion Batteries.' The conference was held at Urumqi, China from 20th-22nd August 2025.



Dr. Tatini Rakshit gave the keynote lecture at the AIIMS Exosome Workshop. Conducted from 1st-10th September 2025, the workshop was jointly arranged by the Department of Biophysics and Department of Anatomy at AIIMS Delhi. The lecture was titled 'Exosomes for drug delivery and antibacterial applications.'

Her work on diabetic wound healing with rose extracellular vesicles was highlighted in *The Hindu* on 30th September in an article titled, 'Could roses help heal diabetic wounds?' <https://www.thehindu.com/sci-tech/health/could-roses-help-heal-diabetic-wounds-a-new-research-paper-finds-out/article70083620.ece>



Dr. Kshatresh Dutta Dubey published an article in the very prestigious journal, *Chemical Research*, titled 'Oriented Electric Fields—Universal Catalysts' <https://pubs.acs.org/doi/full/10.1021/acs.accounts.5c00508>

Faculty Spotlight



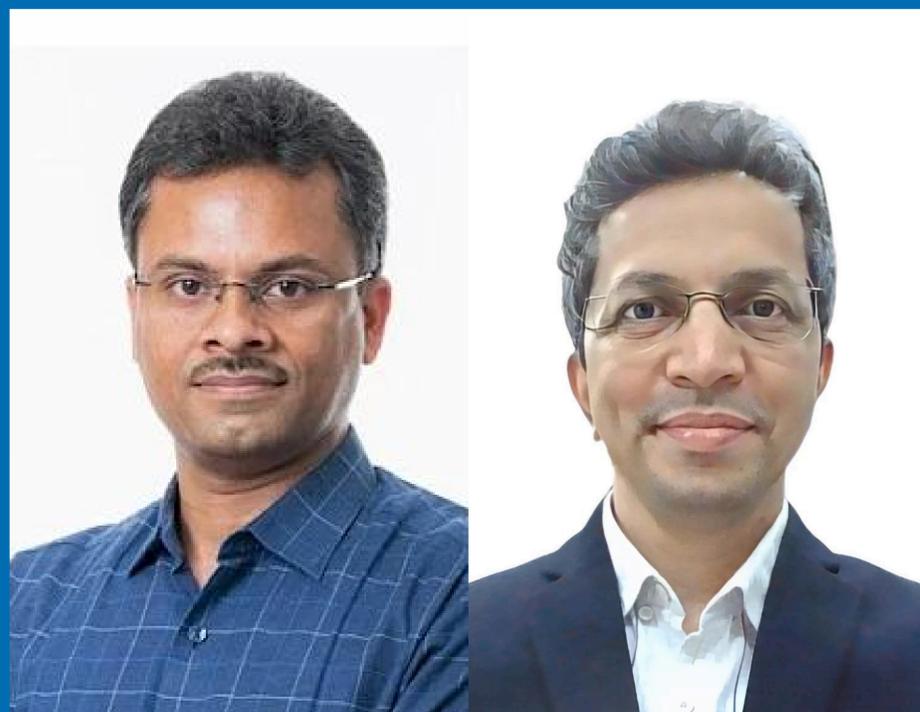
Dr. Ajoy Kapat is leading the pioneering breakthrough of Photoinduced Radical Polymerisation (PRP), a light-powered 3D printing technique that can create durable, toxin-free dental fillings in under 40 seconds. The technology's applications extend beyond dentistry to electronics packaging and other everyday products. For their research, Dr. Kapat's team was featured on the Better India Platform: <https://x.com/thebetterindia/status/1926647042098479120>



Dr. Ipsita Mandal's article, 'Linear response of tilted anisotropic two-dimensional Dirac cones,' published in the *European Physical Journal (EPJ)*, was chosen to be highlighted on the journal website in July. <https://www.epj.org/epjb-news/2913-epjb-highlight-uncovering-the-magnetic-responses-of-anisotropic-semimetals>



Dr. Rudra Nayan Das received an award for oral presentation in the Basic Science category at the Cardiovascular Research Convergence 2025, held at Gujarat Biotechnology University from 6th-7th September 2025.



Prof. Parthapratim Munshi and **Prof. Sujit K. Tandel** have been inducted as Editorial Board Members of **Scientific Reports (Nature Portfolio)**.

I Stanford-Elsevier Top 2% Scientists Ranking 2025



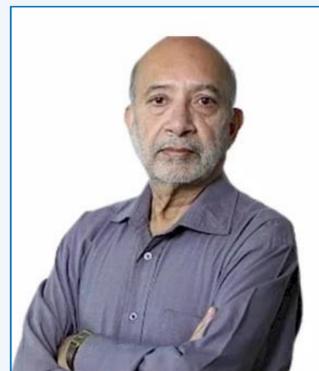
Prof. Harpreet S Arora

School of Engineering



Dr. Balamurugan Balasamy

Associate Dean, Academics



Prof. Rajendra P Chhabra

School of Engineering



Prof. Harpreet S Grewal

School of Engineering



Prof. Indranil Biswas

School of Natural Sciences



Dr. Binson Babu

School of Natural Sciences



Prof. Bimlesh Lochab

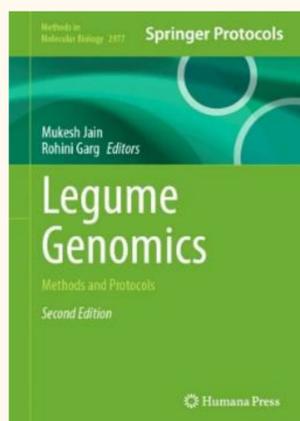
School of Natural Sciences



Dr. Ipsita Mandal

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I Book and Chapter Publication



The second volume of the book ***Legume Genomics - Methods and Protocols***, published in the Methods in Molecular Biology series was edited by **Dr. Mukesh Jain from the School of Computational and Integrative Sciences, Jawaharlal Nehru University** and **Dr. Rohini Garg from the Department of Life Sciences, School of Natural Sciences**. It presents new and updated methodologies for studying various cellular processes in legumes, including essential protocols with step-by-step guidance and improved strategies for enhancing legume crops.



Dr. Sajal Kumar Ghosh from the **Department of Physics** co-authored the chapter, **'Perturbed structure of a vesicle by an antimicrobial peptide,'** in the book, ***ADVANCES IN BIOMEMBRANES AND LIPID SELF-ASSEMBLY***, along with Devansh Kaushik, also from the Department of Physics, and Veerendra K. Sharma from the Bhabha Atomic Research Centre.

I Accepted Grants

- **Dr. Ashish Gupta** (PI) and **Dr. Ashutosh Singh** (co-PI) received a grant worth INR 19.36 lakh from the Council of Science & Technology, Uttar Pradesh (CSTUP) for a project titled, **'Investigating the non-canonical role of TIP60 in driving prostate cancer.'** (2025-2028)
- **Dr. Sumeet Pal Singh** received the 2025 Ramalingaswami Re-entry Fellowship from the Department of Biotechnology (DBT), Government of India. The grant worth INR 40.5 lakh (2025-2028) has been awarded for the project, **'Regulators of cellular plasticity during organ regeneration.'**
- **Dr. Sachin Deshmukh** received a DST-NSF grant of INR 18.06 lakh for his project titled **'Algorithms from Wetware: A Neural Model of Spatial Navigation in Very Large and Cluttered Space'** (2025-2028).

Conferences, Symposia, and Other Achievements

I Invited Speakers

Dr. Bappaditya Gole

- International Travel Grant by ANRF to participate in International Symposium on Foldamers, 2025, at King's College, London from 1st-3rd August 2025 for talk on 'Electroactive multi-stack dye oligomers and their folding behavior.'
- Electroactive multi-stack dye oligomers and their folding behavior.' at Frontier in Chemistry: Fundamentals to Applications - 2025 at Presidency University, Kolkata, 12th-14th September 2025.

Prof. Sanjeev Galande

- Talk titled, 'Spatial transcriptomic analysis reveals age-related alterations in the spatial organization of cell types within the mouse olfactory bulb' at the Genomics India conference, 12th-14th August 2025, IISc Bangalore.
- Talk on, 'Center of Excellence in Metabolism and Aging at Shiv Nadar Institution of Eminence, Delhi-NCR' at the Sun Pharma Science Foundation National Symposium, 'Innovation in age-appropriate therapeutics for the elderly,' organized by the National Institute of Pharmaceutical Education and Research (NIPER) Lucknow, 18th August 2025.
- Talk titled, 'Satb1 integrates cohesion mediated genome organization and transcriptional regulation during T Cell development' at St. Jude Children's Research Hospital, Memphis, Tennessee, USA, on 12th September 2025.
- Talk on, 'Dynamic m⁶A RNA methylation governs differentiation in *Hydra*' at international workshop, 'From conservation to innovation - Adaptation insights from basal metazoans,' held from 22nd-25th September 2025, Evangelische Akademie, Tutzing, Germany.

Prof. Amber Habib

- Talk titled, '2x2 Real Matrices - a melting pot' at IIIT Delhi on 16th September 2025.

Dr. Sachin Deshmukh

- Talk titled, 'Determinants of the hippocampal spatial code,' at Computational Approaches to Memory and Plasticity 2025, held at IISER-Pune.
- Seminar on 'Kinks in the structure-function relationships in the hippocampal formation,' CHINTA (TCG-CREST), Kolkata in August 2025.
- Talk on, 'Towards ethologically relevant spatial scales: representation of space in the rat hippocampus as a function of arena size' at the XXXVIII International Ethological Congress - Behaviour 2025 held in August 2025.

Dr. Priyanka Grover

- Presented the topic 'Subdifferential calculus, approximations and orthogonality' at the mid-year meeting of Indian Academy of Sciences.

Dr. Sajal Kumar Ghosh

- Presented study titled, 'Cholesterol restricted assembly of ionic liquids in a phospholipid membrane' at 15th European Biophysics Congress (EBSA 2025) organised in Rome, Italy from 30th June-4th July 2025.
- Presented study titled, 'Experimental quantification of interaction of ionic liquids with a lipid monolayer' at BIONS 2025 - International Workshop on Biophysics of Ionic Liquids organized at University of Roma Tre, Rome, Italy on 5th July 2025.

Dr. Kenji Nishiwaki

- Oral presentation titled, 'Exploring MeV-scale U(1) L_μ-L_τ Extra Dimension through DUNE and muon beam dumps' in plenary session at Phoenix-2025 conference held at IIT Hyderabad on 9th July 2025.

Dr. Mayukh Majumder

- Physics of Strongly Correlated Electron Systems (PSCES-2025) conference held at IIT Bhubaneswar on 12th September 2025.

Dr. Binson Babu

- Bavarian Center for Battery Technology (BayBatt), University of Bayreuth, Germany.
- Indo-German Science & Technology Centre (IGSTC) Paired Early Career Fellowship in Applied Research (PECFAR)-Call 2025 during research visit at Friedrich Schiller University, Jena and Helmholtz Institute Ulm (HIU), Germany.
- 76th Annual Meeting of International Society of Electrochemistry, held in Mainz, Germany, 7th-12th September 2025.

Dr. Debarshi Das

- Presented 'New Experimental Proposals to Test the Nonclassicality of Large Masses and Gravity' at Department of Physics and Astrophysics, University of Delhi on 1st September 2025.

Prof. Subhabrata Sen

- 'Enlightening and electrifying diazo esters' organised by Lupin Pharma and Aragen Pharma on 7th and 17th July 2025 respectively.

Prof. Bimlesh Lochab

- 'Degradable Bio-derived Polybenzoxazine Thermosets' at Frontiers and Advances in Chemistry: Theory & Synthesis (FACTS 2025), Ashoka University, Sonapat from 1st-3rd August 2025.

Conferences, Symposia, and Other Achievements

I Invited Speakers

Dr. Charu Sharma

- Presented paper, titled 'Leveraging RNNs, LSTMs, and Recurrence Quantification for Synchronization in the Indian Stock Market' at 3rd European Conference on Operational Research (EURO 2025), held in the United Kingdom from 22nd-25th June 2025.

Prof. Colin Jamora

- Conference for the 15th Anniversary of the Amity Institute of Biotechnology at Amity University Haryana, from 10th-13th September 2025.

Dr. Richa Priyadarshini

- Invited to join as member of ANRF-NPDF Evaluation Committee-Life Sciences and evaluated proposals at its 1st meeting from 28th-30th August 2025.

Dr. Tanvi Deora

- Talk titled, 'Tactile sensing and learning during insect feeding and pollination interactions' at Behavior 2025, 38th International Ethology conference at IISSER Kolkata 2025 from 25th-30th August.

Dr. Sumeet Pal Singh

- Patterns-2025 Conference at Indian Institute of Technology, Hyderabad (IIT-H) on 7th September 2025.

Prof. Parthapratim Munshi

- Lecture on, 'Role of Polymorphism in Tuning Potency of Human African Trypanosomiasis Inhibitors: Insights from Quantum Crystallography,' at 52nd National Seminar on Crystallography and Drug & Design (NSC-52), 24th-26th September 2025, Pondicherry University.

Dr. Naiwrit Karmodak

- Talk titled, 'Multiscale Modelling of the Stability and Catalytic Activity of Materials for sustainable energy resources' at Frontier in Chemistry: Fundamentals to Applications - 2025 held from 12th-14th September 2025, Presidency University, Kolkata.

Dr. Puli Chandramouli Reddy

- Talk titled, 'Uncovering the diverse secretory repertoire of Hydra vulgaris' at international workshop, 'From conservation to innovation - Adaptation insights from basal metazoans,' held from 22nd-25th September 2025, Evangelische Akademie, Tutzing, Germany.

I Workshops

Dr. Charu Gupta

- Conducted workshop for undergraduate students at Hindu College, University of Delhi on 28th August 2025 titled, 'From Data to Decisions: Introduction to AI and ML.'

Dr. Satyanarayana Reddy

- Served as resource person for Online Foundation Course in Mathematics (OFCM-2025) organised by the Mathematics Training and Talent Search (MTTS) Trust during 24th August-6th September 2025.

Prof. Amber Habib

- Conducted workshop sessions for teachers of Eklavya Model Residential Schools as part of a faculty development programme organised by National Education Society for Tribal Students, Ministry of Tribal Affairs on 4th and 5th August 2025.

Student Achievements

Dyuti Saha (Post-doctoral fellow)



- Awarded the **Best Oral Presentation** certificate at the **Research Catalyst Global Symposium 2025**.

Shilpa Jangid (Post-doctoral fellow)



- Published **book chapter** titled, '**Research Methods vs. Methodology**' in Research Methods and Advance Techniques in Computer Science (2025).

Gaurav Kansagara (Ph.D. scholar)



- Received **European Society for Dermatological Research (ESDR)-Lilly Fellowship** to attend the **54th Annual Meeting of ESDR** from 10th-13th September 2025 in Antwerp, Belgium.

Sonam Raghav (Ph.D. scholar)



- Won **Bursary Award** worth £500, **funded by Wellcome Trust**, to attend **Physics of Life Summer School 2025** organised at Durham University, United Kingdom, from 8th-11th September 2025 and presented a poster.
- Awarded the **Senior Research Fellowship (Direct)** by the Council of Scientific and Industrial Research, Government of India, from July 2025 to July 2028.

Student Achievements

Dr. Adebayo Isaac Olosho (Post-doctoral fellow)



- Joined as a **Department of Biotechnology and The World Academy of Sciences (DBT-TWAS) postdoctoral fellow** in Prof. Bimlesh Lochab's lab after completing Ph.D. in Industrial Chemistry from University of Ilorin Nigeria, 2023.

Ishant Gaba (Ph.D. scholar)



- Won **best oral presentation award** at **Physics of Strongly Correlated Electron Systems (PSCES-2025)** conference held at IIT Bhubaneswar.

Vaibhav Bhatt (Ph.D. scholar)



- Received **Best Poster Award** at **FACTS-2025** conference, Ashoka University in August 2025.

Ajit Seth (Ph.D. scholar)



- Invited speaker on 'Biophysical study of protective nature of lipopolysaccharide in bacterial membrane against ionic liquids' at **BIONS 2025 - International Workshop on Biophysics of Ionic Liquids** organised at University of Roma Tre, Rome, Italy on 5th July 2025.
- Gave oral presentation titled, 'Cholesterol modulated assembly of graphene oxide nanoflakes around a phospholipid monolayer at air-water interface' at **15th European Biophysics Congress (EBSA 2025)** organised in Rome, Italy from 30th June-4th July 2025.

Shivani Yadav (Ph.D. scholar)



- Co-authored article, 'Advancing Renewable Amines: Furan-Derived Polybenzoxazines,' published in *ACS Applied Polymer Materials*, that was **featured by ACS Publications** for advancing the UN Sustainable Development Goals: <https://www.growkudos.com/publications/10.1021%25252Facsapm.4c03222/reader>.

Malvika Modi (Ph.D. scholar)



- Received **ANRF International Travel grant** to attend **Annual Congress of the Swiss Society for Microbiology (SSM) 2025** and give a talk on 'Deficiency in peptidoglycan recycling promotes beta-lactam drug sensitivity in *Caulobacter crescentus*' from 27th-28th August 2025.
- **Selected to present her PhD thesis** in "My Thesis in 180 seconds" session organised by the Institute of Medical Microbiology, University of Zurich.

Subhankar Bera (Ph.D. scholar)



- Received **ANRF International Travel Grant** to attend **CHEMMEET 2025** in Athens, Greece, 29th September-1st October 2025.

Sayani Das (Ph.D. scholar)



- Received **2nd prize for Best Student Presentation** among Oral plus Poster presentations at **24th Conference on Liquid Crystals (CLC 2025)**, held from 15th-19th September 2025, at Szklarska Poręba, Poland.

Akshat Gupta (UG student)



- Won **first prize and special tour to ZEISS microscopy facility** for oral presentation titled, 'Instabilities in ferrofluids modulated by magnetic fields.'

Shubhika Pandey (UG student)



- Gave oral presentation titled, 'Overcoming Linnean and Wallacean shortfalls in Melon barbs (*Teleostei: Cyprinidae: Haludaria*) endemic to the Western Ghats of India' at **Student Conference on Conservation Science (SCCS) - Bengaluru** organised and hosted by Indian Institute of Science, National Centre for Biological Sciences, Foundation for Ecological Security, and Nature Conservation Foundation in September 2025.

Student Achievements

Deepak Deepak, Tanuja Singh and Abhishek Panghal (Ph.D. scholars)



- Gave oral presentations at **European Materials Research Society 2025 Fall Meeting and Exhibition** from 15th-18th September 2025 at Warsaw University of Technology, Warsaw, Poland.

Khokan Bhattacharya (Ph.D. scholar)



- Gave oral presentation at **Physics of Strongly Correlated Electron Systems (PSCES-2025)** conference held at IIT Bhubaneshwar.

Bharti Sharma (Junior research fellow)



- Presented talk on 'Sensorimotor circuits and motion control of insect proboscis during floral exploration and pollination' at **Behavior 2025, 38th International Ethology Meeting 2025**.

Kishore Kumar and Yasti Dahal (UG students)



- Received **Master Program Fellowship** at **International Max Planck Research School for Condensed Matter Science (IMPRS-CMS)** in Stuttgart, Germany.

Harshini Dhara (UG student)



- Awarded **Fellowship** for **M.Sc. Program** at **Ruhr University Bochum, Germany**.

Mansi Bhattacharya (UG student)



- Received offer to join M.Sc. Program at **KU Leuven, Belgium** with 80% tuition fee waiver.

I Congratulations to our Ph.D. Awardees!

Student	Thesis
Dr. Renu Saraswat	Stock Market Forecasting Through Multilevel Dynamical Interactions: An Auto-Optimized Multimodal Deep Learning Approach.
Dr. Khyati Sharma	Study of Finite Groups Through Subgroups and Their Count.
Dr. Sai Rasmi Ranjan Mohanty	Maximal Surfaces in Lorentz-Minkowski Space and their Singularity.
Dr. Pawanesh	Analyzing Financial Markets Through Network Structures in Hyperbolic Spaces.
Dr. Saroj	Extracellular Vesicles: An Emerging Multifunctional Platform for Biomedical Applications
Dr. Tejas P.	Blue LED induced reactions of diazoesters and diazonium salts: Their application in the formation of new C-X (X = C, O, N) bonds
Dr. Raktim Deka	Harnessing Triplet Energy via Molecular Engineering of Acyclic and Cyclic Donor-Acceptor Conjugates
Dr. Arnab Sil	Microscopic Structure and Dynamics in Deep Eutectic Solvents: A Combined Spectroscopic and Computational Approach

I Other Achievements

Dr. Debajit Maiti (Ph.D. awarded 2024)

Joined as Assistant Professor in Department of Chemistry, SIAS at **Krea University**, Sri City, AP, India.

Dr. Bisweswar Santra

Assumed postdoctoral position at **Technion - Israel Institute of Technology**.

Dr. Arnab Sil (Ph.D. submitted 2025)

Secured position as postdoctoral fellow at **Institute of Plant Genetics of the Polish Academy of Sciences (IPG PAS)**, Poland.

Dr. Rashmi Yadav (Ph.D. submitted 2025)

Secured Research Associate position at **Pohang University of Science and Technology**, South Korea.

I Summer Programs and Internships

Aryaman Sen

- Indian Institute of Science Education & Research (IISER), Bhopal, as part of Summer Research Fellowship Program (SRFP) conducted by Government of India.
-

Abhinandan Bhatia

- Undergraduate Summer Program in Mathematics at IIT Delhi
 - Summer Research Internship Theoretical and Computational Astrophysics at D.S Kothari Research Centre, Miranda House University of Delhi
-

Pratham Mittal

- Ernst and Young
-

Dhruv Sai Shankar

- Indian Meteorological Department, Bengaluru
-

G. Venkatakrishnan

- Mathematics Training and Talent Search Programme (MTTS) Level O, Bharathidasan University
-

Sarthak Bose

- ICICI Housing Finance Company
-

Aden Mathew

- Sutherland Global
-

Garima Mamtani

- Karlsruhe Institute of Technology

Jayin Khanna

- Summer Research Fellowship Program (SRFP) 2025 by Indian Academy of Sciences, SPIRE Lab, at Indian Institute of Science, Bengaluru
 - Internship at IIT Kharagpur
-

Praganya Singh

- Indian School of Business, Hyderabad
-

Shankar Vasudevan

- Edveon Technology
-

Lakshya Mishra

- Fidelity Investments, New Chandigarh
-

Khushi

- Indian Women and Mathematics 2025, Christ University
-

Gaurav Gupta

- Institute of Nuclear Medicine and Allied Sciences, DRDO
-

Mridul Jain

- IIT Delhi
-

Tarunya Venkat

- Summer Research Fellowship sponsored by Indian Academy of Sciences (IASc), Indian National Science Academy (INSA), and the National Academy of Sciences India (NASI) at Indian Institute of Science, Bengaluru
-

Deepak Sai Shankar

- Indian Meteorological Department, Bengaluru

Academic Publications

- Raktim Deka, Manjeet Singh, Tanika Sharma, Sreerang Peethambaran, **Debdas Ray***. Cyclic Array of Twisted Donor-Acceptor Conjugates Leading to Deep Blue Thermally Activated Delayed Fluorescence; *J. Phys. Chem. Lett.* 2025, 16, 7848–7853.
- K. Dogra, **Basab Bijayi Dhar***. Investigation of the true catalyst: a binuclear Ni-NHC complex for water oxidation; *Inorg. Chem. Commun.* 2025; 181, 114979 (1-9)
- Bhaskaranand Bhatt, Umesh Marathe, Shivani Yadav, **Bimlesh Lochab*** and Jayashree Bijwe*. Novel cardanol-based polybenzoxazine (PBZ) resins from a sustainable source to substitute phenolic resins in brake pads for eco-friendliness and superior performance; *Composites Part B: Engineering*, 2025, 112792.
- Amit Kumar, Kritika Dogra, **Basab Bijayi Dhar**. Oxidative copper-catalyzed synthesis of β -amino ketones from allyl alcohols and anilines., *Organic Chemistry Frontiers* 2025; 12, 4924-4929.
- Deepannita Samanta, Sabyasachi Sarkar, Dinesh Singh, Soumya Samanta, Santanu Manna, **Kshatresh Dutta Dubey***, Abhishek Dey*, Sason Shaik*, Sankar Prasad Rath*; Unusually Stable Synthetic Diheme Bis-Fe (IV) oxo: An Intermediate in Diheme Enzymes MauG and BthA; *Journal of the American Chemical Society* 2025; 147, 22562-22571.
- Sahu D., Patel I., Lakshman K., **Mapa K., Malhotra N.***. Bridging structure and selectivity in chaperone-mediated autophagy: towards targeted therapeutics, *The FEBS Journal*, 2025; 292, 2960-2985.
- B. Bhatia, P. Gupta, C. Len, and **B. Lochab***. Photodegradable Biobased Polybenzoxazines: Toward Circular Thermosets, *Macromolecules*. *Macromolecules* 2025; 58, 19, 10725–10737.
- Tripathi S., Gupta E., Naik R., Khare R., Mir R., Kamat S., and **Galande S.** 2025 Statins exhibit anti-tumor potential by modulating Wnt/ β -catenin signaling in colorectal cancer. *Oncotarget* 2025; 16:562-581.
- Jayaram A., **Galande S.**, Sarbati S., Deshpande D, and **Pawar, K.** Profile of tRNA-derived short non-coding RNAs during monocyte differentiation and their role in macrophage survival. 2025. *RNA Biology*, 22(1), 1–9.
- **Dahanukar, N.***. Phreatic mysteries: Diversity and distribution of fossorial and aquifer-dwelling synbranchid eels of southern peninsular India, and implications for conservation (Pisces: Synbranchiformes: Synbranchidae); *Vertebrate Zoology*. 75: 245-258
- Gupta H and **Gupta A.** Post-translational modifications of epigenetic modifier TIP60: their role in cellular functions and cancer; *Epigenetics and Chromatin*. 18(1), 1-18.
- Saraswat, Renu, & **Kumar, Ajit.** (2025). Stock Price Forecasting With Integration of Sectoral Behavior: A Deep Auto-Optimized Multimodal Framework; *Journal of Forecasting*, 44(5), 1767-1784.
- Pawanesh Pawanesh, **Charu Sharma, Niteesh Sahni**, Analyzing communicability and connectivity in the Indian stock market during crises; *Journal of Complex Networks*, Volume 13, Issue 5, 2025, pp. 1-21.
- Imran Ansari, Pawanesh, and **Niteesh Sahni**. Uncovering the hidden core-periphery structure in hyperbolic networks; *Physical Review E, American Physical Society*, vol. 112, Issue 3, 2025, pp. 034311-1 - 034311-16.
- Megha Prajapatizz, Abhinav Mahapatra, G. Maity, Prashant Kumar Mishra, Sekhar Chandra Ray, **Susanta Sinha Roy**. Tuning of optical band gap and photoluminescence behaviours of 1D-ZnO decorated with ZrO₂ (ZnO-NRs/ZrO₂ core shell) nanostructured materials by pulse laser deposition technique; *Discover Materials*, Volume 5, 164 (2025)
- **S. K. Tandel**, S. G. Wahid, N. Krishnadev, M. Hemalatha, Subhrajit Sahoo, P. C. Srivastava, P. Chowdhury, R. V. F. Janssens, F.G. Kondev, M. P. Carpenter, T. Lauritsen, D. Seweryniak. Core-excited microsecond isomer in 207Pb; *Physical Review C* 112, 024302 (2025).
- J. Gupta, V. K. Sharma, P. Hitaishi, A. K. Jha, J. B. Mitra, H. Srinivasan, S. Kumar, A. Kumar, **S. K. Ghosh**, and S. Mitra. Cholesterol Modulates Ionic Liquid-Lipid Membrane Interactions; *Langmuir* 2025, 41, 25978–25991.
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