



MANIPAL UNIVERSITY
JAIPUR

DEPARTMENT OF BIOSCIENCES

NEWSLETTER

JAN - JUNE 2026

*Exploring Life. Advancing Knowledge.
Inspiring Tomorrow.*



RESEARCH • INNOVATION • EDUCATION • COLLABORATION • IMPACT



EDITORIAL NOTE

It is with great pride that we present this edition of our newsletter with a true reflection of the collective spirit, achievements, and vibrant academic culture of our department. More than a compilation of updates, this publication represents the creativity, dedication, and collaboration that define our community.

*Under the guidance of **Dr. Priya Shukla**, the editorial team led the entire process, from conceptualizing the structure and curating meaningful content to highlighting significant milestones and accomplishments. Their thoughtful approach to design, emphasizing clarity, visual appeal, and reader engagement, has transformed this newsletter into an informative and inspiring resource.*

Equally valuable has been the enthusiastic involvement of our faculty members. Their insightful suggestions, active participation, and generous contributions have enriched the content and ensured that this edition truly reflects the diverse expertise and accomplishments within the department. From sharing achievements to refining the narrative, every faculty member has played an integral role in bringing this publication to life.

This newsletter is more than a document, it is a celebration of teamwork and a testament to what can be achieved when diverse perspectives, creativity, and shared vision come together. It serves not only to inform but also to inspire and strengthen our sense of belonging as a dynamic academic family.

We hope this edition resonates with every reader and reinforces the pride we all share in being part of such a thriving and collaborative community.

Thank you.

Editorial Board



Welcoming New Horizons: Dr. Kamakhya Prakash Misra Takes Charge

The Department of Biosciences enters a new chapter as Dr. Sandeep Kumar Srivastava concludes his tenure at the University. We express our heartfelt gratitude for his dedicated service, leadership, and valuable contributions towards the growth of the department, and wish him every success in his future endeavors.



*We are pleased to announce that **Dr. Kamakhya Prakash Misra** has taken over the charge as the new **Head of the Department of Biosciences**.*

*Dr. Misra obtained his **Ph.D. in Physics** from the **University of Lucknow** in 2011 and joined **Manipal University Jaipur** in 2013 as an Assistant Professor in the Department of Physics. He is an accomplished researcher with **over 75 publications** in reputed international journals and conference proceedings.*

*His academic achievements include editing the Elsevier book **Ceramic Science and Engineering: Basics to Recent Advancements** (2022), authoring four book chapters, and writing the novel **The Guest Faculty**. He has also successfully completed a **UGC-DAE-CSR Indore Centre funded project** as Co-Principal Investigator.*

*Dr. Misra serves as a reviewer for several prestigious journals and is a member of the editorial boards of three Q1 journals: **Nanomedicine**, **Materials Technology**, and **International Journal of Nanomedicine**. He actively engages in national and international collaborations, including with the **University of Texas at El Paso, USA**.*

"Leadership is not merely about guiding a department; it is about inspiring people, fostering innovation, and creating opportunities for others to excel. We warmly welcome Dr. Kamakhya Prakash Misra and look forward to an exciting new chapter under his stewardship while expressing our deepest appreciation to Dr. Sandeep Kumar Srivastava for his dedicated service and enduring contributions to the department.

Sustainability & Health: A Synergistic Approach

The Department of Biosciences, Manipal University Jaipur (MUJ), in collaboration with the Directorate of Student Welfare and the Biotech Club, successfully organized a symposium on “Sustainability & Health: A Synergistic Approach” on 10 March 2026. The event was organized under the leadership of Dr. Mousumi Debnath, whose efforts brought together experts, academicians, and students to promote dialogue on sustainable health solutions.

*The symposium highlighted the significance of the **One Health approach**, emphasizing the interconnectedness of human, animal, and environmental health in addressing global challenges such as antimicrobial resistance, emerging infectious diseases, and climate change.*

*The inaugural session featured a keynote address by **Prof. Vishwa Mohan Katoch**, Former Secretary, Department of Health Research (DHR), Ministry of Health & Family Welfare, Government of India, and former Director General of ICMR. He was honored with the **MBSI Lifetime Devotion Award** in recognition of his exceptional contributions to medical research and public health.*

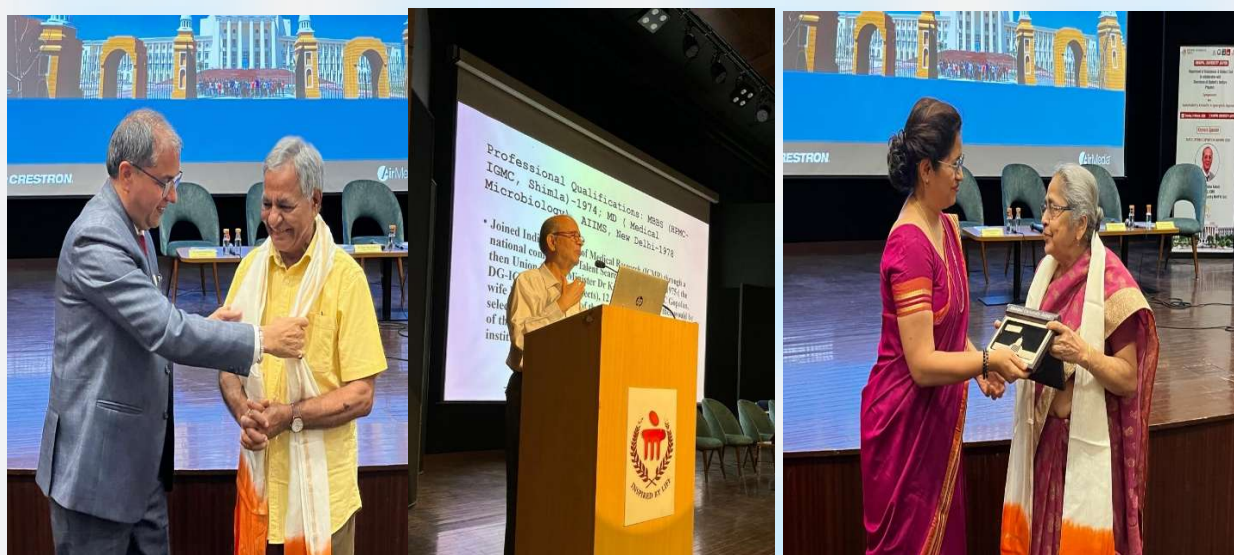


*The event also included a panel discussion on “**One Health**”, bringing together distinguished academicians to emphasize the importance of interdisciplinary collaboration in tackling global health challenges. Students*

actively participated in a **poster presentation**, an **essay competition on antimicrobial resistance**, and a **rangoli competition**, showcasing their innovative and creative perspectives.

The symposium concluded with a **valedictory session and prize distribution ceremony**, including the **MBSI Best Student Awards**, recognizing outstanding student participation and achievements.

This event reflects **MUJ's continued commitment to interdisciplinary research, innovation, and student engagement in building sustainable solutions for global health challenges**.





Research Excellence: Faculty Members Secure Prestigious Grants



Dr. Arti Choudhary



Dr. Shatrunjai Giri



Dr. Izharul Haq



Dr. Atar Singh Kushwaha



Dr. Priya Shukla

The Department of Biosciences, Manipal University Jaipur, proudly celebrates the research achievements of its faculty members through the successful acquisition of competitive research grants.

Institute Seed Grants were awarded to Dr. Arti Choudhary, Dr. Izharul Haq, Dr. Atar Singh Kushwaha, and Dr. Priya Shukla, recognizing their innovative research ideas and commitment to advancing scientific knowledge.

Further strengthening the department's research profile, Dr. Arti Choudhary secured a prestigious MRB Grant in collaboration with Dr. Chaitanya Baliram Pande, Dr. Binay Kumar Tripathy, and Dr. Ranjeet Kumar Mishra.

Additionally, Dr. Shatrunjai Giri (PI) along with Dr. Bobby Paul, Dr. Pesona Grace, Dr. Prashanth Suravajhala, Dr. Kumar Nishant, Dr. Sandeep Mallya was awarded a research grant, highlighting the growing culture of interdisciplinary and collaborative research within the department.

These accomplishments reflect the department's unwavering commitment to fostering impactful research, encouraging innovation, and addressing contemporary scientific challenges through collaborative excellence.

"The Department of Biosciences congratulates all the awardees for their remarkable achievements and looks forward to the transformative impact of their research contributions."



Department of Biosciences Secures Industry Consultancy Project

The Department of Biosciences, Manipal University Jaipur, has achieved another significant milestone through a research-based consultancy project titled “Operation Trials & RM/Product Analysis of Biomass Feedstock Pyrolysis.” The project has been undertaken in collaboration with WOG Greencoal Private Limited, a leading organization working in the field of sustainable biomass and green energy solutions.



Dr. Rohit Jain

The consultancy project is being led by Prof. Lalita Ledwani (Department of Chemistry) as the Principal Investigator, with Dr. Rohit Jain (Department of Biosciences) and Dr. Manisha Sharma (Department of Biotechnology and Chemical Engineering) serving as Co-Principal Investigators. The project aims to conduct operational trials and detailed raw material/product analysis of biomass feedstock pyrolysis, contributing to the advancement of renewable energy technologies and sustainable resource utilization.

With a consultancy value of ₹6 lakh plus GST, the six-month project reflects the university's growing engagement with industry and its commitment to translating academic expertise into practical solutions for real-world challenges.

This collaboration highlights MUJ's strong emphasis on interdisciplinary research, industry partnerships, and innovation-driven problem-solving, further strengthening its role in promoting sustainable technologies and impactful research outcomes.



DAAD Informative Session: Exploring Study Opportunities in Germany

The Directorate of International Collaborations (DoIC), Manipal University Jaipur, in collaboration with the Department of Biosciences, MVJ-TEC, International Student Cell, and Biotech Club, organized an informative session on “Explore Study Opportunities in Germany.”

The session featured distinguished delegates from DAAD, including Mr. Apoorv Mahendru, Ms. Aditi Gosavi, and Ms. Maneesha Jakku, who provided valuable insights into higher education, scholarships, research opportunities, and student life in Germany.

The event commenced with a welcome address by Prof. Mousumi Debnath, DAAD Alumna, who shared her academic journey and emphasized the importance of international exposure. An interactive Q&A session enabled participants to engage directly with the experts and gain clarity on academic and research prospects in Germany.

The program concluded with a vote of thanks by Prof. Ravi Kumar Sharma, Director, International Collaborations. The event successfully strengthened awareness about international academic opportunities and reflected MVJ's commitment to fostering global collaborations and student mobility.





Celebrating Academic Excellence

*The Department of Biosciences, Manipal University Jaipur, proudly congratulates **Sanashri Sachdev**, a student of B.Sc. (Hons.) Biotechnology (VI Semester), on securing **All India Rank 1 (AIR 1)** in the **CUET-PG Bioinformatics Examination**.*

This exceptional achievement reflects her dedication, perseverance, and academic excellence. Her success brings immense pride to the department and serves as an inspiration for fellow students to strive for excellence in their academic pursuits.

We extend our heartfelt congratulations to Sanashri and wish her continued success in all her future academic and professional endeavors.



Industry-Academia Workshop on Advanced Instrumentations in Environmental Biotechnology

The Department of Biosciences, Manipal University Jaipur, successfully organized an **Industry-Academia Workshop on “Advanced Instrumentations in Environmental Biotechnology”**, organized under the guidance of **Dr. Izharul Haq** and **Dr. Nitesh Kumar Poddar**. The workshop aimed to bridge the gap between academic learning and industry practices by providing students with exposure to advanced analytical instruments and their applications in environmental biotechnology.

The session was conducted by **Mr. Dileep Kumar Srivastava**, who shared valuable insights into modern instrumentation techniques, industry requirements, and emerging trends in environmental analysis. The interactive nature of the workshop enabled participants to gain practical knowledge and a deeper understanding of real-world applications of biotechnology.

The Department extends its sincere gratitude to the resource person, faculty members, organizers, and enthusiastic participants for their contributions in making the workshop a successful and enriching learning experience.

**MANIPAL UNIVERSITY
JAIPUR**
(University under Section 2(f) of the UGC Act)



DEPARTMENT OF BIOSCIENCES
is Organising an
Industry-Academia Workshop on
**“Advanced Instrumentations
in Environmental Biotechnology”**





RESOURCE PERSON
Mr. Dileep Kumar Srivastava
Regional Head,
Spark Scientific Pvt. Ltd.

 **Date:** 14th May, 2026

 **Time:** 1.30 to 3.30 pm

 **Venue:** Lab 110, 1st Floor,
Academic Block 2

CONVENER
Dr. Izharul Haq
Assistant Professor (Senior Scale)

CO-CONVENER
Dr. Nitesh Kumar Poddar
Associate Professor (Senior Scale)



Farewell Ceremony for Graduating Students

The Department of Biosciences, Manipal University Jaipur, organized a heartfelt Farewell Ceremony for the outgoing students of B.Sc. (Hons.) Biotechnology and Microbiology (2023–26 Batch) and M.Sc. Biotechnology (2024–26 Batch).

The event was a celebration of the students' academic journey, achievements, and memorable experiences at the university. Faculty members and students came together to share their experiences, express gratitude, and extend their best wishes to the graduating batch as they embark on new academic and professional endeavors.

Filled with cultural performances, interactive activities, and cherished memories, the farewell created a warm and emotional atmosphere. The Department wishes all graduating students continued success, happiness, and fulfillment in their future pursuits and looks forward to witnessing their achievements in the years ahead.





Expert Talk on Targeting Acquired Therapeutic Resistance in Renal Cancer

The Department of Biosciences, Manipal University Jaipur, organized an expert talk on “Targeting Acquired Therapeutic Resistance in Renal Cancer” by Dr. Laxminarayan Rawat, Research Scientist at Boston Children’s Hospital and Harvard Medical School, Boston, USA organized under guidance of Dr. Shatrunjai Giri and Dr. Arun Kumar.

The session provided valuable insights into the molecular mechanisms underlying therapeutic resistance in renal cell carcinoma, highlighting receptor tyrosine kinase signaling, oxidative stress adaptation, tumor microenvironment remodeling, and emerging combination therapies. Dr. Rawat also discussed translational research strategies aimed at improving treatment outcomes and combating therapy resistance.

Organized under the guidance of Dr. Atar Singh Kushwah and Dr. Veer Singh, the event witnessed enthusiastic participation from students, research scholars, and faculty members. The interactive session enriched participants’ understanding of cutting-edge advances in cancer biology and reinforced the department’s commitment to promoting research-oriented learning and global academic engagement.



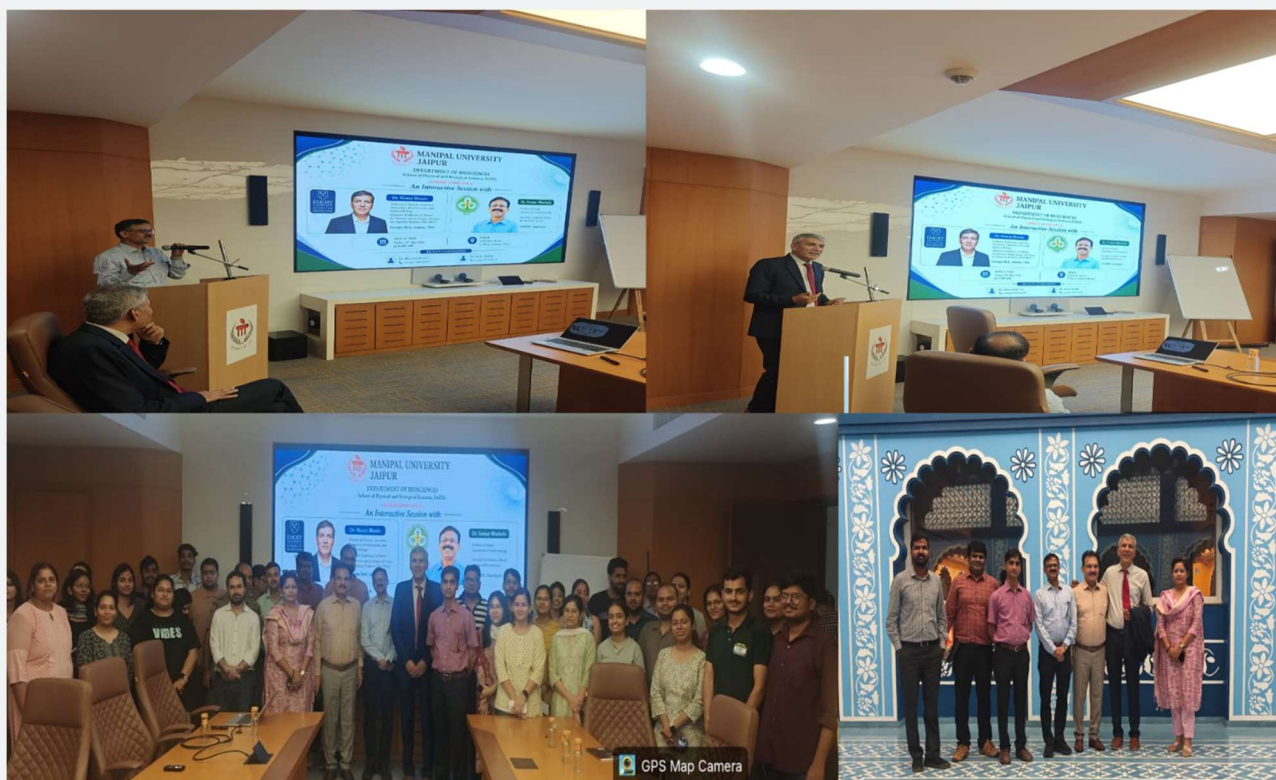


Expert Interaction on Advances in Genomics and Metabolic Disorders

The Department of Biosciences, School of Physical and Biological Sciences (FoSTA), Manipal University Jaipur, organized an enriching interactive session featuring **Dr. Manoj Bhasin** (Emory University School of Medicine, USA) and **Dr. Sanjay Bhadada** (PGIMER, Chandigarh).

The session offered valuable insights into the latest advances in **genomics, bioinformatics, systems biology, endocrinology, diabetes, obesity, and metabolic disorders**. Through engaging discussions, the speakers highlighted emerging research trends, translational approaches, and the importance of interdisciplinary collaborations in addressing complex health challenges.

Students, research scholars, and faculty members actively participated in the interactive session, making it a vibrant platform for knowledge exchange. The event reaffirmed the Department of Biosciences' commitment to promoting academic excellence, global collaborations, and research-driven learning.





Faculty Achievements: Academic Excellence and Professional Development

The Department of Biosciences, Manipal University Jaipur, proudly celebrates the remarkable academic and professional achievements of its faculty members, reflecting their commitment to excellence in research, innovation, and continuous learning.

Dr. Indresh Kumar Maurya actively represented the department at several prestigious international conferences. He delivered oral presentations at the **International Conference on Biosciences Beyond Boundaries (BBB-2026)**, organized by Sardar Bhagwan Singh University, Dehradun (13–14 March 2026), and **Plant SciSustain 2026**, organized by Bhupal Noble's University, Udaipur (17–18 March 2026). He was also invited as a speaker at the **International Conference on Recent Trends in Multidisciplinary Research and Development (ICRTMD-2026)**, organized by JVMGR College, Charkhi Dadri, Haryana (6–7 April 2026). Adding to these accomplishments, Dr. Maurya received the **Best Oral Presentation Award** at BBB-2026 for his outstanding research contribution, as recognized in the conference certificate. He further enhanced his professional expertise by participating in the **Faculty Development Programme on “SDGs: Advancing Education for a Sustainable Future”**, organized by Rayat Bahra University, Mohali (20–24 April 2026).

Dr. Pankaj Chandley also contributed significantly to the department's academic visibility by presenting his research at the **International Conference on Biosciences Beyond Boundaries (BBB-2026)** and successfully completing the **Five-Day Faculty Development Programme on “AI and its Multidisciplinary Applications: Bridging Theory and Practice”**, organized by Manipal University Jaipur (15–19 June 2026).

These accomplishments highlight the department's strong commitment to fostering academic excellence, research dissemination, interdisciplinary collaborations, and continuous professional development, further strengthening Manipal University Jaipur's growing reputation in the field of biosciences.



Faculty Achievement: Fellow of the Royal Society of Chemistry (FRSC)



The Department of Biosciences, Manipal University Jaipur, is delighted to congratulate Dr. Nitesh Poddar, Associate Professor (Senior Scale), on being elected as a Fellow of the Royal Society of Chemistry (FRSC), United Kingdom—one of the highest professional recognitions awarded by the Royal Society of Chemistry.



The FRSC distinction is conferred upon accomplished scientists who have demonstrated significant contributions to chemical sciences through outstanding research, innovation, leadership, and professional excellence. This prestigious honour recognizes Dr. Poddar's sustained contributions to scientific research and his commitment to advancing the field of chemistry.

This remarkable achievement reflects the department's dedication to academic excellence, impactful research, and global recognition, while further enhancing the reputation of Manipal University Jaipur in the international scientific community.

The Fellowship of the Royal Society of Chemistry (FRSC) is a globally recognized professional distinction awarded to individuals who have made significant contributions to the chemical sciences. Such prestigious international fellowships acknowledge excellence in research, innovation, and scientific leadership while providing opportunities for global networking, collaborative research, professional development, and knowledge exchange. Dr. Poddar's election as an FRSC not only recognizes his individual achievements but also strengthens Manipal University Jaipur's international academic profile, fostering future collaborations and enhancing the university's commitment to excellence in research and higher education.



Industrial Visit to Jaipur Dairy (Frubon): Bridging Classroom Learning with Industry

The M.Sc. Food Science and Technology students of the Department of Biosciences, Manipal University Jaipur, visited Jaipur Dairy (Frubon) as part of an industrial learning initiative aimed at providing practical exposure to modern dairy processing and quality management systems. The visit offered students an opportunity to observe large-scale manufacturing processes for dairy products such as milk, paneer, curd (dahi), ghee, lassi, and chaach, while understanding the integration of automation, hygiene, and food safety standards in industrial production.

During the visit, students gained first-hand experience of Quality Assurance (QA) and Quality Control (QC) practices, including milk quality testing, microbiological analysis, protein estimation, Solid-Not-Fat (SNF) analysis, and other analytical procedures essential for ensuring product quality and consumer safety. They also learned about cold chain management, packaging technologies, and regulatory practices followed in the dairy industry.

The industrial visit provided an excellent platform for students to connect classroom concepts with real-world industrial applications. It enhanced their understanding of dairy technology, food processing, quality assurance, and industrial workflow, while preparing them with the practical knowledge and professional skills required for successful careers in the food and dairy industry.





M.Sc. Students Pursue Summer Internships at Leading Industries

*The Department of Biosciences, Manipal University Jaipur, proudly congratulates the students of **M.Sc. Food Science and Technology** on the successful completion of their summer internships at some of India's leading food and dairy industries. The students gained valuable industrial exposure by working with renowned organizations, including **Mother Dairy, Britannia Industries Ltd., Everest Food Products Pvt. Ltd., Parle Products Pvt. Ltd., Jaipur Dairy, and Tirhut Dugdh Utpadak Sahkari Sangh Ltd. (Sudha Dairy).***

*During their internships, the students were actively involved in diverse functional areas such as **Quality Control, Quality Assurance, Production, Research & Development, Food Safety, Microbiology, and Process Management.** This hands-on training enabled them to understand industrial workflows, quality standards, regulatory practices, and modern food processing technologies while working alongside experienced professionals.*

The internship experience served as a vital bridge between classroom learning and industrial application, equipping students with practical skills, technical expertise, and professional confidence. Such industry exposure enhances their employability, broadens their understanding of the food processing sector, and prepares them to meet the evolving demands of the food and dairy industry.

The Department congratulates all the interns on this significant achievement and appreciates the support of the partnering industries in nurturing the next generation of food science professionals.





Research and Publications:

- Dadhich, A., & Sharma, M. M. Jasmonic acid enhances biomass, antioxidant defense, and Bacoside-A in *Bacopa monnieri* (L.) Wettst. via the mevalonate pathway.
- Abdellatif, M.M., Poddar, N.K, Dopamine Deficiency and Parkinson's Disease: Novel Pathogenesis and Therapeutic Discoveries. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* (2026). <https://doi.org/10.1007/s40011-026-01787-z>
- Tanwar, V. J. S., Choudhary, R., Kumawat, S., Sharma, N., Purohit, S., Kachhwaha, S., & Jain, R. (2026). PLS-SEM reveals growth-mediated regulatory control of withanolide biosynthesis under micronutrient stress in *Withania coagulans* (Stocks) Dunal. *Biocatalysis and Agricultural Biotechnology*, 104131.
- Tanwar, V. J. S., Choudhary, R., Jain, R., Purohit, S., & Kachhwaha, S. (2026). Differential modulation of morphogenesis and withanolide biosynthesis in *Withania coagulans* (Stocks) Dunal under copper and cobalt supplementation. *Plant Cell, Tissue and Organ Culture*, 165(3), 64.
- Haq, S., Pathak, A., Dwivedi, P., Kothari, S. L., Jain, R., & Kachhwaha, S. (2026). Regulatory dynamics of molecular determinants in divergent rice varieties under the influence of nano-structured zinc: An integrative study of OsbZIP genes and their targeting. *BMC Plant Biology*.
- Dadhich, A., Jain, R., Dhiman, M., Sharma, L., & Sharma, M. M. (2026). Sodium chloride-induced metabolic shifts and morpho-physiological responses in *Bacopa monnieri* (L.) Wettst. for enhanced bacoside-A production. *Natural Product Research*, 40(6), 1580–1590.
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- R Rathore, A Kumar, U Chauhan, PY Prakash, M Sen and **IK.Maurya**. 2026. Mycotoxin Exposure: Risks to Human Health and Detection Approaches. *Applied Food Science*.6,102251, 1-20.
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- Biswas S, Rajarathinam B, Khilwani B, Jalendra G, Sharma D, Vijavargiya M, Aradhya R, Ansari AS, Shukla N, Chaubey G, Lohiya NK, **Suravajhala P** and The CA Prostate Consortium of India (CAPCI) (2026) Toward the genetic landscape of prostate cancer in India: insights from whole-exome and low-pass whole-genome sequencing of formalin-fixed paraffin-embedded tumor tissues. *Front. Syst. Biol.* 6:1803649. doi: 10.3389/fsysb.2026.180364
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OPPORTUNITIES!!

We are excited to announce several open positions within the department for those eager to advance their academic and research careers. Currently, we are offering opportunities for Research Assistants, Internships, and PhD Programs across various ongoing projects and specialized fields. These positions provide a unique chance to work alongside esteemed faculty members and contribute to cutting-edge research while gaining invaluable hands-on experience.

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Editor's Closing Remarks

As we conclude this edition of the Department of Biosciences Newsletter, we reflect with pride on the remarkable achievements, academic milestones, research accomplishments, and vibrant activities that have defined the past few months. Each success story featured in these pages is a testament to the dedication, innovation, and collaborative spirit of our students, faculty, researchers, alumni, and staff.

From pioneering research and prestigious recognitions to industry collaborations, student achievements, and engaging academic events, our department continues to strive for excellence while nurturing a culture of learning and discovery. These accomplishments not only strengthen our academic community but also inspire us to embrace new opportunities and challenges with confidence.

I extend my heartfelt gratitude to all contributors, faculty members, students, alumni, and well-wishers whose support and enthusiasm have made this newsletter possible. Your achievements and experiences are the essence of this publication and a source of inspiration for the entire Department of Biosciences.

As we look ahead, let us continue to innovate, collaborate, and contribute towards scientific advancement and societal well-being. We hope you enjoy reading this edition and look forward to sharing many more milestones in the issues to come.

Happy Reading!



Priya Shukla

Dr. Priya Shukla
Department of Biosciences
Manipal University Jaipur