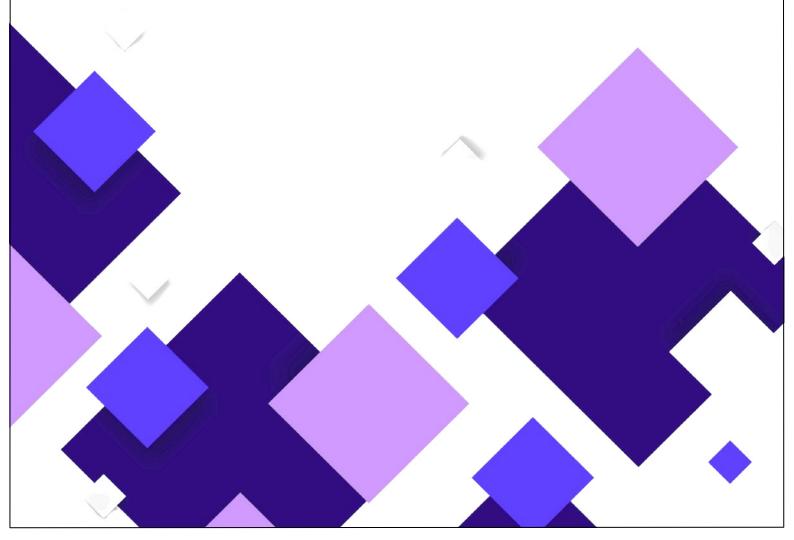


REFLEXIONS MONTHLY NEWSLETTER

DEPARTMENT OF SCIENCES

JANUARY, 2024



MESSAGE FROM DEAN



It's high time to start a path of transformation by integrating sustainability into education and setting the stage for a green and resilient future. The need for this change is more important than ever in the ever- evolving landscape of education. The global challenges that we face—environmental degradation, climate change, and scarcity of resources—make this call to action urgent. The education sector has a great responsibility to instil in students the basic principles of sustainability that will help them understand, overcome and take control as builders of the future entrusted with the task of shaping a world that aligns with sustainable values and practices. I congratulate School of Sciences for maintaining the continuity of sharing information through this newsletter. My personal thanks to the Editor for structuring and presenting information so beautifully.

Warm Regards

Prof. (Dr.) Meena Kapahi

MESSAGE FROM HOD



I extend my heartfelt gratitude to all members of the Department of Sciences – faculty, staff, and students – for their unwavering commitment and dedication.

We strive to provide an enriching educational experience that prepares our students for success in their future endeavors. Our departmental initiatives such as DAC, mentorship programs, research internships, research colloquium for PhD scholars and outreach activities will certainly help to cultivate a culture of curiosity, critical thinking, and scientific inquiry among our students. One of the major aspects of the department is to promote interdisciplinary research and actively engage in collaborative research activities. We are confident that the Department of sciences will continue to thrive and make significant contributions in the field of science.

Sincerely **Dr. Sandeep Kumar**

Table of Contents >

Departmental Activities

Industrial Visits / Educational Trips 04

Faculty Corner

Achievements 05
Research Publications

Students Corner

Achievements 06
Placements



DEPARTMENT ACTIVITIES

INDUSTRIAL VISITS / EDUCATIONAL TRIPS

1. Students and faculty members visited IISF 2023 Expo at DBT THSTI - RCB Campus, NCR Biotech Science Cluster on 19th January 2024. During the Educational visit, students witnessed the collaborative endeavor between the Ministry of Science and Technology, Ministry of Earth Sciences, Department of Space, and Department of Atomic Energy in partnership with Vijnana Bharati - a science movement spearheaded by scientists of the nation with swadeshi spirit.



2. Students and faculty members of **Program - Mathematics** visited **IIT Delhi** campus on **25th January 2024** & attended a lecture by **Prof. R.K. Sharma.** The students learned about the applications of number theory and cryptography and their importance in daily life.





FACULTY CORNER

ACHIEVEMENTS:

Prof. (Dr.) D K SHARMA

Professor, Department of Sciences (Physics) has authored a **book** recently titled **"The Lightning Discharge"** with the **ISBN 978-81-948724-8-1**. He has served as a Visiting Scientist at Tata Institute of Fundamental Research (TIFR), Mumbai.

He has contributed as a researcher in the field of Atmospheric Sciences and published more than 85 research papers in the National/International journals/conferences and 4 patents and has been awarded by several fellowships from ISRO & CSIR (Govt. of India).



RESEARCH PUBLICATIONS:

- Komal Jain, Deepti Maikhuri & Anshuman Sahai, Quadrupole Interaction Induced Optical Rectification and Second Harmonic Generation in CdSe Quantum Dots, The European Physical Journal Plus, 2190-5444, -> <u>Link</u>
- Ekemini D. Akpan, Ashish Kumar Singh, Hassane Lgaz, Taiwo W. Quadri, Sudhish Kumar Shukla, Bindu Mangla, Abhishek Dwivedi, Omar Dagdag, Sheetal, Etienying Edem Inyang, Eno E. Ebenso; Coordination compounds as corrosion inhibitors of metals: A review; 0010-8545; -> <u>Link</u>
- Sudhish Kumar Shukla, Somya Tanwer; Adsorption Study of Doxycycline to Protect the Mild Steel Surface from Sulphuric Acid Solution; 2008-2134; -> <u>Link</u>
- Priti Gupta, Shilpa Sharma, Shagufta Jabin, Sapana Jadoun; International Journal of Biological Macromolecules; 0141-8130; -> <u>Link</u>
- Sandeep Kumar, Kamlesh Kumar, Rajesh K. Pandey & Yufeng Xu; Legendre collocation method for new generalised fractional advection-diffusion equation; International Journal of Computer Mathematics; 1029-0265; -> <u>Link</u>
- Mohit Kumar, Hitendra K. Malik & Sandeep Kumar; Enhancement of Electron-Bunch Quality in Bubble Domain Utilizing Plasma Ramp Profile with Various Density-Hill Widths in Laser Wakefield Acceleration; Optical and Quantum Electronics; 1572-817X; -> <u>Link</u>
- Rajni Narang, Priya Vashishth, Himanshi Bairagi, Rashmi Sehrawat, Sudhish Kumar Shukla & Bindu Mangla; Experimental and Quantum Chemical Investigation of Corrosion Inhibitive Action of Sertraline on Mild Steel in Acidic Medium; Chemistry Africa; 2522-5766; -> <u>Link</u>

STUDENTS CORNER

ACHIEVEMENTS



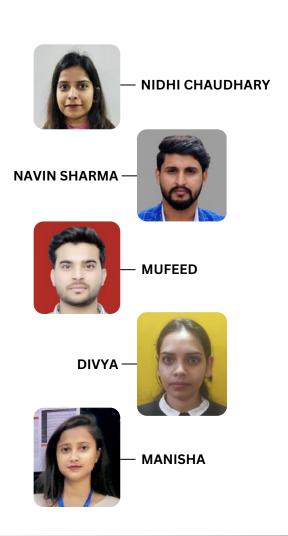
Ms. Geetika, M.Sc. Mathematics IV Sem, presented a paper entitled "A Comparative Study of Average, Wiener, and their Hybrid Filter for Noise Reduction" in the "International Conference on Recent Trends in Mathematics and its Applications (ICRTMA'24)" Organized by the Department of Mathematics, AIMAN College at Trichy, Tamilnadu, India on 23rd February 2024.

Ms. Nikita Mittal, Ph.D. Scholar-Mathematics, presented a paper entitled "Some fixed point theorems under contraction conditions using linear and rational expression in dislocated metric space" in the "International Conference on Pure and Applied Mathematics (ICPAM-2024)" Organized by the Department of Mathematics, Janki Devi Memorial College, University of Delhi, India held during February 22-23, 2024.



PLACEMENTS:

- M.Sc. CHEMISTRY (2020-2024) got placed with wings pharmaceuticals limited at a package of 4 LPA.
- M.Sc. CHEMISTRY (2020-2024) got placed with BINARY GLOBAL LIMITED at a package of 3 LPA.
- M.Sc. CHEMISTRY (2020-2024) got placed with Jubilant Biosys limited at a package of 2.8 LPA.
- M.Sc. CHEMISTRY (2020-2024) got placed with GOODYEAR India limited at a package of 2.4 LPA.
- M.Sc. CHEMISTRY (2020-2024) got placed with Kantech Research Solutions at a package of 2 LPA.





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CHIEF EDITOR | SAVITTA SAINI savitta@mru.edu.in

DESIGNER | HARSH BHARDWAJ harshbhardwajofficial1414@gmail.com