




Faculty Details proforma for Gargi College

Title	DR.	First Name	TRIPTI	Last Name	KUMARI	Photograph
Designation		ASSISTANT PROFESSOR				
Address		DEPARTMENT OF CHEMISTRY GARGI COLLEGE (UNIVERSITY OF DELHI)				
Phone No Office						
Residence*						
Mobile*		+91-9810403262				
Email		tripti.kumari@gargi.du.ac.in				
Web-Page						
Educational Qualifications						
Degree		Institution			Year	
Ph.D		University of Delhi			2014	
M.Sc. Chemistry		Department of Chemistry, University of Delhi			2009	
B.Sc. (H) Chemistry		Miranda House, University of Delhi			2007	
AISSCE (CBSE) XII		Pitts Modern School, Gomia, Jharkhand			2004	
AISSE (CBSE) X		Pitts Modern School, Gomia, Jharkhand			2002	
Career Profile						
<ul style="list-style-type: none"> Assistant Professor in Department of Chemistry, Gargi College, University of Delhi (August 2013 – till date). University Teaching Assistant (UTA) in the Department of Chemistry, University of Delhi (April 2011 – July 2013). Guest Faculty in the Department of Chemistry, Daulat Ram College, University of Delhi (January 2013 - May 2013). 						
Administrative Assignments						
NA						
Areas of Interest / Specialization						
Physical Chemistry, Computational Chemistry and Molecular Modeling, Environmental Chemistry						
Subjects Taught						
Physical Chemistry (Quantum & Spectroscopy, Chemical Kinetics, Conductance, Electrochemistry, Phase Equilibria, Chemical Energetics, Chemical Equilibrium, Ionic Equilibrium, Photochemistry, Applications of Computers in Chemistry, IT Skills for Chemists)						

Research Guidance
<ul style="list-style-type: none"> • Mentored Pathfinder Winner Project “From Waste to Essentials - Studying the Potential of Sawdust & Waste Tea Leaves for the Removal of Heavy Metal Ions: A Case Study of Water and Contaminated Soil from the Yamuna River Basin” in the year 2018-2019. • Mentored PathFinder Winner Project “From Waste to Essentials- A Green Extraction of Limonene Oil from Waste Fruit Peels and Studying its Larvicidal, Insecticidal and Antimicrobial Properties” in the year 2017-2018. • Mentored PathFinder Winner Project “Walking the Road – From Sugarcane Bagasse to Benign Bioplastics” in the year 2016-2017. • Mentored PathFinder Winner Project “Solvent Systems: Exploring Various Facets from Utility to Benignity to Procurability” in the year 2014 – 2015. • Mentored students of Chem(H), Gargi College for the National Technex competition held at IIT(BHU) in February 2014. Gargi College won the 5th prize out of a total of 35 National teams that participated.
Recent Publications
<ul style="list-style-type: none"> • Tripti Kumari, Richa Arora & Rita Kakkar (2013) Peptide deformylase inhibitors for addressing the issue of bacterial resistance. <i>Int. Rev. Biophys. Chem. (IREBIC)</i> Volume 4, Issue No. 1, Pages 19-48. ISSN: 2038-0321 • Tripti Kumari, Upasana Issar & Rita Kakkar (2014) Docking modes of BB-3497 into the PDF active site – a comparison of the pure MM and QM/MM based docking strategies. <i>Current Computer-Aided Drug Design</i>, Volume 10, Issue No. 4, Pages 315-326. ISSN: 1875-6697 (Online) ISSN: 1573-4099 (Print) • Upasana Issar, Tripti Kumari & Rita Kakkar (2015) Assessment of Molecular Binding of Hoechst 33258 Analogues into DNA Using Docking and MM/GBSA approach. <i>Journal of Computational Science</i>. Volume 10, Pages 166-177. ISSN: 1877-7503. • Tripti Kumari, Ritika Chauhan, Neha Sharma, Kohinoor Kaur, Aparna Krishnamurthy, Priya Pandey, Shivangi Aggarwal (2016) <i>DU Journal of Undergraduate Research & Innovation</i>. Volume 2, Pages 203- 210. ISSN: 2395 – 2334.

- Upasana Issar, **Tripti Kumari**, Richa Arora & Rita Kakkar (2017) Conformational properties of DNA minor groove binder Hoechst 33258 in gas phase and in aqueous solution. *Computational and Theoretical Chemistry*. Volume 1113, Pages 32-41. **ISSN: 2210-271X**.
- Upasana Issar, Richa Arora, **Tripti Kumari**, Rita Kakkar (2019) Combined Pharmacophore-Guided 3D-QSAR, Molecular Docking and Virtual Screening on bis-benzimidazoles and ter-benzimidazoles as DNA-Topoisomerase I poisons. *Structural Chemistry*. Volume , Pages 1-17. **Online ISSN: 1572-900**.
- **Tripti Kumari**, Nandana Pal Chowdhury, Ritika Chauhan and Nawin Kumar Tiwary (2020) Eco-friendly extraction of Mosambi (*Citrus limetta*) essential oil from waste fruit peels and its potential use as a larvicidal, insecticidal and antimicrobial agent. *Int. J. Environment and Waste Management*, Vol. 29, No. 3, pp.360–375. ISSN No. 1478-9876.

Conference Organization/ Presentations

- Oral Presentation at **International Conference on the Contributions of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter** organized by Indraprastha Vigyan Bharti; Ministry of Culture, Govt. of India and Dept. of Chemistry (University on Delhi) on August 2-3, 2022. **Received Best Oral Presentation Award (3rd Prize)**.
- Contributed as **Member of the Organizing Committee in One Week Online National Faculty Development Program/Refresher Course** on “*Enhancing Quality of Chemistry Education in India*” organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMNMTT) of Ministry of Education held from 04th March to 10th March 2021.
- **Coordinator of National Conference on Combating Industrial Pollution For Sustainable Environment – A Fusion of Industrial and Scientific Efforts** held on 22-23 September 2016 at Gargi College, University of Delhi.
- **Convener** of a three-day inter-disciplinary seminar on “*Exploring New Dimensions of Knowledge*” on **July 17-19, 2017** at Department of Chemistry, Gargi College.
- Presented paper titled “*Walking the Road – From Sugarcane Bagasse to Benign Bioplastics*” at a **National Conference on Environmental Concerns of 21st Century: Indian and Global Context** organized by Zakir Husain Delhi College (Evening) on 21st & 22nd March’ 2016.

<ul style="list-style-type: none"> Presented Poster Titled “<i>Walking the Road – From Sugarcane Bagasse to Benign Bioplastics</i>” in the National Conference on “Combating Industrial Pollution for Sustainable Environment – A Fusion of Industrial and Scientific Efforts” in Gargi College on September 22-23, 2016 and won III prize. Presented Poster Titled <i>DES: A Benign Solvent: A Greener Solution</i> in the National Conference on “Combating Industrial Pollution for Sustainable Environment – A Fusion of Industrial and Scientific Efforts” in Gargi College on September 22-23, 2016. Presented Poster in the Recent Advances in Computer Aided Drug Design Workshop organized by Schrödinger at IISc, Bangalore in September’2013. Awarded III prize.
Research Projects (Major Grants/Research Collaboration)
NA
Awards and Distinctions
<ul style="list-style-type: none"> University Ranker’s Prize in M. Sc. Chemistry by Miranda House. “All India Post Graduate Scholarship, 2008-09” by the University of Delhi. “Jeans and Ashit Ganguly Fellowship” by the Department of Chemistry, University of Delhi. “Post-Graduate Science Meritorious Award” for two consecutive years from 2007-09 by the University of Delhi. Undergraduate and Post-Graduate Book Grants by the University of Delhi during B.Sc and M.Sc. Neeta Bhattacharya Memorial Prize in Miranda House.
Association With Professional Bodies
NA
Other Activities
<p>Delivered a series of invited lectures at the Nehru Memorial Museum and Library, Nehru Planetarium on the following topics</p> <ul style="list-style-type: none"> <i>The Story of Helium – Beyond Balloons</i>” on 11th September 2018 & July 10, 2021. <i>From Cosmos to Daily Life – The World of Elements</i>” on 19th July 2018 <i>AstroChemistry - Finding Molecular Fingerprints in Space</i> on 30th November 2019 <i>Chemistry in Day-to-Day Lives</i> on 20th May 2020 <i>Chemistry Tales to Tell – Scientists, Discoveries and Interesting Stories</i> on September 5, 2020 <i>Chemistry Tales to Tell – Manmade and Natural Chemical Disasters</i> on September 12, 2020 <i>Chemistry in Forensic Science</i> on September 19, 2020

- *Chemistry in Human Body* on September 26, 2020
- *Our Unsung Heroes of Science* on 28 February, 2022.
- *On Mole concept, periodic table* on June 2-4, 2022