



FEROZE GANDHI COLLEGE RAE BARELI

NAAC-Accredited Grade "A" College

Affiliated to University of Lucknow, Lucknow

Established on 8th August, 1960

DR. PUNEET KUMAR GUPTA

Name : Dr. Puneet Kumar Gupta, Ph.D

Father's name : Shri Shiv Kumar Gupta

Present Designation : Assistant Professor

Date of Birth : 27th February, 1986

Date of Joining : 25th March, 2019

Official Address : Department of Chemistry, Feroze Gandhi College, Rae Bareilly - 229001, Uttar Pradesh (India)

Permanent Address : Nagar Panchayat - Shivgarh, District Rae Bareilly - 229308, Uttar Pradesh (India)

Phone (Mobile) : +91-9454698077

Email : puneetcdri@gmail.com



Introduction :

Dr. Gupta received his doctorate from Central Drug Research Institute - Jawaharlal Nehru University (JNU New Delhi) in the area of breast cancer, specifically the development of new anti-cancer agents. He is an Assistant Professor at Feroze Gandhi College Rae Bareilly, where he is engaged in teaching at graduate and postgraduate classes. He has published 07 papers in reputed international journals like Chemistry A-European Journal (Wiley-VCH, IF-5.73), New Journal of Chemistry (RSC, IF-3.08).

Courses Taught:**Undergraduate (B.Sc)**

- Organic Chemistry
- Physical Chemistry
- Spectroscopy
- Quantum Chemistry
- Chemistry of Natural Products

Post Graduate (M.Sc)

- General Organic Chemistry
- Organo Metallic Chemistry
- Pericyclic Chemistry
- Spectroscopy
- Organic Synthesis

Research Description: Worked as Research scholar (**Ph.D**) under the supervision of **Dr. Kanchan Hajela**, Chief Scientist (Retd.) CSIR-Central Drug Research Institute, Lucknow during 2010 - 2016 in the area of Organic synthesis and medicinal chemistry. (Published 07 peer- reviewed scientific articles). Currently I am working on transition metal catalyzed oxidation of various pharmaceutically important drugs and naturally occurring molecules.

Drug Discovery:

- Targeting ER α / ER β selectivity for anti-breast cancer and antiosteoporotic activity.
- Design, Synthesis and Biological Evaluation of Benzoxazine- fused Quinazolinones as Potential Anti-cancer agents

Heterocyclic Chemistry:

- Palladium-Catalyzed Synthesis of Phenanthridine/ Benzoxazine-Fused Quinazolinones by Intramolecular C-H Bond Activation
- A Metal-free Tandem Approach to Prepare Structurally Diverse *N*-heterocycles: Synthesis of 1,2,4-Oxadiazoles and Pyrimidinones
- Diversity oriented synthesis of privileged scaffolds such as benzodiazepine, coumarins, chromenes
- Synthesis of 2-Phenylquinazolin-4(3*H*)-one via Domino Addition/ Deamination reaction
- Metal-free Synthesis of 2,5-Diphenyl-1*H*-imidazoles from Amidine Hydro-chlorides and (2,2-dibromovinyl) benzenes

Awards/Honours/Fellowships

2012: Qualified **Senior Research fellowship (SRF)** from the Council of scientific & Industrial Research CSIR, New Delhi.

2009: Qualified **Junior Research Fellowship (JRF) and National Eligibility Test (NET)** for Eligibility for Lectureship, Conducted jointly by Council of scientific & Industrial Research-University Grant Commission New Delhi

2009: Qualified **Graduate Aptitude Test in Chemistry (GATE)** conducted by Indian Institute of Science Bangalore (Percentile score 94.91)

Research Articles

1. A Highly Efficient and Eco-Friendly Synthesis of Disubstituted Imidazoles in Ionic Liquid from Gem-Dibromo Vinylarenes and Amidines: **Puneet Kumar Gupta**, Maged A. Azzam, Mohammad Saquib & Mohd Kamil Hussain, **Polycycl Aromat Compd** 2022, 42 (IF 3.744)
2. Palladium-Catalyzed Synthesis of Phenanthridine /Benzoxazine- Fused Quinazolinones by Intramolecular C-H Bond Activation: **Puneet K. Gupta**, Nisha Yadav, Subodh Jaiswal, Mohd. Asad, Ruchir Kant and Kanchan Hajela, **Chem. Eur. J.** 2015, 21, 13210-13215. (Selected as Hot Topics, WILEY-VCH) (IF 5.731)
3. Iodine-induced Oxidative Cyclisation of *N*-Acyl Amidines: A Rapid Synthesis of 3,5-Disubstituted-1,2,4-Oxadiazoles: Mohammad Asad, **Puneet K. Gupta**, Subodh K. Jaiswal, and Kanchan Hajela, **Chemistry Select**, 2016, 1, 4753-4757. (IF 2.1)
4. A Metal-Free Tandem Approach to Structurally Diverse *N*-Heterocycles: Synthesis of 1,2,4 - Oxadiazoles and Pyrimidinones: Puneet K. Gupta, Mohd. Kamil Hussain, Mohd. Asad, Ruchir Kant, Rohit Mahar, Sanjeev K. Shukla and Kanchan Hajela, **New J. Chem.** 2014, 38, 3062-3070. (IF 3.086)
5. Design and Synthesis of ER α / ER β Selective Coumarin and Chromene Derivatives as Potential Anti-Breast Cancer and Anti- Osteoporotic Agents: Mohd. Kamil Hussain, Mohd. Imran Ansari, Nisha Yadav, Puneet K. Gupta, Amit K. Gupta, Ruchi Saxena, Iram Fatima, Murli Manohar, Priyanka Kushwaha, Vikram Khedgikar, Jyoti Gautam, Ruchir kant, Prakash R. Moulik, Ritu Trivedi, Anila Dwivedi, K. Ravi Kumar, Anil K. Saxena and K. Hajela, **RSC Advances**, 2014, 4, 8828-8845. (IF 3.708)
6. A highly efficient ultrasound-promoted synthesis of 2,3-disubstituted benzo[*b*]furans via intramolecular C-C bond formation in ionic liquid[bmim]BF₄ at room temperature: Nisha Yadav, Mohd Kamil Hussain, Mohd. Imran Ansari, Puneet K. Gupta and Kanchan Hajela. **RSC Advances**, 2013, 3, 540-544. (IF 3.708)
7. Silica supported perchloric acid catalyzed rapid *N*-formylation under solvent-free conditions: Mohd. Imran Ansari, Mohd. Kamil Hussain, Nisha Yadav, Puneet K. Gupta, and K. Hajela, **Tetrahedron Lett.** 2012, 53, 2063-2065. (Highlighted by Synfacts 2012, 8(6), 680) (IF 2.391)

Paper/ Abstract presented

1. **Puneet K. Gupta** and Kanchan Hajela. "A Metal-Free Tandem Approach To Prepare Structurally Diverse *N*-Heterocycles Synthesis of 1,2,4-Oxadiazoles and Pyrimidinones" 25th-28th February at the 21 ISCB International Conference (ISCBC-2015), India. (Poster-presented)

2. **Puneet K. Gupta** and Kanchan Hajela. "A Metal-Free Tandem Approach To Prepare Structurally Diverse *N*-Heterocycles: Synthesis of 1,2,4-Oxadiazoles and Pyrimidinones" at the One Day Symposium on **"Drug Discovery in India: Past, Present and Future"** 1st January 2015 held at Central Drug Research Institute (CDRI), Lucknow, India (Poster-presented)
3. **Puneet K. Gupta** and Kanchan Hajela. 6th National **NIPER (RBL)- CSIR-CDRI Symposium on "Current Scenario in Drug Discovery and Development"** 20th-22nd February, 2014 at CSIR-Central Drug Research Institute Lucknow. (Participated)
4. **Puneet K. Gupta** and Kanchan Hajela. "One-Step Synthesis of 2-phenylquinazolin-4(3*H*)-one Via HATU-Mediated Domino Addition/Deamination Reaction" at the 5th **International Symposium Symposium on "Current Trends in Drug Discovery Research"** 26th-28th February 2013 at CSIR-Central Drug Research Institute, Lucknow, India. (Poster-presented)
5. Puneet K. Gupta and Kanchan Hajela. National Seminar on "Natural Products & Organic Synthesis" at Lucknow University, Lucknow, India. (Participated)
6. **Puneet K. Gupta** and Kanchan Hajela. The Mid Year Meeting of the Chemical Research Society of India, held at the CSIR-Central Drug Research Institute Lucknow, 2012. (Participated)
7. **Puneet K. Gupta** and Kanchan Hajela. **International Conference on "Chemistry and Material Prospects and Perspectives" (ICMPP-2012) 14th-16th December 2012** at Babasaheb Bhimrao Ambedkar University, Lucknow, India. (Participated)
8. **Puneet K. Gupta** and Kanchan Hajela. **3rd NIPER (RBL)-CSIR-CDRI Symposium on "Medicinal Chemistry and Pharmaceutical Sciences"** 3rd-5th March 2011 at CSIR-Centra Drug Research Institute Lucknow. (Participated)

Academic Achievements

- ❖ Minor research project entitled **"Mechanistic study of Ruthenium(III) promoted oxidation of some aldoses and amino acids by bromate in aqueous alkaline medium"** has been sanctioned by Higher Education Council under Research and Development Scheme on 27th March, 2025.