Name: Dr. Neha Sharma

Designation: Assistant Professor

Specialization: Chemistry (Inorganic Chemistry)

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Education

Ph.D.Chemistry (May, 2019, Punjabi University, Patiala,India) **M.Phil Chemistry** (2013, Punjabi University Patiala, India) **M.Sc. Chemistry** (2011, Punjabi University Patiala, India)

Title of Ph. D Thesis: SYNTHESIS, COMPUTATIONAL AND ANALYTICAL STUDIES OF HETEROCYCLIC COMPOUNNDS

Professional Experience:

Department of Chemistry, M.M. Modi College, Patiala, India (24 July, 2019 to till date)

Research Experience:

7 years of research experience in the field of chemistry in Punjabi University Patiala, Punjab, India.

Teaching Interests:

Inorganic Chemistry
Inorganic Spectroscopy
Organometallics
Environmental Chemistry
Analytical chemistry
Computational chemistry

Research Interest:

Organometallics, Computational Chemistry, Sensors and Material Chemistry.

Research Publications

- 1. **Neha Sharma**, Jaspreet S. Dhau, Avtar Singh, Amritpal Singh, Ashok Kumar Malik, FT-IR, NMR, Molecular structure and HOMO-LUMO studies of 3,5-dimethyl-2-Pyridylselenium compounds by Density functional theory. *Phosphorous sulphur and silicon and related elements*, 2016.
- 2. **Neha Sharma**, Avtar Singh, Jaspreet Dhau, Synthesis, Characterization, and Computational Studies of Selenium Derivatives of 3,5-Dichloropyridine. *J. Heterocyclic Chem*, 2017.
- 3. Jaspreet S. Dhau, Avtar Singh, **Neha Sharma**, Amritpal Singh, Paula Brandao, Vitor Felix, Baljinder Singh and Vishal Sharma A mechanistic study on Synthesis, Single crystal X-Ray and anticarcinogenic Potential of Bis(2-Pyridyl)selenides and diselenides. *RSC Advances*, 2015.
- 4. Avtar Singh, Jaspreet Dhau, **Neha Sharma**, and Amritpal Singh, Synthesis of C-6 & C-3 derivatives of 2-methoxypyridine through lithiation of 2-methoxy: An experimental and Quantum Chemical Study. *Inorganica chimica Acta*, 2015.
- 5. Asnake Lealem Berhanu, **Neha Sharma**, Irshad Mohiuddin, Ashok Kumar Malik , Jatinder Singh Aulakh, Jechan Lee, Ki-Hyun Kim, Experimental and theoretical studies of the schiff base (Z)-1-(thiophen-2-yl- methyleneamino) propane-2-ol, 2019. *Journal of molecular structure*, 2019.
- 6. Heena Rekhi, Susheela Rani, **Neha Sharma** and Ashok Kumar Malik, A Review on Recent Applications of High-Performance Liquid Chromatographyin Metal Determination and Speciation Analysis. *Critical Reviews in Analytical Chemistry*, 2017.
- 7. Neha Sharma, J. S. Dhau, Avtar Singh, A. Singh, A. K. Malik, Experimental and Theoretical investigation on Lithiation of 2,4-Lutidine. (Communicated)
- 8. Neha Sharma, J. S. Dhau, Avtar Singh, A. Singh, A. K. Malik, Bis(2-methoxy-3-pyridyl)diselenide and bis(3,5-dimethyl-2-pyridyl)diselenide based highly selective fluorescent sensor for Arsenic Detection. (Communicated)

Books Published

R.D. Atomic Structure and Bonding, CHEM 101 TH SEC. A & B, B.sc- I H.P.U Shimla, India.

Conference / Seminars

A) Paper/Poster presented:

- 1. Presented a Poster in National Conference -2011 at Punjabi University Patiala.
- 2. Presented an Abstract in National Conference 2011 at Modi College Patiala.
- 3. Presented a Poster in National Conference -2012 at Punjabi University Patiala.
- 4. Presented an Abstract in National Conference 2012 at Modi College Patiala.
- 5. Presented a Poster in National Conference -2013 at Punjabi University Patiala.
- 6. Presented a Poster in National Conference -2015 at Punjabi University Patiala.
- 7. Presented a Poster in National Conference -2016 at Punjabi University Patiala.
- 8. Presented a Poster in National Conference -2017 at Punjabi University Patiala.
- 9. Presented a Poster in International Conference -2017 at Punjab University Chandigarh.
- 10. Presented a Poster in National Conference -2018 at Punjabi University Patiala.
- 11. Presented a Poster in National Conference -2019 at Punjabi University Patiala.
- 12. Presented a Poster in National Conference -2020 at Punjabi University Patiala.

Achievements, Awards and Recognitions

- Awarded as JRF and SRF research fellow by UGC-BSR fellowship, India from 1-6-2015 to 21-12-2018.
- Got **First prize in** *UGC Sponsored Presentation* on 'Cancer in Malwa region of Punjab' at *Mata Guzri College, Fathegarh Sahib, Punjab, India* on celebrating "2011 as a year of Chemistry".
- Got **first Prize in Presentation** 'Chemistry and Our lives' sponsored by Punjabi University Patiala, Punjab, India at *Bardhwal Polytechnical College, Dhuri. Punjab, India*
- Got First Prize in debate competition conducted at *Fatehgarh college, Channa, Sangrur*, Punjab, India.
- Got First Prize in various other Inter college competitions based on Presentation, Debate and Quiz, Punjab, India.