

Dr. NIDHI SHARMA

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EDUCATIONAL QUALIFICATIONS

M.Sc. in Physical Chemistry (2012)

Ph.D. in Organometallic Chemistry (2018)

AWARDS AND RECOGNITIONS

❖ **NET-JRF (Rank-45), June-2012**

❖ **SRF, October-2014**

RESEARCH DETAILS

Master's research project: Three semesters

Title: STUDY OF MIXED MICELLAR SYSTEMS AND THEIR APPLICATION IN DRUG DELIVERY

Ph.D.: Thesis defended

Title: SYNTHESIS, CHARACTERIZATION AND EVALUATION OF FUNCTIONALIZED IMIDAZO[1,2-a]PYRIMIDINE CHALCOGENIDES

Research Supervisors: (i) Prof. S. K. Mehta, Department of Chemistry, Panjab University, Chandigarh.

(ii) Prof. K. K. Bhasin, Department of Chemistry, Panjab University, Chandigarh.

Total No. of publications: 6

Total No. of National/International Conferences/Symposia/Workshops Attended: 10

LIST OF PUBLICATIONS:

1. **Synthesis and characterization of fused imidazole heterocyclic selenoesters and their application for chemical detoxification of HgCl₂.**

Nidhi Sharma, Sanjeev Kumar, Sangit Kumar, S. K. Mehta, K. K. Bhasin.

New Journal of Chemistry, 42 (2018) 2702-2710.

2. **Insights into selenylation of imidazo[1,2-*a*]pyridine: synthesis, structural and antimicrobial evaluation.**

Sanjeev Kumar, Nidhi Sharma, Indresh K. Maurya, Ajay Verma, Sangit Kumar, K. K. Bhasin and Rohit K. Sharma.

New Journal of Chemistry, 41 (2017) 2919-2926.

3. **Synthesis, structural analysis, antimicrobial evaluation and synergistic studies of imidazo[1,2-*a*]pyrimidine chalcogenides.**

Nidhi Sharma, Sanjeev Kumar, Indresh K. Maurya, K. K. Bhasin, Ajay Verma, Nishima Wangoo, Aman K. K. Bhasin, S. K. Mehta, Sangit Kumar and Rohit K. Sharma.

RSC Advances, 6 (2016) 114224-114234.

4. **Facile synthesis, structural evaluation, antimicrobial activity and synergistic effects of novel imidazo[1,2-*a*]pyridine based organoselenium compounds.**

Sanjeev Kumar, Nidhi Sharma, Indresh K. Maurya, Aman K. K. Bhasin, Nishima Wangoo, Paula Brandao, Vitor Felix, K. K. Bhasin and Rohit K. Sharma.

European Journal of Medicinal Chemistry, 123 (2016) 916-924.

5. **Investigating mixed micellar system of dodecylammonium acetate for solubilisation of curcumin.**

Gurpreet Kaur, Nidhi Sharma and S. K. Mehta.

Science of Advanced Materials, 7 (2015) 1546-1555.

6. **Synthesis of new organochalcogen (Se or Te) based multifunctional pyrimidine derivatives: X-ray structure determination of 2,4-bis(arylchalcogenyl)pyrimidine and 2-chloro-4,6-bis(arylchalcogenyl)pyrimidine compounds.**

Ekta Arora, K. K. Bhasin, S. K. Mehta, Nidhi Sharma, Aman K. K. Bhasin, Claus Jacob, Vitor Felix and Subhadip Neogi.

Polyhedron, 81 (2014) 316-322.

LIST OF CONFERENCES/SYMPOSIA/WORKSHOPS ATTENDED

1. *Nidhi Sharma, Sanjeev Kumar, K. K. Bhasin and S. K. Mehta.* 50th Annual Convention of Chemists, 2013, held at the Department of Chemistry and Centre for Advanced Studies in Chemistry, Panjab University, Chandigarh. (**Poster Presentation**)
2. **One pot facile reduction of diselenides to form unsymmetrical monoselenides under air atmosphere.** *Nidhi Sharma, Sanjeev Kumar, K. K. Bhasin and S. K. Mehta.* Professor Ram Chand Paul National Symposium on New Visions in Chemical Sciences, 2014, organized by Department of Chemistry and Centre for Advanced Studies in Chemistry, Panjab University, Chandigarh. (**Poster Presentation**)
3. **Brief study of substituted imidazo[1,2-*a*]pyrimidine chalcogenides: synthesis and characterization.** *Nidhi Sharma, Sanjeev Kumar, K. K. Bhasin and S. K. Mehta.* Professor Ram Chand Paul National Symposium on Innovations in Chemical Sciences, 2015, organized by Department of Chemistry and Centre for Advanced Studies in Chemistry, Panjab University, Chandigarh. (**Poster Presentation**)
4. **Synthesis and characterization of substituted imidazo[1,2-*a*]pyrimidine chalcogenides.** *Nidhi Sharma, K. K. Bhasin and S. K. Mehta.* Asian Network for Natural and Unnatural Materials, 2015, organized by Department of Chemistry and Centre for Advanced Studies in Chemistry, Panjab University, Chandigarh. (**Poster Presentation**)
5. 10th National Conference on Thermodynamics of Pharmaceutical, Chemical and Biological systems, 2015, organized by University Institute of Pharmaceutical Sciences and Department of Chemistry, Panjab University, Chandigarh. (**Volunteer participation**)
6. **Synthesis and characterization of symmetrical 2-pyridyl monoselenides from elemental selenium.** *Nidhi Sharma, K. K. Bhasin and S. K. Mehta.* International Conference, NanoSciTech 2016, held at Panjab University, Chandigarh. (**Poster Presentation**)
7. **Imidazo[1,2-*a*]pyrimidine chalcogenides: facile synthesis and computational analysis.** *Nidhi Sharma, Sanjeev Kumar, K. K. Bhasin and S. K. Mehta.* 18th CRSI National Symposium in Chemistry, 2016, organized by Institute of Nano Science and Technology and Panjab University. (**Poster Presentation**)

8. **Facile synthesis and computational analysis of imidazo[1,2-*a*]pyrimidine chalcogenides.** *Nidhi Sharma, Sanjeev Kumar, K. K. Bhasin and S. K. Mehta.* Professor Ram Chand Paul National Symposium on Progressive Trends in Chemical Sciences, 2016, organized by Department of Chemistry and Centre for Advanced Studies in Chemistry, Panjab University, Chandigarh. **(Poster Presentation)**
9. **Imidazo[1,2-*a*]pyrimidine chalcogenides: synthesis, structural analysis, antimicrobial evaluation and synergistic studies.** *Nidhi Sharma, K. K. Bhasin and S. K. Mehta.* Achievements of Women in Science and Technology: Current Scenario and Future Prospects, 2017, held at Department of Chemistry and Centre for Advanced Studies in Chemistry, Panjab University, Chandigarh. **(Oral Presentation)**
10. **Synthesis, structural analysis of imidazo[1,2-*a*]pyrimidine chalcogenides and their evaluation as potential antimicrobial agents.** *Nidhi Sharma, K. K. Bhasin and S. K. Mehta.* International Conference on Green Chemistry/Engineering and Technologies for Sustainable Development (GCET-2017), jointly organized by Department of Chemistry and Centre for Advanced Studies in Chemistry, Panjab University, Chandigarh and Florida Polytechnic University, Lakeland (USA). **(Poster Presentation)**