

Name: Dr. Nisha Sharma
Designation: Associate Professor
Qualification: Ph. D.
Area of specialization: Inorganic Chemistry
Teaching Experience: 15 years
Research Experience: 5 years
Institute: Department of Chemistry
Himachal Pradesh University-Shimla

Academic Qualification: Ph.D
Ph.D. degree submitted : 1

Ph.D. students enrolled: 4

Orientation /Refresher programme/ workshop attended

- Attended Orientation programme, OP-102 held from 20.06.2011- 16.07.2011 at Himachal Pradesh University, Shimla.
- Attended Refresher Course-315 held from 19/08/2019 to 31/08/2019 at HRDC, Himachal Pradesh University, Shimla.
- Attended 1 week NEP 2020 Orientation and Sensitization Programme, from Malaviya Mission Teacher Training Centre, HPU Shimla-5 from 13/05/2024 to 21/05/2024.
- Faculty Development Programme- Teaching Learning Centre Ramanujan College, University of Delhi, 26/04/2023 to 02/05/2023
- Workshop on MOOCs, Online courses and Open Educational Resources, HRDC, Himachal Pradesh University, Shimla-5, 07/12/2020 to 12/12/2020.
- Attended National workshop on Cigarette and other Tobacco products act (COTPA) at RGGDC –Shimla on 21st Oct 2016.
- Attended workshop - Capacity building of women managers in higher education organized by Centre for women studies and development Himachal Pradesh University, Shimla held 20th-24th march 2012.

Awards in conferences

1. Indian chemical Society Research excellence award for oral paper presentation in International conference on Recent trends in chemical Sciences (ACC-RTCS-2021)
2. Best poster presentation award in IVth International conference on ICAAS-2022 held during 12-14 June 2022 at HPU Shimla

List of research publications

1. Ankita, Nisha Sharma, Comparative biosorption efficiency of *Agaricus bisporus* mushroom and spent mushroom compost for cobalt and manganese removal from aqueous solution: Equilibrium, kinetic and thermodynamic analysis, *Journal of Water Process Engineering*, Volume 74, 2025, 107839, 1-15. <https://doi.org/10.1016/j.jwpe.2025.107839>.
2. Sharma, N., & Chaudhary, A. (2025). Assessing the Role of Soil Amendments on the Sorption-Desorption Behavior of Glufosinate-Ammonium Herbicide in Soils: Kinetic, Isothermal and Thermodynamic Investigations. *Soil and Sediment Contamination: An International Journal*, 1–22. <https://doi.org/10.1080/15320383.2025.2450397>.
3. Nisha Sharma and Srishti Shekhar, Indirect Spectrophotometric Method for Evaluation of Dimethoate and Oxydemeton-methyl Insecticides in Environmental Samples. *Journal of Analytical Chemistry*. 2025 (Accepted).
4. Comparative analysis of Cu(II) and Ni(II) removal using *Agaricus bisporus* mushroom and spent mushroom compost as biosorbents *Journal: International Journal of Phytoremediation*. 2025 (Accepted).
5. Akhil Chaudhary and **Nisha Sharma**, Assessment of fenobucarb and propoxur insecticides in environmental samples by spectrophotometric and spectrofluorimetric methods. *Chemical papers*, 2024, 1-18.
6. D.K. Sharma, Akhil Chaudhary, Shubham Sharma, **Nisha Sharma**, Maridula Thakur, Meena Kumari and Kanika Rana Evaluating the agricultural impact of zineb fungicide through spectrophotometric technique and its applications. *International journal of environmental analytical chemistry*, 2024, 1-13.
7. Spectrophotometric investigations on some heavy metals Cu, Ni, Co and Mn to evaluate their environmental toxicity *Journal of Analytical Chemistry*, 2024,79,914-922,1.27.
8. **Nisha Sharma**, Ankita Kaura and Akhil Chaudhary, Development and Validation of Spectrophotometric and Spectrofluorimetric Methods for Glufosinate-Ammonium Herbicide and Carbofuran Insecticide Contamination in Environmental Samples. *Journal of Analytical Chemistry*, 2023, 78, 1511-1524.
9. Akhil Chaudhary, Srishti Shekhar and **Nisha Sharma**, Evaluation of Adsorption and Leaching Behaviour of Glyphosate Herbicide on Soils of Different Characteristics. *Research Journal of Agricultural Sciences*, 2023, 14, 1910-1916.
10. Pulse polarographic determination of malathion to evaluate its leaching potential and ground water contamination, *International Journal of Research and Analytical Reviews*, 2023, 10, 90-97.
11. Evaluation of pollution of groundwater resources by Carbofuran based on its adsorption on three soils by Spectrophotometry. *Research Journal of Chemistry and Environment*. 2022,26,17-26.
12. Differential Pulse Polarographic Determination of Carbofuran in Environmental Samples. *Research Journal of Chemistry and Environment*, 2021,25,135-143.

13. Pulse Polarographic Investigations of Adsorption Study and Leaching of Carbaryl on five soils to evaluate groundwater contamination. International Journal of Applied and Pure Science and agriculture., **N. Sharma**, T. Dharmani and D. K. Sharma., 2018, 4(2), 27-36.
14. Spectrophotometric study of adsorption of Propoxur on Indian soils. **N. Sharma**, T. Dharmani and D. K. Sharma., Asian Journal of Advanced Basic Science., 2017, 5(2), 85-91.
15. Investigations on adsorption and leachability of methomyl on natural soils and risk of groundwater contamination. **N. Sharma**, T. Dharmani and D. K. Sharma., J. Indian Chem. Soc., 2016, Vol. 93, pp. 1-8.
16. Extractive spectrophotometric method for the determination of carbaryl in environmental samples. Devender Kumar Sharma, Tilak Dharmani and **Nisha Sharma**., Bull. Chem. Soc. Ethiop. 2015, 29(2), 1-14.
17. Spectrophotometric evaluation of leaching behaviour and ground water contamination of anilofos. D. K. Sharma, N. Verma and **Nisha Sharma**., J. Indian Chem. Soc., Vol. 91, 2014, pp. 1-7.
18. A New Extractive Spectrophotometric Method for the Determination of Oxydemeton methyl in Relation to its Environmental and Toxicological Analysis. D. K. Sharma, R. Kashyap, N.K. Verma, **Nisha Sharma**., Research and Reviews: A Journal of Toxicology Vol 2, Issue 2, 2012, 1-15.
19. Assessment of environmental toxicity of oxydemeton methyl by differential pulse polarography. D.K.Sharma, Atul Gupta, **Nisha Sharma**, Arch. Environ., Sci. 2011, 5, 106-115.
20. Development and validation of a spectrophotometric method for soil adsorption study of malathion on three Indian soils. D.K.Sharma, R.K.Sharma, **Nisha Sharma** and Atul Gupta, Toxicol. & Environ. Chem., 2010, 92, 1831-1840.
21. A pulse polarographic method for the determination of primary and secondary amines and its application to the analysis of organic isocyanates. Sharma D.K.; Chauhan C.; Gupta A.; **Sharma Nisha**; 2007, vol. 84(11), 1145-1147.

Book Chapters : 2

1. **Dr. Nisha Sharma and Dr. Meena Kumari**. Impact of pesticides on soil health and management practices. Astha Foundation Meerut(U.P.)- India. ISBN No. - 978-81-958010-0-8
2. **Dr. Nisha Sharma**, A review on factors affecting adsorption of carbofuran pesticide in soils. Bhumi Publishing Maharashtra India. ISBN No. - 978-93-91768-17-1

Paper presented in Conferences/Symposium/ Seminar

1. International conference: Paper “ Analysis of glufosinate-ammonium sorption-desorption and leaching potential in various organically altered soils” presented in 3rd International Conference on Recent advances in Sustainable Environment (RAISE- 2024) from 22 -23 November 2024, held at University Institute of Technology Himachal Pradesh University Summer Hill Shimla.
2. Attended one day seminar on Institutional preparedness for new binary system of accreditation on 21st October, 2024 organized by IQAC- Himachal Pradesh University, Shimla.
3. International conference: Paper “Assessment of Contamination of Propoxur insecticide in environmental samples” presented in 6th International Conference on Strategies and challenges in Agricultural and Life Science for Food Security and Sustainable Environment (SCALF- 2023) from 28 -30 April 2023 held at Himachal Pradesh University Summer Hill Shimla.
4. National conference: Paper “Determination of Glufosinate in environmental samples by spectrophotometry” presented National Conference on Role of science and technology in environmental conservation and sustainable development from 23 -24 September, 2022 held at Department of Biosciences, Himachal Pradesh University Summer Hill Shimla.
5. International conference: Paper “Evaluation of leaching potential and groundwater contamination of Malathion” presented in 4th International Conference on Innovative and current advances in Agriculture and Allied sciences from 12 -14 June 2022 held at Himachal Pradesh University Summer Hill Shimla.
6. International conference: Paper “ Evaluation of leaching potential and groundwater contamination of Carbofuran by polarography” presented in 58th Annual convention of Chemists and International Conference on Recent trends in Chemical Sciences”(ACC-RTCS-2021) from 21 -24 December 2021 organized by the Indian Chemical Society, Kolkata.
7. Evaluation of adsorption of Dimethoate in soils. Presented at International conference on Transforming our world: Opportunities and challenges., 30th Nov-2nd Dec 2018 organized by RKMV-Shimla with Science and management society Himachal Pradesh.
8. Risk of ground water pollution by methomyl, Paper presented at International conference on Opportunities and challenges of 21st century held at RGGDC-Shimla, 7th -9th Dec 2017 in collaboration with Science and management society Himachal Pradesh.
9. Determination of Carbaryl in environmental samples. Oral presentation in National conference on Science and technology for Sustainable livelihood in Indian Himalayan region held from 20-21Nov, 2017 at Hotel Peterhoff Shimla..
10. The impact of pesticides on environment, Presented at National conference on Environment and natural resource management.,23-24th Feb 2017 organized by Shoolini university and Him Science Congress Association Himachal Pradesh.
11. Adsorption characteristics of Carbofuran insecticide on various Indian soils: Risk assessment for groundwater protection, Paper presented at National conference on Current issues and challenges in contemporary world held at RGGDC-Shimla, 9th -11th Dec 2016.
12. Assessment of environmental toxicity of Carbofuran Insecticide by Spectrophotometry. Oral presentation in National conference on Recent developments in science and technology held at Biotechnology department, Himachal Pradesh University, Shimla,10-12 Oct, 2014.

13. Assessment of environmental toxicity of Methomyl Insecticide by Spectrophotometry. Presented at 50th Annual convention of chemists held at the Department of chemistry and centre for advanced studies in chemistry, punjab university, chandigarh, 04-07 Dec 2013, IAC (PP)-05.
14. Differential pulse polarographic determination of anilofos in environmental samples. Presented at National Symposium on Chemistry Innovations for human well being, organized by Himachal Pradesh University, Shimla, 21-22 Oct 2011, p.26.
15. Spectrophotometric determination of anilofos in environmental samples. Presented at National Seminar on Frontier in Polymer Science.,18-19Nov 2011, organized by Himachal Pradesh University, Shimla,2011, p-55.
16. Adsorption Characteristics of the Dimethoate Insecticide on various Indian Soils: Risk Assessment for Ground Water Protection. Presented at conference on Himalayan Environment: Issues and Challenges organized by Institute of Integrated Himalayan Studies (U.G.C. Centre of Excellence), H.P. University Shimla-5, Abstr. Book, 2010.
17. A new and rapid spectrophotometric method for the microdetermination of dimethoate insecticide and its applications in soil adsorption study. Presented at IInd National conference in Recent advances in chemical and environmental sciences, 2010,organized by MM College, Patiala. Abstr. Book, 2010,p-71.
18. An oxidimetric method for the quality control of 1-Butyl 3-methyl imidazolium ionic liquid precursors. Presented at IInd National conference in Recent advances in chemical and environmental sciences, 2010, organized by MM College, Patiala. Abstr. Book, 2010,p-37.
19. Pulse polarographic determination of Dopamine hydrochloride (a drug) in its formulated products. Presented at National Symposium on Recent advances in analytical sciences and applications organized by Indian Chemical Societyof Analytical Scientists and Deptt. of Chemistry, Himachal Pradesh University, Shimla, Abstr. Book, 2007, p-55.
20. Pulse Polarographic Determination of Some Organic Isocyanates. Presented at UGC – SAP National Seminar on Recent Trends in Synthetic and Polymer Chemistry (RTSPC-II) organized by Himachal Pradesh University, Shimla, Abstr. Book, 2007, p-33.