


**HANS RAJ COLLEGE
UNIVERSITY OF DELHI
FACULTY PROFILE**

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|---|---|------------|---------------|-----------|----------------|---|
| Title | Dr. | First Name | MONICA | Last Name | DINODIA | Photograph |
| Designation | Assistant Professor | | | | |  |
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| Educational Qualifications M. Sc.(Honours School, Chemistry) Ph.D.(Organic Chemistry) | | | | | | |
| Degree | Institution | | | | Year | |
| Ph.D. | IIT Roorkee | | | | 2009 | |
| PG | Panjab University Chandigarh | | | | 2002 | |
| UG | Maharash Dyanand University, Rohtak | | | | 1999 | |
| Career Profile | | | | | | |

Started as Ad-hoc Lecturer in Amity University Noida, in 2008. Currently working as Associate Professor, Hansraj College

Areas of Interest / Specialization

1. Synthetic Organic Chemistry
2. Organic Spectroscopy
3. Green Chemistry

Administrative Assignments

- Convenor of the Apparatus committee of the department, 2014-15.
- Dept Library committee member 2014-15
- Dept Library committee (convenor) 2015-16. As convenor of Library Committee, I was involved in purchasing various books required for B.Sc and M.Sc students.
- Member; Canteen Committee, 2014-15, 2015-16 (Staff Council)
- Member; Environment Awareness Committee, 2016-17, 2017-18 (Staff Council)
- Member; Garden Committee, 2016-17, 2017-18 (Staff Council)
- Representative Member from the department for Library Committee, 2016-17
- Admission in charge for admission of B.Sc (H) Chemistry and M.Sc. 2017-18
- Convenor of Science admissions, 2018-19 (Staff Council)
- **Teacher in Charge** of Chemistry Department, 2018-19.
- Superintendent Chemistry practical exam April-May 2018 and Nov-Dec 2018
- Dept chemical store (member) 2019-20.
- Dept Lab staff society (member) 2019-20.
- Staff Council- Garden Committee (Member) 2019-20.
- Dept Apparatus store (member) 2020-21.
- Dept Library (member) 2020-21.
- Staff Council Member; Garden Committee, 2021-22.
- Staff Council Member; Environment Awareness Committee, 2021-22.
- Departmental Nominee for Criteria 6 for NAAC, 2021-22.
- Dept Chemical store (member) 2021-22.
- Dept Chemical Society (member) 2022-23.
- Dept Chemical Store (member) 2022-23.
- Member, Garden committee 2022-23 (Staff Council)

- Member, Canteen committee 2022-23(Staff Council)
- Member of selection committee for permanent post (assistant professor) in the Department of Chemistry in 2022.

Subjects Taught

1. B. Sc. (Hons.) Chemistry

Biomolecules, N containing functional groups, Polynuclear hydrocarbons, Oxygen Containing functional groups, Spectroscopy, Carboxylic acids and their derivatives, Carbonyl compounds, halogenated hydrocarbons, alcohols, phenols, ethers and epoxides, alkaloids, terpenes, heterocyclic compounds, Analytical Clinical Biochemistry, Stereochemistry. Green Chemistry.

2. B.Sc Programme Life Sciences and B.Sc Programme Physical Sciences

Carbohydrates, Amino acids and proteins, Carboxylic acids and their derivatives

3. M. Sc. (Industrial chemistry at Amity University) Mass spectroscopy

4. Environmental Studies

Publications Profile

Research papers published in Refereed/ Peer Reviewed Journals

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- 1) **Synthesis, anti-inflammatory and analgesic activity evaluation of some amidine and hydrazone derivatives.** Sondhi Sham M; Dinodia Monica; Kumar Ashok Department of Chemistry, Indian Institute of Technology Roorkee (IIT R), UA. *Bioorganic & medicinal chemistry* 14(13), 4657-63,(2006). IF: 3.461
- 2) **One pot synthesis of pyrimidine and bispyrimidine derivatives and their evaluation for anti-inflammatory and analgesic activities.** Sham M. Sondhi, Shubhi Jain, Monica Dinodia, Rakesh Shukla and Ram Raghubir. *Bioorganic & Medicinal Chemistry, Volume 15, Issue10, Pages 3334-3344, 15 May 2007.* IF: 3.461
- 3) **Synthesis of biologically active N-methyl derivatives of amidines and cyclized five-membered products of amidines with oxalyl chloride.** Sham M. Sondhi, Monica Dinodia, Shubhi Jain and Ashok Kumar. *European Journal of Medicinal Chemistry Volume 43, Issue 12, Pages 2824-2830, 2007.* IF: 7.088
- 4) **Heterocyclic compounds as anti-inflammatory agents.** Sondhi, Sham M.; Dinodia, Monica; Singh, Jaiveer; Rani, Reshma. Department of Chemistry, Indian Institute of Technology Roorkee,

Roorkee, India. **Current Bioactive Compounds** (2007), 3(2), 91-108. *Scopus CiteScore 2021: 1.8*

5) Synthesis of physiologically important quinoxaline derivatives using conventional method and microwave irradiation. Bhattacharjee, G.; Sondhi, S. M.; Dinodia, Monica; Mishra, Sushanta K. Department of Chemistry, Indian Institute of Technology Roorkee, Roorkee, India. *Indian Journal of Chemical Technology* (2008), 15(1), 72-74. **Impact Factor of IJCT is 0.76 (JCR 2021).**

6) Synthesis of some thiophene, imidazole and pyridine derivatives exhibiting good anti-inflammatory and analgesic activities. Sondhi, Sham M.; Jain, Shubhi; Dinodia, Monica; Kumar, Ashok. Department of Chemistry, Indian Institute of Technology Roorkee (IIT R), Roorkee, India. *Medicinal Chemistry* (2008), 4(2), 146-154. **IF: 2.329**

7) Synthesis, anti-inflammatory and analgesic activity evaluation of some pyrimidine derivatives. S. M. Sondhi*, Monica Dinodia, Rakesh Shukla and Ram Raghubir. *IJCB Vol.48B(2) [February 2009] 273-281*. **Impact Factor of IJCB is 0.456 (JCR 2021).**

8) Synthesis of biologically active novel bis Schiff bases, bis hydrazone and bis guanidine derivatives. S. M. Sondhi*, Monica Dinodia, Shubhi Jain and Ashok Kumar. *IJC-B Vol.48B(08) [August 2009], 1128-1136*. **Impact Factor of IJCB is 0.456 (JCR 2021).**

9) Ionic Liquids: Environment-Friendly Greener Solvents for Organic Synthesis. **Review Article** Monica Dinodia* Volume 19, Issue 4, 2022, Pp: 543-557, DOI: [10.2174/1570179419666220107160725](https://doi.org/10.2174/1570179419666220107160725)

Current IF: 2.276, 5 – Year IF: 1.987

10) Microwave-promoted Synthesis of Novel Bioactive N-based Heterocycles (*E-pub Ahead of Print*) Mini-Reviews in Organic Chemistry, **Mini-Review Article**
Published on: 10 June, 2022 **Author(s):** Monica Dinodia* **Corpus ID:** 248358269
DOI: [10.2174/1570193X19666220420133723](https://doi.org/10.2174/1570193X19666220420133723)
Current IF: 2.159, 5 – Year IF: 1.832

11) N-heterocycles: Recent Advances in Biological Applications **Mini-Review Article**

(*E-pub Ahead of Print*) Mini-Reviews in Organic Chemistry, **Published on:** 04 February, 2022

Author(s): [Monica Dinodia*](#)

DOI: [10.2174/1570193X19666211231101747](https://doi.org/10.2174/1570193X19666211231101747)

Print ISSN: 1570-193X **Online ISSN:** 1875-6298

Current IF: 2.159, 5 – Year IF: 1.832

12) Recent Advances in N-Heterocycles for COVID-19 Treatment - A Mini Review

(*E-pub Ahead of Print*) **Medicinal Chemistry**

Published on: 27 March, 2023

Author(s): [Monica Dinodia*](#)  **DOI:** [10.2174/1573406419666230228115410](https://doi.org/10.2174/1573406419666230228115410)

13) FROM THE EDITED VOLUME

Strategies Towards the Synthesis of Heterocycles and Their Applications, Book Chapter: Greener Approach towards the Synthesis of Nitrogen Based Heterocycles

WRITTEN BY

Monica Dinodia, Submitted: August 21st, 2022 Reviewed: October 6th, 2022 Published: December 6th, 2022, DOI: 10.5772/intechopen.108489

Conference Organization/ Seminars/Workshops

Conferences Attended/Organized

1. Microwave assisted synthesis and biological evaluation of some heterocyclic Hydrazones and Bis Schiff Base. S. M. Sondhi* and Monica Dinodia. Souvenir: National Conference on Modern Trends in Chemical Science and Technology held at DAV College Jalandhar (Punjab) 15-17 Oct. 2005. P.20 (2005).
2. Second International Conference on Heterocyclic Chemistry Held at Department of Chemistry, University of Rajasthan, Jaipur, India from 16th-19th December 2006.
3. Member of Organizing Committee for 1st International Conference on Integrative Chemistry. Biology and Translational Medicine organized by Center of Global Health, Hansraj College, University of Delhi & Loyola University Chicago Stritch School of Medicine, USA from 25-26 February 2019.
4. Member of organizing committee in National conference on New Frontiers on Biosensing held on April 13 2021, organized by Department of Chemistry, Hansraj College, DU, Delhi.
5. Attended the International Conference on 'Recent Trends in Drug Discovery and Development' organized by the Department of Chemistry under the aegis of IQAC, Maitreyi College, University of Delhi held during October 8-9, 2021 on virtual platform.
6. Member of organizing committee in online International Conference on Emerging Trends in Chemical and Applied Sciences for Sustainable Future (30th October, 2021) Organized by Department of Chemistry in association with IQAC, Hansraj College, University of Delhi.

Workshops Organized/Attended

1. Participated in the NATIONAL ONLINE WORKSHOP ON "CHEMDRAW SOFTWARE LEARNING" organized by Department of Chemistry, Aggarwal College Ballabgarh on 17/08/2022.

2. **Member of organizing committee** (Garden Committee) for terranium workshop on August 6 2021.
3. Participated in Tools for exploring chemistry (online workshop) organized by Department of chemistry, Rajdhani college, DU, Delhi on 12-13 July 2021.
4. Participated in Laboratory Safety measures and chemical waste management for Ecological and Environmental shield (online national workshop) on 16 April 2021 organized by Department of chemistry, Rajdhani college, DU, Delhi.
5. Participated in 1 Day National workshop on ICT tools for chemistry teachers (online) organized by GAD-TLC, SGTB Khalsa College, DU, Delhi under the PMMMNTT held on 22 Feb, 2021.
6. Member of organizing committee in Inspire programme (DST) held at Hansraj College from 12 Dec 2017-16 Dec 2017.
7. One day author Workshop conducted by Vivekananda library in association with Elsevier held at radhakrishnan auditorium at MDU Rohtak on 18 Nov 2016.
8. Indo-Portuguese workshop on Emerging Trends of Nanotechnology in Chemistry and Biology (INCB-2016) organized by Department of Chemistry Hansraj College and Deshbandu College, University of Delhi, India in association with CQM, University of Madeira, Portugal held on 12-13 February, 2016.
9. Two days' National Workshop on 'Role of Scientific and Technical Terminology in Higher Education by Commission for Scientific & Technical Terminology, MHRD at Hansraj College, July 2015.
10. DBT sponsored workshop on Relevance of Experimental Chemistry to Biotechnology March 12-13, 2014 at Department of Chemistry, Hansraj College, University of Delhi, Delhi.
11. Workshop on project funding and Technical consulting (for startups and researchers) held at Amity School of Engineering and Technology in collaboration with Amity Innovation Incubator on 30th May, 2009.
12. Bruker-AXS, Germany sponsored 2 days National workshop on Techniques and challenges for Structure solution in Chemical Crystallography organized by Department of Chemistry IIT Roorkee from Aug 31-Sep 1 2007.

Seminars Organized/attended

- Participated in NAAC Sponsored One Day National Seminar On NAAC Revised Assessment and Accreditation Framework – An Approach, organized by the IQAC, Hindu College, University of Delhi, Delhi on 10th May 2022.
- Participated in the “National Symposium on Discrimination and Disparities” organised by the North-East Cell of Hansraj College on October 23, 2021.

- Participated in the National Seminar on Women Empowerment through Science and Technology: Power to Transform the World (25th September 2021) Organized by Royal Society of Chemistry, London, North India Section Hindu College, University of Delhi & Save The Environment (STE)
- Participated in 2 days National seminar: Reshaping education during Pandemic held from 13-14 July 2021(online) organized by Vidya Vistar and Gyan setu committee of Hansraj College in collaboration with Govt College Yachuli (Arunachal Pradesh)
- Member of the Organizing Committee at the National Seminar on "Environment and Sustainability in The Third World" organized by Department of Chemistry & IQAC, Hansraj College, University of Delhi held on 28 February 2020.
- National seminar on Role of Analytical Sciences in Sustainable Development held on March 4-5, 2016 at Hansraj College, University of Delhi, Delhi.
- National seminar on Chemistry in Interdisciplinary Applications organized by Department of Chemistry Hansraj College, University of Delhi on March 19th, 2013.

Webinars Organized/Attended

1. Organized a webinar on 20th November, Saturday 2021 on "Plagiarism in Academic Writing and Research" in association with Chemical Society and IQAC, Hansraj College University of Delhi.
2. Participated in the Online Lecture Series on "Biomass waste management for healthy environment, resource conservation and tapping Bioenergy" & "Good Laboratory Practices" by Dr. Navindu Gupta, organized by the Department of Chemistry, Shivaji College, University of Delhi under the aegis of DBT Sponsored Star College Scheme on October 30, 2021.
3. Attended International Webinar on "Global Peace and Power of positivity" organised by Department of Zoology, Hansraj College on 23rd October, 2021.
4. Participated in an Awareness session on Prevention of Sexual Harassment at Workplace organised by the Internal Complaints Committee, Hansraj College on August 13, 2021.
5. Participated and completed the Online National Webinar entitled "Teacher's e-Kit: A Four Quadrant Approach for Development of OERs for Higher Education" 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 on 9th September 2021.

6. Participated in webinar on “Winning the game of publishing research papers, raising your profile, and extending the impact of your publications” held on Sep 7, 2021 and organized by Wiley.
7. Participated in one day International Science Webinar entitled "Chemistry For Sustainable Human Life - Essentials of New Education Policy" held on July 28th 2021, organised by RAMJAS COLLEGE, UNIVERSITY OF DELHI.
8. Participated in One day Webinar on "Strengthening the immune system through Naturopathy" held on May 6, 2020 organized by Department of Botany and Internal Quality Assurance cell, Hansraj College, University of Delhi.
9. Participated in One day webinar on Role of ICC and Prevention, Prohibition and Redressal of Sexual Harassment of Workmen at Workplace on May 22, 2020.
10. Participated in the International Webinar on “Gut microbiota and host: the fight for iron” organised by Shrishti Chetna, Department of Zoology, Hansraj College, University of Delhi on 1st August 2020.

Orientation/Refresher Course

- Participated and completed the One Week International Online Faculty Development Programme on “**Modern scientific technologies – Ways to enhance research skills**” organized by Mahatma Hansraj Faculty Development Centre, Hansraj College during **December 26 - 31, 2022**.
- Participated in One week (online) faculty development programme, “Emerging Trends in Applied Chemistry- A Step towards Sustainable Development” organized by Department of Chemistry, Faculty of Science, SGT University, Gurugram from 30th May to 4th June 2022.
- Successfully completed One Week (Online) Interdisciplinary Faculty Development Programme on ‘Creation and development of MOOCs while managing online classes’ (24th August – 31st August 2021) organised by Keshav Mahavidyalaya, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi.
- Participated and successfully completed One week (online) interdisciplinary faculty development programme on Basics of Research organized by MHFDC, Hansraj College, DU in collaboration with PARAMARSH UGC Scheme from June 18 to June 24, 2021.
- Successfully completed the ARPIT Course for Career Advancement Scheme(CAS) promotion Online Refresher Course In Chemistry For Higher Education with a "A" Grade in the proctored examination held on 16.02.2020 Sri Guru Tegh Bahadur Khalsa College, University of Delhi.

- Successfully completed the ARPIT Course for Career Advancement Scheme (CAS) promotion Online Refresher Course in Chemistry for Higher Education Faculty with a "A" Grade in the proctored examination held on 30.03.2019 Offered by Sri Guru Tegh Bahadur Khalsa College, Delhi.
- Participated and completed 2 weeks FDP on Bhasha, Sahitya, Media aur Paryavaran from 10/12/2018 to 23/12/2018 organized by MHFDC, organized by Hansraj College, University of Delhi and Faculty of Arts, University of Delhi.
- Participated and completed 3 weeks UGC Sponsored Refresher Course in Contemporary studies from 7 June 2016 to 27 June 2016 organized by HRDC-CPDHE, University of Delhi, Delhi.
- Participated and completed 4 weeks UGC Sponsored Orientation Programme (OR-75) from Oct 5-15, Nov 9-19, 2013 and Dec 14-20, 2013 organized by CPDHE, University of Delhi, Delhi.

Members of Professional Bodies

1. Life member of Indian Society of Analytical Scientists (ISAS)-Delhi Chapter, LM Number, LM-2021/19.
2. Life member of Association of Carbohydrate Chemists and Technologists (India), life membership number, LM/309/2021.
3. Life member of GCNC Advancing Green Chemistry, life membership number 0656/22/289.

Dr. Monica Dinodia
Associate Professor