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Name: Dr. Anita Kumari

Department: Chemistry

Current Designation: Assistant Professor

Email id: anita.kumari@mirandahouse.ac.in

Academic Qualifications: B.Sc., B.Ed., M.Sc., M.Phil., Ph.D.

Research Degree(s)

Ph.D. Chemistry, Department of Chemistry, University of Delhi

M.Phil. Chemistry, Department of Chemistry, H.P. University Shimla

Field of Specialization under the Subject/Discipline: Organic Chemistry

Total Teaching Experience: 12 Years

Teaching at Miranda House since: July 2009

List of Publications:

- Vikas Kalia, Pradeep Kumar, Suresh Kumar, Madhusudan Goyal, Priti Pahuja , Gaurav Jhaa ,Suman Lata , Hariom Dahiya , Sudershan Kumar, **Anita Kumari** , ChandrabhanVerma Synthesis, characterization and corrosion inhibition potential of oxadiazole derivatives for mild steel in 1M HCl: Electrochemical and computational studies *Journal of Molecular Liquids.*(2021)



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<https://doi.org/10.1016/j.molliq.2021.118021>.

- **A. Kumari**, G. Kaur, R. K. Sharma, S.Lata, G. Singh, Synthesis, Electrochemical and Theoretical Characterization of Schiff base as an anticorrosive molecule for mild steel in 0.5 M 0.5 M H₂SO₄ Medium, *Journal: Chemical Papers(2021)*.<https://doi.org/10.1007/s11696-021-01819-0>.
- **A. Kumari**, R. K. Sharma, G. Singh, Imidazolium based Ionic Liquid as an Eco-Friendly Corrosion Inhibitor for Mild Steel in 0.5 M H₂SO₄ Medium: Electrochemical and Surface Morphological Studies, NACE International Gateway India Section organized International conference on Corrosion “CORCON 2021”. The Proceeding of Conference, PP-MCI22
- **A. Kumari**, R. K. Sharma, G. Singh, Inhibition Effect of a 1-n-Butyl-3-methylimidazolium hexafluorophosphate on the Corrosion of Mild Steel in Sulfuric Acid Solution, NACE International Gateway India Section organized International conference on Corrosion “CORCON 2018”. The Proceeding of Conference, Vol.-19, PP. 18, ISBN: 978-93-5321-616-0.
- **A. Kumari**, Gurmeet Kaur, R., K. Sharma, G. Singh, Anti-corrosive properties of 1-Ethyl-3-methylimidazolium tetrafluoroborate on mild steel corrosion in sulphuric acid Solution, *International Research Journal of Natural and applied Sciences* 3 (2018) (2349-4077).
- **A. Kumari**, G. Kaur, R. K. Sharma, G. Singh, Gravimetric and Electrochemical studies of a Schiff Base as green corrosion inhibitor for mild steel in 0.5 M H₂SO₄ solution. *International Journal of Engineering & Scientific Research* 11 (2017) 2347-6532.

Book Chapter:

- **Anita Kumari**, Bhawna Chugh, Sheetal, Gurmeet Singh, and Ashish Kumar Singh, Corrosion Inhibitors for Sweet (CO₂ Corrosion) and Sour (H₂S Corrosion) Environments, (2021) In: Sustainable Corrosion Inhibitors I: Fundamentals, Methodologies, and Industrial Applications, ACS Symposium Series, Vol. 1403, pp 189-205. DOI: 10.1021/bk-2021-1403.ch009, **ISBN13: 9780841297906**.



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Research Guidance:

- Guide undergraduate students as Facilitator and Mentor at the summer DSKC workshop “Flavor of Research” in multidisciplinary contexts organized by DS Kothari Centre for Research and Innovation in Science Education, Miranda House on topic: Green synthesis of nitrogen containing six membered heterocyclic compounds in June-July 2021.
- Teacher Mentor in the Inspire Internship Programme under D S Kothari Center for Research and Innovation in Science Education, Miranda House, University of Delhi in 2013, 2015.

Research Projects:

- Innovation Project (Project code: MH- 311) “Phytoremediation of Heavy Metals Contamination and Extraction of Nanoparticles. sponsored by University of Delhi, (5,00,000/-) 2015- 2016.

Administrative Responsibilities :

- Staff Advisor of “TRICORD (Life Science Society) -2021
- Member of Equal Opportunity cell, Placement cell, Cafeteria Committee-2021
- Member of Jigyasa Quiz Society- 2016, 2017
- Staff advisor of chemical society “RASAYANIKA- 2015,2016
- Member of International Collaboration, Member of Jigyasa Quiz Society-2012,2013,2014
- Member of NCC, Member of Chemical Society (CS) -2009,2010,2011

Invited talks/Session chair/Resource person:

- Resource Person for the Bridge course on Laboratory Safety and handling of Equipment conducted by Department of chemistry, Miranda House in the year 2015, 2020, 2021.

Seminars/Workshops/Conferences attended :

Oral/Poster Presentation:

- Oral Presentation on topic: “Electrochemical and morphological studies of Schiff base as



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corrosion inhibitor for mild steel in acidic medium” in the 1st International Conference on Advanced Developments in Chemistry and Allied Sciences-2021 (ADCAS-21) organized by the Department of Chemistry, Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Sonipat, India , 16 -17th December, 2021.

- Oral Presentation on topic” Imidazolium based Ionic Liquid as an Eco-Friendly Corrosion Inhibitor for Mild Steel in 0.5 M H₂SO₄ Medium: Electrochemical and Surface Morphological Studies in NACE International Gateway India Section organized International conference on Corrosion “CORCON 2021”, 18-20 November, 2021 on Virtual Platform.
- Oral Presentation on topic” Schiff base as green and efficient corrosion inhibitor for mild steel in 0.5 M H₂SO₄ medium: Electrochemical and Surface morphological studies” in 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, 08-09 October, 2021.
- Presented a poster on topic “Inhibition Effect of a 1-n-Butyl-3-methylimidazolium hexafluorophosphate on the Corrosion of Mild Steel in Sulfuric Acid Solution” in NACE International Gateway India Section organized International conference on Corrosion “CORCON 2018”, 30 September-3 October 2021 at Jaipur, India .
- Presented a poster on topic “Electrochemical and Surface Characterization of Ionic Liquid as an Efficient Corrosion Inhibitor for Mild Steel in 0.5 M H₂SO₄ Medium” in the National Conference on “Emerging Trends and Advances in Chemical Sciences” (ETACS) organized by Chemistry Department at St. Stephen’s College, University of Delhi, 25-26 September, 2018.
- Presented a poster on topic “Greener Synthesis of Cadmium metal chelates with bidentate Schiff base Ligands in 1st National Conference on Emerging Trends & Future Challenges in Chemical sciences (ETFC-2016) from February 3 - 4, 2016 at Department of Chemistry, Kirori Mal College.
- Oral Talk in 3rd Annual National Conference on Science: Emerging Scenario & Future



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Challenges-III organized by Him Science Congress Association in Himachal Pradesh, 11-12 April, 2015.

Conferences Organized and attended:

- Two-Day International Online Symposium on “Reproductive Health and Physical Fitness” held on September 28-29, 2021, organized by Deen Dayal Upadhyaya College, University of Delhi
- Member as Organizing Secretary of the International Conference “Chemistry- The Catalyst for Change” held on 19-20 February 2021, organized by Department of Chemistry, Miranda House, University of Delhi, Delhi
- Member of the Organizing Committee for International Webinar on “Empowering Diversity in Science” held on 12 February 2021, organized by Department of Chemistry, Miranda House, University of Delhi, Delhi.
- Member of the Organizing Committee for National Webinar Learnings from the Corona Pandemic held on 24 -25 September 2020, organized by Department of Chemistry, Miranda House, University of Delhi, Delhi.
- Member of the Organizing Committee for National Workshop-Nano Road Show-2020 Feb.1, 2020, Miranda House, University of Delhi.
- Workshop on Active Learning as a Transformational Tool for the University Classroom May 15, 2017, DSKC Miranda House, University of Delhi.
- Science Setu at Hindu college ,University of Delhi as member of organizing committee for the workshop DNA Fingerprinting on 22 January 2016.
- Computational Chemistry and Bioinformatics DSKC Miranda House 26-28 august 2015.
- D S Kothari Center for Research and Innovation in Science Education, Miranda House, University of Delhi as Teacher Mentor in the Inspire Internship Programme from 13 to 17 July



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2015.

- D S Kothari Center for Research and Innovation in Science Education, Miranda House, University of Delhi as Teacher Mentor in the Inspire Internship Programme from 15 December to 20 December 2013.
- Workshop on Foundation Course, Centre for Professional Development in Higher Education, University of Delhi on 21 & 22 June 2013.
- Workshop For Students Mimicking Nature: Using Plant and Animal Extracts for Chemical Reaction, DBT Star College Project on 5, March 2013.
- National Conference on Relevance of Nanotechnology in Biology, Hans Raj College, University of Delhi on 1st March 2013.
- International Symposium on Green Chemistry and Sustainable Development, Department of Chemistry, Miranda House, University of Delhi on 30-31 March 2012.
- National Workshop on Renewable Energy & Environment, Department of Chemistry, Ramjas College on 28th & 29th Jan., 2011.
- Role of Analytical Technique in Biological & Environmental Science, Kirori mal College, University of Delhi on 27th Jan., 2011.
- 4th Indo – Italian Seminar on “GREEN CHEMISTRY & NATURAL PRODUCTS” at Department of Chemistry, University of Delhi on 17th Nov. 2010.
- National Symposium on Recent advances in analytical sciences. April 12-14, 2010. Himachal Pradesh University Shimla.



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- National workshop on Art and Science of paper recycling. January 22-23, 2010. Miranda House, University of Delhi

Refresher/ Orientation /FDP courses attended:

- One week (Online) Interdisciplinary Faculty Development Programme on “Waste Management During Pandemic and Its Impact on Circular Economy” organized by Departments of Chemistry and Commerce, Hansraj College in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) , 22nd November– 26th November, 2021)
- One Week (Online) Interdisciplinary Faculty Development Programme on creation and development of MOOCs while managing online classes’ organised by Keshav Mahavidyalaya, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) , 24th August – 31st August 2021)
- Two weeks Faculty development Programme on “Learning Advanced E-tools for MOOCs Development and Research” in Ramanujan College and Motilal Nehru College (E) under Ministry of Human Resource Development (MHRD), Govt. of India (PMMMNTT), September 1-14, 2020.
- Two weeks Faculty development Programme on “Challenges before the academia in the Era of Gadgets, E-Communication and Artificial Intelligence (Interdisciplinary)”in Hansraj College under Mahatma Hansraj Faculty Development Centre, MHRD, Govt. of India. (PMMMNTT), December 15-28, 2018.



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- UGC- ASC UGC sponsored 4- weeks Orientation Programme (OR-71) organized by centre for Professional Development in Higher Education (CPDHE), Institute of life long learning (ILLL) , University of Delhi held from August 6 to September 5, 2012.
- UGC-ASC UGC sponsored 3- weeks Refresher Course on the subject of CHEMISTRY organized by the Centre for development in higher education (CPDHE), Institute of life long learning (ILLL), University of Delhi held from February 14 to March 08, 2011.