



Faculty Details proforma for DU College Web-site



Title	Dr.	First Name	Sunita	Last Name	Hooda	Photograph
Designation		Professor				
Department		Chemistry				
Address (Campus)		Acharya Narendra Dev College, GovindPuri, Kalkaji, New Delhi-110019.				
Phone Number (Office)		011-26412547,	011-26293224,	011-26294542		
Fax		011-26294540				
Residence						
Mobile						
Email		hooda_sunita@hotmail.com, sunitahooda@andc.du.ac.in				
Web Page		Wikieducator.org/sunita hooda				
Educational Qualifications						
Degree		Institution	Year			
B.Sc.		University of Delhi	1985			

M.Sc.	University of Delhi	1987
M. Tech.	IIT, Delhi	Dec. 1988
Ph.D.	IIT, Delhi	1992

Carrier Profile

Teaching in AND college from last 31 years. In addition to teaching I have a great interest in Research also. Published around 73 research publications in various national / international journals. I have successfully completed various research projects funded by different agencies. I have written various school and college books also.

Administrative Assignments.

- Worked as Bursar of College for two years.
- Worked as Vice Principal For 2 Years.
- Teacher –In-Charge of Department of Chemistry (Two terms of 2 Years each) as well as of Department of Physical Sciences and Department of English
- Worked as Convener, Examination Committee
- Worked as Convener, Award and Fellowship Committee
- Worked as Convener, Alumini Association
- Liaison Officer of college
- Convener, UGC XI Plan monitoring committee.

Research Interests/ Specialization

My research area of interest is "NMR of Polymers, Chemical Sensors to detect metal ions,

'Fabrication of Synthetic as well as Bio-Polymeric Nano Composite for Water Purification Study"

Area of specialization is "Physical Chemistry".

Subject Taught

- B.Sc.(H.) Chem. I Sem, Physical Chemistry, Theory and Practical
- B. Sc. Life Sciences, V Sem, Quantization and Spectroscopy, Theory / Practical
- B.Sc. Physical Sciences, IV Sem, State of matter and Chemical Kinetics, Theory / Practical
- B. Sc. Life Sciences, IV Sem, State of matter and Chemical Kinetics, Theory / Practical
- B.Sc. Physical Sciences, V Sem, , Quantization and Spectroscopy, Theory / Practical
- B.Sc. Prog. Part III, Chemistry Practical
- B.Sc (Hons) VI Sem, Polymer Chemistry, Theory and Practical
- B.Sc (H.) V Sem, Quantum Chemistry and Spectroscopy, Theory and Practical
- B.Sc (H.) II Sem., Thermodynamics, Theory and Practical

Research Guidance

Three students have completed their Ph.D. under my guidance.

Publication Profile:

1. A.S. Brar and **Sunita**, Mossbauer Studies of Styrene - Acrylonitrile Copolymers Containing Ferric Nitrate, J. Appl. Polym. Sci., 41, 2503-2510 (1990), ISSN: 0021-8995.
2. A.S. Brar and **Sunita**, Determination by ^{13}C - NMR Spectroscopy of the Microstructure of Copolymers of Acrylic Acid - Vinyl Acetate, Eur. Polym. J., 27 (1), 17-20 (1991), ISSN: 0014-3057.
3. A.S. Brar, Harjot, **Sunita** and G.S. Kapur, The Effect of Method of Preparation and Molecular Weight on the Tacticity of Polymethyl Methacrylate: A ^{13}C - NMR Study, J. Polym. Mater., 8, 225 (1991), ISSN: 0973-8622.
4. A.S. Brar and **Sunita**, Sequence Determination of Acrylonitrile - (Ethyl Acrylate) Copolymers by ^{13}C - NMR Spectroscopy and Correlation with Glass Transition Temperature, Eur. Polym. J., 28(7), 803 - 808 (1992), ISSN: 0014-3057.
5. A.S. Brar, **Sunita** and C.V.V. Satyanarayana, Microstructure Determination of Styrene - Butyl Acrylate Copolymers by ^{13}C - NMR Spectroscopy, Polym. J., 24, 879- 887 (1992), ISSN: 0032-3896.
6. A.S. Brar and **Sunita**, Determination of Microstructure and Glass Transition Temperature of Acrylonitrile - Methyl Acrylate Copolymers by ^{13}C - NMR Spectroscopy, J. Polym. Sci., Polym. Chem. Ed., 30, 2549 (1992), ISSN: 1099-0518.
7. A.S. Brar and **Sunita**, Microstructure and Glass Transition Temperature Determination of Styrene - Methyl Acrylate Copolymers by ^{13}C - NMR Spectroscopy. Ind. J. Chem., 31 A, 903 (1992), ISSN: 0376-4710.
8. A.S. Brar and **Sunita**, Acrylonitrile- Alkyl Acrylate Copolymers Containing Ferric Chloride: A Mossbauer Study, J. Radio Anal. & Nucl. Chem., 172(2), 417(1993), ISSN: 0236-5731.
9. A.S. Brar and **Sunita**, Microstructure Determination of Styrene - Ethyl Acrylate Copolymers by ^{13}C - NMR Spectroscopy and its Relation with Glass Transition Temperature, Macromol. Chem., 194, 1707 (1993), ISSN: 1521-3935.
10. A.S. Brar and **Sunita**, Compositional Sequence Determination of Acrylonitrile - Butyl Acrylate Copolymers by ^{13}C - NMR Spectroscopy, Polymer, 34 (16), 3391 (1993) ISSN: 0032-3861.
11. A.S. Brar and **Sunita**, Configurational Sequence of Poly (4 - Vinyl Pyridine) by One- and Two- Dimensional NMR Spectroscopy, J. Polym. Mat., 19, 141 (2001), ISSN: 0973-8622.
12. **Sunita Hooda** and A.S. Brar, Characterization of 4 - Vinyl Pyridine - Styrene Copolymers by NMR Spectroscopy, Ind. J. Chem., 40 A, 483 (2001), ISSN: 0376-4710.
13. **Sunita Hooda** and A.S. Brar, Compositional Sequence Determination of 4 - Vinyl Pyridine - Ethyl Methacrylate

- Copolymers by One- and Two- Dimensional NMR Spectroscopy, Polym. J., 33 (5), 390 (2001), ISSN: 0032-3896.
14. A.S. Brar, Anil Yadav and **Sunita Hooda**, Characterization of Glycidyl Methacrylate/Styrene Copolymers By One- and Two- Dimensional NMR Spectroscopy, Eur. Polym. J., 38 (8), 1683- 1690 (2002), ISSN: 0014-3057.
 15. **Sunita Hooda**, Reactivity ratios and Microstructure Determination of 4 - Vinyl Pyridine - Methyl Acrylate copolymers by NMR Spectroscopy, J. Polym. Mat., 19 (3), 237 (2002), ISSN: 0973-8622.
 16. **Sunita Hooda**, Reactivity Ratios Determination and Complete Spectral Assignment of 4 - Vinyl Pyridine - Ethyl Acrylate Copolymers by NMR Spectroscopy, Ind. J. Chem., 41 A, 723 (2002), ISSN: 0376-4710.
 17. A.S. Brar, S.K. Hakmatyar, **Sunita Hooda** and Ravi Shankar, Characterization of Methacrylic Acid - Vinylidene Chloride Copolymers by NMR Spectroscopy, J. Polym. Mat., 19 (3), 273 (2002), ISSN: 0973-8622.
 18. **Sunita Hooda** and A.S. Brar, Investigation of Microstructure of 4 - Vinyl Pyridine - Methacrylonitrile Copolymers by NMR Spectroscopy, J. Appl. Polym. Sci., 88, 3232 (2003), ISSN: 0021-8995.
 19. A. S. Brar, **Sunita Hooda** and Rajeev Kumar, Compositional and configurational Sequence determination of Ethyl acrylate - methyl methacrylate copolymers by one- and two- dimensional Nuclear Magnetic Resonance Spectroscopy, J. Polym. Sci, Part A, Polym. Chem, 41, 313 (2003), ISSN: 1099-0518.
 20. **Sunita Hooda**, Rajeev Kumar and M. Kaur, NMR studies of N - vinyl pyrrolidone / 4 - vinyl pyridine - copolymers, Ind. J. Chem., 43 (A), 527 (2004), ISSN: 0376-4710.
 21. A.S. Brar, D. R. Pradhan and **Sunita Hooda**, Reactivity ratios and sequence determination of Methacrylonitrile - Butyl acrylate copolymers by NMR spectroscopy, J. Mol. Str., 699, 39 (2004), ISSN: 0022-2860.
 22. A.S. Brar, D. R. Pradhan and **Sunita Hooda**, Methacrylonitrile - Vinylidene Chloride - Butyl acrylate terpolymers: A sequence determination by one- and two- Dimensional NMR spectroscopy, Ind. J. Chem., 43 A, 10, 2066 (2004), ISSN: 0376-4710.
 23. A.S. Brar, D. R. Pradhan and **Sunita Hooda**, Compositional and Configurational Sequence Determination of Methacrylonitrile - Vinylidene Chloride copolymers by Nuclear Magnetic Resonance Spectroscopy, J. Appl. Polym. Sci., 96, 1865-1874 (2005), ISSN: 0021-8995.
 24. **Sunita Hooda**, A. S. Brar and A. K. Goyal, Structure investigation of 2 - Hydroxy Ethyl Methacrylate - Styrene Copolymers by NMR spectroscopy, Ind. J. Chem., 45 A, 1981 (2006), ISSN: 0376-4710.
 25. **Sunita Hooda**, A.S. Brar and A.K. Goyal, Microstructure determination of 2 - Hydroxy Ethyl Methacrylate - Methyl acrylate Copolymers by NMR Spectroscopy, J. Mol. Str., 828, 25 (2007), ISSN: 0022-2860.
 26. **Sunita Hooda** and A. K. Goyal, Stereochemical configuration of Poly (2-Hydroxy ethyl methacrylate) by NMR spectroscopy, Ind. J. Chem., 46 (A), 6, 899 (2007), ISSN: 0376-4710.
 27. A.S. Brar, A.K. Goyal and **Sunita Hooda**, Structural Investigation of Poly (methyl acrylate) by 2D - HMBC spectra, J. Mol. Str., 885 (1-3), 15-17 (2008), ISSN: 0022-2860.
 28. **Sunita Hooda**, A.S. Brar and Ashok Goyal, NMR studies of Poly (2- hydroxyl ethyl methacrylate -2- vinyl pyridine), J. Appl. Polym. Sci, 109, 1114 (2008), ISSN: 0021-8995.
 29. A.S. Brar, A. K. Goyal and **Sunita Hooda**, Stereoregularity evolution of vinyl acetate and methyl acrylate copolymer by 2D NMR, J. Mol. Str., 888 (1-3), 257-265 (2008), ISSN: 0022-2860.
 30. **Sunita Hooda** and A.K. Goyal, Reactivity Ratios Determination and NMR Characterization of 2-Hydroxy Ethyl

Methacrylate- Methyl methacrylate Copolymers, J. Ind. Chem. Soc., 85, 1 (2008), ISSN: 0019-4522.

31. **Sunita Hooda**, A.S. Brar and Ashok Goyal, Stereochemical Elucidation of Complex α - methyl and β - methylene Carbon Resonances in Poly (2 - Hydroxy Ethyl Methacrylate - methacrylonitrile) by 2 D NMR, J. Appl. Polym. Sci., 111, 2381, (2009), ISSN: 0021-8995.
32. A.S. Brar, Ashok Kumar Goyal and **Sunita Hooda**, Two- Dimensional NMR Studies of Acrylate copolymers, Pure & Applied Chemistry, 81 (3), 389 - 415 (2009), ISSN: 1365-3075.
33. A.S. Brar, A.K. Goyal and **Sunita Hooda**, Ravi Shankar, Poly (Acrylonitrile - co - methyl acrylate - co - methyl methacrylate): Synthesis and Stereosequence Distribution Analysis by 2 D-NMR, J. Polym. Sci., Part A, Polym. Chem., 47, 25-37 (2009), ISSN: 1099-0518.
34. **Sunita Hooda**, A.K. Goyal and A.S. Brar, Microstructure determination of Poly (Acrylonitrile – co-methyl acrylate – co-methyl methacrylate) terpolymers by 2D HMBC, J. Mol. Str., 920, 424-429 (2009), ISSN: 0022-2860.
35. **Sunita Hooda**, A. K. Goyal and A.S. Brar, One- and two-dimensional NMR studies of Methyl acrylate - Vinyl acetate - N- Vinyl Carbazole terpolymers, J. Mol. Str., 963, 27 (2010), ISSN: 0022-2860.
36. Deepika Khandelwal, **Sunita Hooda** and A. S. Brar, Configurational sequence determination of poly(isobornyl acrylate) by NMR spectroscopy, J. Mol. Str., 991, 24 (2011), ISSN: 0022-2860.
37. Deepika Khandelwal, **Sunita Hooda**, A. S. Brar and Ravi Shankar, 1D and 2D NMR studies of isobornyl acrylate and methyl meth acrylate copolymers, J. mol. Str., 1004, 121 (2011) ISSN: 0022-2860.
38. Deepika Khandelwal, **Sunita Hooda**, A. S. Brar and Ravi Shankar, Stereochemical Assignments of the Nuclear Magnetic Resonance Spectra of Isobornyl Acrylate/Methacrylonitrile Copolymers, J. Appl. Polym. Sci., 126, 916 (2012), ISSN: 0021-8995.
39. Deepika Khandelwal, **Sunita Hooda**, A. S. Brar and Ravi Shankar, Poly(isobornyl methacrylate-co-methyl acrylate): Synthesis and Stereosequence Distribution Analysis by NMR Spectroscopy, J. Polym. Sci., Part A, Polym. Chem., 50, 3350 (2012), ISSN: 1099-0518.
40. Deepika Khandelwal, **Sunita Hooda**, A. S. Brar and Ravi Shankar, Stereoregularity evolution of isobornyl acrylate and styrene copolymers by 2D NMR spectroscopy, J. Mol. Str., 1049, 99 (2013), ISSN: 0022-2860.
41. Deepika Khandelwal, **Sunita Hooda**, A. S. Brar and Ravi Shankar, Microstructure determination of isobornyl methacrylate-styrene copolymer by NMR spectroscopy, J Polym. Res, 21, 377 (2014) ISSN: 1572-8935.
42. Sulekh Chandra, **Sunita Hooda**, Praveen Kumar Tomar, Amrita Malik, Ankit Kumar, Sakshi Malik, Seema Gautam, Synthesis and Characterization of bis nitarto [4 - hydroxy acetophenonesemicarbazone] nickel (II) Complexes as Ionophore for thiocyanate - Selective Electrode, Material Sci. and Engg. C, 62, 18-27 (2016). ISSN No. 0928-4931.
43. Sudha Vipin Sharma, **Sunita Hooda** An Analysis Upon Various Strategies For Redesign and Direct Evolution of Enzyme Engineering, Journal of Advances in Science and Technology, 13,144-150,(2017), ISSN : 2230-9659.

44. Shyam Lal, **Sunita Hooda**, Amit Kumar, Subodh Kumar, Aarushi Singh, Snigdha Singh, Ramesh Chandra, Vikrant Kumar, Vandana Uberoi, Geetu Gambhir, Drashya, "Acrylonitrile copolymer based membrane sensor for selective detection of Pb^{2+} ions in aqueous medium", International Journal of Advanced Educational Research, 3 (2), 107-113, March (2018) ISSN: 2455-6157 . Impact factor -5.12.
45. Shyam Lal, Satish Kumar, **Sunita Hooda** and Promod Kumar, A highly selective sensor Cu^{2+} and Fe^{3+} ions in aqueous medium: Spectroscopic, computational and cell imaging studies, Journal of Photochemistry and photobiology: Chemistry, 364, 811-818, (2018). ISSN No. 1010-6030 Impact factor - 2.9.
46. Shyam Lal, Satish Kumar, **Sunita Hooda**, Pramod Kumar CCDC 1569824: Experimental Crystal Structure Determination, 2018, DOI: 10.5517/ccdc.csd.cc1ppjhd
47. Shyam Lal, Vikrant Kumar, Mukesh Chandra Joshi, **Sunita Hooda** "Heterolyptic Metal Complexes of Curcumin and 2,2'-Bipyridine Ligands : Synthesis, Characterization, Molecular Modeling and Their Preliminary Antimicrobial Investigation", Academia Romana, Revue Roumaine de Chimie, 63 (4), 299-307, (2018). ISSN No. 0035-3930 Impact factor - 0.5.
48. Sudha Vipin Sharma and **Sunita Hooda** "An Analysis on Recent Technological Developments in Green Chemistry: Biocatalytic Processes", Journal of Advances and Scholarly Researches in Allied Education 15(11), 262-275, 2018, ISSN 2230-7540.
49. Shyam Lal, Kunal Prakash, **Sunita Hooda**, Vikrant Kumar and Pramod Kumar, "Ibuprofen-based chemosensor for efficient binding and sensing of Cu^{2+} ion in aqueous medium" Journal of Molecular Structure 1199, 1-8, 2020,127003. Impact factor – 2.12, ISSN: 0022-2860.
50. Drashya, Shyam Lal and **Sunita Hooda**, "Adsorption of Rhodamine 6G dye on binary system of Nanoarchitectonics composite Magnetic Graphene Oxide Material", J. Nano Sci. Nano Tech., 20, 1-7, 2020, Impactfactor - 1.354, ISSN: 1533-4880.
51. Deepika Khandelwal, A. S. Brar, Ravi Shankar, Aarushi Singh, Shyam Lal and Sunita Hooda, "Comprehensive sequence distribution analysis of isobornyl methacrylate-acrylonitrile copolymers by NMR spectroscopy", J. Appl. Polym. Sci., 2019.
52. Shyam Lal, Kunal Prakash, Nainy Khera, Drashya, Snigdha Singh, Aarushi Singh, **Sunita Hooda**, Ramesh Chandra, **Curcumin based supramolecular ensemble for optical detection of Cu^{2+} and Hg^{2+} ions**, 1211, 128091, (2020) J. Mol. Str.
53. Shyam Lal, Kunal Prakash, Nainy Khera, **Sunita Hooda** CCDC 1997225: **Experimental Crystal Structure Determination**, 2020, DOI: [10.5517/ccdc.csd.cc2518m4](https://doi.org/10.5517/ccdc.csd.cc2518m4).
54. Drashya Gautam and **Sunita Hooda**, Magnetic Graphene Oxide/Chitin Nanocomposites for Efficient Adsorption of Methylene Blue and Crystal Violet from Aqueous Solutions, J. Chem. Eng. Data, <https://dx.doi.org/10.1021/acs.jced.0c00350>, 65, 4052-4062 (2020) ISSN - 0021-9568.
55. Garima Rathee, Sahil Kohli, Sagar Panchal, Nidhi Singh, Amardeep Awasthi, Snigdha Singh, Aarushi Singh, **Sunita Hooda**, and Ramesh Chandra, Fabrication of a Gold-Supported NiAlTi-Layered Double Hydroxide Nanocatalyst for Organic Transformations, <https://dx.doi.org/10.1021/acsomega.0c03250>, ACS omega, 5, 23967–23974 (2020), ISSN – 24701343.
56. Drashya Gautam, Laishram Saya, **Sunita Hooda**, Fe_3O_4 loaded chitin –A promising nano adsorbent for Reactive Blue 13 dye, doi:10.1016/j.envadv.2020.100014 . Environmental Advances 2, 1-9 (2020) 100014, ISSN - 2666-7657.
57. Laishram Saya, Drashya Gautam, Vipin Malik, W. Rameshwor Singh, and **Sunita Hooda**, Natural Polysaccharide Based Graphene Oxide Nanocomposites for Removal of Dyes from Wastewater: A Review, <https://dx.doi.org/10.1021/acs.jced.0c00743>, J. Chem. Eng. Data, 2021, 66, 11-37, ISSN - 0021-9568.
58. Laishram Saya, Vipin Malik, Aarushi Singh, Snigdha Singh, Geetu Gambhir, W. Rameshwor Singh, Ramesh Chandra, **Sunita Hooda**, Guar gum based nanocomposites: Role in

water purification through efficient removal of dyes and metal ions, <https://doi.org/10.1016/j.carbpol.2021.117851>, Carbohydrate Polymers, 2021, 261, 117851.

59. Sahil Kohli, Garima Rathee, **Sunita Hooda** and Ramesh Chandra, **Al₂O₃ / CuI / PANI nanocomposite catalyzed green synthesis of biologically active 2-substituted benzimidazole derivatives**, Royal Society of Chemistry, Dalton Transactions, 2021, 50, 7750-7758, <https://doi.org/10.1039/d1dt00806d>.
60. Madhu Bala Raigar, **Sunita Hooda** and Savita Bargujar, **Synthesis, Characterization and Application of Novel Guar Gum-N,N-Dimethylaniline Resin for Waste Water Treatment**, International Journal of Recent Scientific Research, 2021, 12 (6), 41932-41936.
61. Devaj Gupta, Roopa Rani Samal, Drashya Gautam, **Sunita Hooda** and Sarita Kumar Multifunctional activity of graphene oxide-based nano formulation against the disease vector, *Aedes aegypti*, Journal of Applied and Natural Science, 13 (4), 1265- 1273, 2021.
62. Vipin Malik, Laishram Saya, Shallu Sachdeva, Neelu Dheer, Dinesh Kumar Arya, Geetu Gambhir and **Sunita Hooda** **Review on adsorptive removal of metal ions and dyes from wastewater using tamarind-based bio-composites**, Polymer Bulletin, 2022, <https://doi.org/10.1007/s00289-021-03991-5>.
63. Laishram Saya, Vipin Malik, Drashya Gautam, Geetu Gambhir, Balendra, W. Rameshwar Singh, **Sunita Hooda**, **A Comprehensive Review on Recent Advances toward Sequestration of Levofloxacin Antibiotic from Waste Water**, Science of Total Environment, 813, 152529, 1-25, 2022.
64. Geetu Gambhir, Drashya Gautam, Laishram Saya, Amit Kumar, Subodh Kumar, Aarushi Singh, Snigdha Singh, Ramesh Chandra and **Sunita Hooda**, **A Novel Terpolymer Membrane-Based Electrode Sensor for Selective Determination of Cd(II) Ions**, Asian Journal of Chemistry, 34 (3), 749 - 756, 2022, <https://doi.org/10.14233/ajchem.2022.23701.3333>.
65. Savita Barguja, Geetu Gambhir, Madhu Bala Raigar, Sunita Hooda, Dinesh Kumar Arya and Mamta Bhatia, A new polysaccharide-based ion-exchange resin for industrial wastewater treatment, Polimery Journal on Chemistry, Technology and Polymer Processing, 67 (5), 212- 219, 2022. <https://doi.org/10.14314/polimery.2022.5.4>. Published on 21st june.
66. Laishram Saya, **Sunita Hooda**, W. Rameshwar Singh, **Hydrothermally Fabricated Bionano-composite of Guar gum as a Promising Adsorbent for Reactive Green 19 Dye from Wastewater**, ISSN: 2349-6002, International Journal of Innovative Research in Technology, 9 (6), 55-70, Nov. (2022).
67. Sahil Kohli, Garima Rathee, **Sunita Hooda** and Ramesh Chandra, **An efficient approach for the green synthesis of biologically active 2,3-dihydroquinazolin-4(1H)-ones using a magnetic EDTA coated copper based nanocomposite**, 13, 1923- 1932, 2023. DOI: <https://doi.org/10.1039/d2ra07496f>
68. Drashya Gautam, Roopa Rani Samal, Sarita Kumar, Sunita Hooda and Neelu Dheer, **One pot chemical co-precipitation preparation of magnetic graphene oxide-deltamethrin nanoformulations for management of *Aedes aegypti***, Journal of Applied and Natural Science, 15 (1), 194 -203, 2023. ISSN : 0974-9411 (Print), 2231-5209 (Online). DOI <https://doi.org/10.31018/jans.v15i1.4305>.
69. Manisha Verma, Drashya Gautam, Ravina Yadav, Vikrant Kumar, **Sunita Hooda**, and Neelu Dheer, **ROLE OF FUNCTIONALIZED CHITIN-EDTA AS A PROMISING ADSORBENT FOR WATER PURIFICATION**, Rasayan, J. Chem., 16 (2), 660-666, 2023. ISSN: 0974-1496 | e-ISSN: 0976-0083, <http://doi.org/10.31788/RJC.2023.1628289>.
70. Manisha Verma, Amit Kumar, Shyam Lal, Deepika Khandelwal, Praveen Kumar Tomar, Neelu Dheer, Sunita Hooda, Mamta Bhatia, Shallu Sachdeva, Vandana Kumari, **Ni²⁺ ion sensitive sustainable sensors based on 4-vinyl pyridine-ethyl acrylate copolymer**, Applied Chemical Engineering (2023), 6(1), 38-45, DOI: <http://dx.doi.org/10.24294/ace.v6i1.1948>.
71. Puneeta Sarin, Manisha Verma, Sanjeeta Rani, Geetu Gambhir and **Sunita Hooda**, **Controlled radical**

polymerization And Characterization Of Vinylic- Acrylate Copolymer, European Chemical Bulletin, 12 (4), 666-679, 2023, 2063-5346 , <http://dx.doi.org/10.31838/ecb/2023.12.4.054>.

72. Sanjeeta Rani, Sunita Hooda, Neelu Dheer, V Bhasker Raj, Ishwar Prasad Sahu, Manisha Verma, _Complex dielectric-impedance spectroscopic studies of magnetite added chitin biopolymer, Applied Chemical Engineering (2023) Volume 6 Issue 1, <http://dx.doi.org/10.24294/ace.v6i1.1965>

Conference / Presentations /Workshops

1. A.S. Brar and **Sunita**, **Sequence Determination of Acrylonitrile - Vinyl Acetate Copolymers Prepared by Emulsion Polymerization Using ^{13}C - NMR Spectroscopy**, Proceeding of Polymer 91, Polymer Science Contemporary Theme, held at NCL, Pune, 2, 582 (1991).
2. A.S. Brar, K. Dutta and **Sunita**, **Microstructure Determination of Alkyl Methacrylate Polymers by ^{13}C - NMR Spectroscopy**, proceeding of "Ninth National Symposium on Analytical Techniques for Fossil Fuels", 210 (1992).

3. A.S. Brar and **Sunita Hooda**, **Sequence determination of 4 - vinyl pyridine copolymers by NMR spectroscopy**, Proceeding of Pacific Polymer Conference 8, held at Bangkok, Polymer Processing and Characterization, 213 (2003).
4. **Sunita Hooda** and R. K. Suri, **Utilization of wastewater for green belt development-I**, Proceedings of conference, held in Agra on 8-9 Oct. (2004).
5. **Sunita Hooda** and R. K. Suri, **Utilization of Waste Water for green Belt Development-II**, Environmental Science and Technology in India, By Arvind Kumar and R. K. Somashekar, Chapter 42, 361 (2005).
6. A. K. Goyal, A. S. Brar and **Sunita Hooda**, **Stereoregularity determination of 2 - hydroxyl ethyl methacrylate based Copolymers by 2D NMR spectroscopy**. Proceeding of international conference "Poly Char 16"- World forum on advanced materials", held at Lucknow, India, 150, (2008).
7. A. K. Goyal, A. S. Brar and Sunita Hooda, **Stereo sequence distribution analysis of poly (Acrylonitrile - co - methyl methacrylate - co - methyl acrylate) by 2D NMR**. Proceeding of Centenary symposium on future directions in NMR, NMR research centre, Indian Institute of Science, Bangalore, India, P 9, (2008).
8. Vandana Uberoi, **Sunita Hooda**, Geetu Gambhir, Subodh Kumar and Priya Barua, **Lead Chemical Sensors for Environmentally Green Chemical Process**, Proceeding of 3rd Indo- Italian Seminar on Green Chemistry, P-1, Held on 9th Dec. 2009, University of Delhi.
9. **Sunita Hooda**, Vandana Uberoi, Geetu Gambhir, Vimmy Suvarna & Uday Mahajan, **Lead (II) - PVC Membrane Selective Electrodes Based on 1-Naphthyl Amine as an Ionophore**, Proceeding "First Indo - Italian Workshop on Frontiers of Fundamental & Industrial Electrochemistry A Challenge for a Better World", PP -48, Held on August 30- 31, (2010).
10. Vandana Uberoi, **Sunita Hooda**, Geetu Gambhir, Aakriti Jakhmola& Akshay Kalra, **Nickel (II) PVC membrane Electrochemical Sensor Based on 2, 4, 6-Tribromo Phenol as a Novel Ionophore**, Proceeding "First Indo-Italian Workshop on Frontiers of Fundamental & Industrial Electrochemistry: A Challenge for a Better World", PP - 49, Held on August 30-31, (2010).
11. **Sunita Hooda**, Vandana Uberoi & Geetu Gambhir, **Application of Novel Polymer based Ion Selective Electrode in Analytical and Industrial Electrochemistry**. Proceeding "First Indo - Italian Workshop on Frontiers of Fundamental & Industrial Electrochemistry: A Challenge for a Better World", OP -14, Held on August 30-31, (2010).
12. **Sunita Hooda**, Uday Mahajan and Amit Kumar, **Copper Ion Selective Electrode for Environmentally Green Chemical Processes**. Proceeding "4th Indo - Italian Seminar on Green Chemistry and Natural Products" PP-12, Held on 17th November 2010.
13. **Sunita Hooda**, Vandana Uberoi, Geetu Gambhir, Subodh Kumar and Priya Barua, **"Lead Ion Selective Electrode for Environmentally Green Chemical Processes"** Proceeding National Symposium on "Chemistry in Biology" NSCBO-1, Feb.12-13th, 2010, Indian International Center, New Delhi.
14. Ashok K. Goyal, Vivekanand Kagdiyal, A.S. Brar and **Sunita Hooda**, **NMR studies of Poly (Lauryl methacrylate- co- methyl acrylate)**. Proceeding of Symposium on Recent Developments and Applications of Biomedical Magnetic Resonance and 16th conference of National Magnetic Resonance Society, PP 82, held on Feb. 21-24, 2010, Lucknow, NMRS (2010).

15. Deepika Rani, A.S. Brar, Ravi Shanker, **Sunita Hooda** and Ashok K. Goyal, **Reactivity Ratios Determination and NMR characterization of Isobornyl acrylate and methyl methacrylate copolymers**, Proceeding of Symposium on Recent Developments and Applications of biomedical Magnetic Resonance and 16th conference of National Magnetic Resonance Society, PP81, held on Feb. 21-24, 2010, Lucknow, NMRS (2010).
16. Deepika Khandelwal, **Sunita Hooda**, A. S. Brar, **2D NMR Studies of isobornyl acrylate copolymers**, Proceeding of Symposium on Magnetic Resonance in Pharmaceuticals in 17th Conference of Nuclear Magnetic Resonance Society (NMRS - 2011), P - 35, 2011, held on 1-4th March, 2011, in Guru Nanak Dev University, Amritsar.
17. **Sunita Hooda** and Amit Kumar, **Nickel (II) ion selective electrode for environmentally green Chemical process**. Proceeding of International Congress of Environmental Research, ICER 2011, PS 1028, P - 255, held on 15th -17th December, Surat (India).
18. Deepika Khandelwal, Sunita Hooda, A. S. Brar and Ravi Shankar, **Structure Investigation Isobornyl acrylate - methacrylonitrile Copolymers By NMR Spectroscopy**, Published in Proceeding of Symposium held on 7-9th Dec. 2012 on "New Directions in Chemical Sciences", PP-15, Organized by Department of Chemistry, I.I.T. Delhi.
19. Wancha Arya, Piyush Tiwari, Pooja Dogra, Madhu Bala and **Sunita Hooda**, **Role of Tamarind Triethylamine Chelating Resin as Biosensor for Monitoring of Toxic Metal Ions from Industrial Waste**, Published in proceeding of National Symposium On "Chemistry and Environment" held on 22-23rd March, 2013, Poster: 23, Organized by Department of Chemistry, Deen Dayal Uadhyaya College, University of Delhi.
20. **Sunita Hooda** and Amit Kumar, **Synthesis and Characterization of Nanosilica Particles with Poly (Acrylamide-co- Acrylic Acid)**. Published in proceeding of Ist International Conference On "Emerging Trends of Nanotechnology in Drug Discovery" held on 26-27 May, 2014, Poster: PP-91, page -105, Jointly organized by Department of Chemistry, Sri Venkateswara College, University of Delhi and University of Madeira, Portugal.
21. Deepak Yadav, Mohammad F. Anwar, Amit Kumar, Mohd Tayab, Sunita Hooda and Mohd Asif, **Comparative study of Nano Paclitaxel and Nano Zingiber officinale extract encapsulated in NIPAAm/VP Polymeric Micelles against Cancer**. Published in proceeding of 1st International Conference On "Emerging Trends of Nanotechnology in Drug Discovery" held on 26-27 May, 2014, Poster: PP-104, page-118, Jointly organized by Department of Chemistry, Sri Venkateswara College, University of Delhi and University of Madeira, Portugal.
22. **Sunita Hooda**, M. B. Raigar, Atul Kumar and Sonu Kumar, **Synthesis, Characterization and Application of Polysaccharide based Resin for Yamuna Water Treatment**, Published in UGC Sponsored Proceeding of National Conference on "Recent Trends in Instrumentation and Electronics" (RTIE-2015) held on 5-6 Jan. 2015, page 62-68, Organized by Department of Electronics & Department of Instrumentation, Shaheed Rajguru College of Applied Sciences for Women, University of Delhi.
23. Madhu Bala Raigar, **Sunita Hooda***, Gayatri Batra and Sakshi Tyagi, **Synthesis, Characterization and Application of Novel Guar Gum N, N-Dimethyl Aniline Resin for Waste Water Treatment**, Published in Proceeding of National Seminar on "Innovative, Advance Research in Biomedical and Environmental Dynamics" held on 9th-10th Oct. 2015, PP-30, Organized by Department of Chemistry, Dyal Singh College, University of Delhi.

24. Vikrant Kumar, Shyam Lal, Mukesh Chandra Joshi, Hemant Kumar Rajour and **Sunita Hooda**, **Spectroscopic Analysis, Molecular Modeling and Antimicrobial Applications of Cu^{II} Heteroleptic Metal Complex Bearing Curcumin and 2, 2' - Bipyridine**, Published in proceeding of "National conference on Interdisciplinary Approaches in Chemical Sciences - 2015" held on 16th Dec. 2015, PP-144, page no. 67, Organized by Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia.
25. **Sunita Hooda***, Madhu Bala Raigar, Kajal Singal, Muskan Bhatnagar, Pooja Sharma, Meenu Upadhyay & Yogesh Kumar, **Investigation of Cellulose Based Polysaccharide Resin for Effluent Treatment**, Published in Proceeding of National Seminar on held on 29th-30th March 2016, Organized by Department of Chemistry, Sri Arobindo College, University of Delhi.
26. **Sunita Hooda**, Geetu Gambhir and Shyam Lal, **Synthesis of Silver Nano Particles In Acrylic Acid Solution And Their Application For Estimation of Dopamine**, Oral VIII, No. 79, Published in proceeding of 26th Biennial International Conference of The Asian Association for Biology Education on "Trends in Biology Education and Research: Practices and Challenges", 20th -23rd September 2016, Goa - India.
27. **Sunita Hooda**, Shyam Lal, Geetu Gambhir and Vandana Uberoi, **The Adsorptive Removal of Cationic drug From Aqueous Solution Using Hydrogel - Poly (N-IsoPropylacrylamide)**, Poster, VIII, No. 92, published in proceeding of 26th Biennial International Conference of The Asian Association for Biology Education on "Trends in Biology Education and Research: Practices and Challenges", 20th -23rd September 2016, Goa - India.
28. Shyam Lal, Vikrant Kumar Attri and Sunita Hooda, **Synthesis, Characterization and Antimicrobial Studies of Some Transition Metal Complexes of Schiff's Bases**, POSTER III, No. 29, Published in proceeding of 26th Biennial International Conference of The Asian Association for Biology Education on "Trends in Biology Education and Research: Practices and Challenges", 20th -23rd September 2016, Goa - India.
29. Sunita Hooda*, Geetu Gambhir, Simran Agarwal, Harshit Srivastava and Devendra Sharma, **Determination of some soft drink constituents and contamination by some heavy metals**, PP-03 , Published in Proceeding of **International Conference on Green Chemistry in Environmental Sustainability (ICGC-2016)**, Page 109, held on 17-18th Nov. 2016, Organized by Department of Chemistry, Daulat Ram College, University of Delhi.
30. Shyam Lal, Vikrant Kumar, Sunita Hooda, Mukesh Chandra Joshi and Hemant Kumar Rajour, **Mixed Ligand Metal Complex of Nickel Chloride Bearing Curcumin and 2, 2' - Bipyridine: Their Synthesis, Characterization and Antimicrobial Study**, PP049, Published in Proceeding of 7th National Conference on Science and Technology for National Development, held on 20th -22th Nov. 2016, Organized by Indian Science Congress Association, Haridwar Chapter and Department of Chemistry, Gurukul Kangri Vishwavidyalya, Haridwar, Uttarakhand.
31. **Sunita Hooda***, Geetu Gambhir, Simran Agarwal, Harshit Srivastava and Devendra Sharma, **Chemical Analysis of Soil and Their Effects on Germination of Seed**, presented in National Conference on **Environmental Sustainability in Wastewater Remediation: Current Status and Future Prospects**, held on 19th -20th Jan. 2017, Organized by Department of Chemistry, Sri Venkateswara College, University of Delhi in association with RSC (London).
32. Shyam Lal, Vikrant Kumar and **Sunita Hooda**, **Synthesis, Characterization and Fluorescence Study of 4- Substituted 2- Aminothiazole Derived from Dimedone (5,5'- Dimethylcyclohexane-1,3-Dione**, PP-19, Presented in National Conference on Latest Advancements in Physical Sciences and Life Sciences, held on 18-19th March 2017, Organized by Department of Chemistry, Meerut College, Meerut.
33. Drashya, Shyam Lal, **Sunita Hooda**, **Magnetic Graphene Oxide for Adsorption of Organic Dyes from Aqueous Solution**, A-4032, Presented in 2nd International Conference on Condensed matter and applied

physics, held on 24th -25th November 2017, Sponsored by DST & DAE-BRNS, Organized by Department of Physics, Govt. Engineering College, Bikaner, Rajasthan.

34. Ravina Yadav, Geetu Gambhir*, **Sunita Hooda**, Drashya, Received First Prize and Trophy for best Poster Presentation on “**Remediation of Heavy Metal ion Toxicity from Waste Water Using Functionalized Chitin**”, International conference of the Public Health Foundation of India and Pacific Basin Consortium, 14-16th November, 2017, India Habitat Centre, New Delhi, India.
35. **Shyam Lal**, Sunita Hooda*, Vikrant Kumar, Drashya, „**Fast and selective detection of Cu²⁺ and Fe³⁺ ions by 4-substituted 2-Aminothiazole in aqueous medium**“. International Conference on „Emerging Trends in Drugs Development and Natural Products“. Organized by Department of Chemistry, University of Delhi, Delhi 110007-January 12th - 14th , 2018, published in proceeding ETDDNP-2018, PP-94, Page No.180. (Poster Presentation).
36. Drashya, Shyam Lal, **Sunita Hooda**, “**Magnetic Graphene Oxide for Adsorption of Organic Dyes from Aqueous Solution**”, AIP Conference Proceedings **1953**, 030282 (2018); Doi: 10.1063/1.5032617.
37. **Sunita Hooda**, “**Curcumin Based Fluorescent Chemosensor for Selective Detection of Cu²⁺ and Hg²⁺ Ions in Aqueous Medium and Cell Imaging Study**”, Published in proceeding of conference on “**World Congress on Biochemistry and Enzymology**” March 25-26, 2019 at Amsterdam, Netherlands”, World Bio Chem 2019 and Regenerative Medicine 2019, Page 41.
38. Drashya[#] and Sunita Hooda, Presented a poster entitled “**Rhodamine 6G Adsorbed by Eco-friendly adsorbent Needle – Shaped Chitin Nanoparticle in Day light**”, in International Conference in Advance on Smart Materials & Emerging Technologies, ASMET-2020, Organized by Indira Gandhi Delhi Technical University for Women, on 23-24th Jan. 2020, PP43, Page no. 109.

Conferences Organized

1. Attended a Pre-Conference workshop on “Hands-on to Computational Biology for Genomics and Proteomics Analysis for Beginners” 14th November, 2021, Sponsored by International Society for Microbial Ecology (ISME), the Netherlands.
2. Attended a 6th Annual International Conference of Indian Network for Soil Contamination Research (INSCR), on **Microbes in Sustainable Development**, 15-18th Nov.2021.
3. **Convener** in organizing a Hands-on Workshop for Non-teaching Staff on “The calibration and standardization of laboratory equipments and glasswares” under DBT Star College Scheme by Acharya Narendra Dev College, DU on April 20, 2022.
4. **Convener** of one-day workshop on "Introduction to New Experiments" organised under DBT Star College Scheme by Deptt of Chemistry, Acharya Narendra Dev College, DU on April 21, 2022.
5. **Convener** in organizing lecture series (online mode) of “Journey of an Alumni” held weekly from October 16, 2021, Acharya Narendra Dev College, DU.
6. **Convener** in organizing the Two Day online National Hands-on workshop on Computational Chemistry: A New Approach to Understanding & Solving Chemical Problems, organized by Abhikriya, The Chemical Society of Acharya Narendra Dev College, University of Delhi under the aegis of DBT STAR College Scheme and IQAC from October 06-07, 2021.
7. **Convener** in Organizing the Four Day National Hands-on workshop (online mode) on Exploring and Understanding Computational Chemistry Using Gaussian: Molecular Builder and Visualization Tool, organized by Abhikriya, The Chemical Society of Acharya Narendra Dev College, University of Delhi under the aegis of DBT STAR College Scheme and IQAC from March 07-10, 2022.
8. Convener in organizing a Hands-on Workshop for Undergraduate Students on “Introduction to New

Experiments” organized by Abhikriya, The Chemical Society of Acharya Narendra Dev College, University of Delhi under the aegis of DBT STAR College Scheme and IQAC on April 21, 2022.

9. Convener in Organizing Two Days Webinar Workshop on Basics of Photoshop organized by Abhikriya, The Chemical Society of Acharya Narendra Dev College, University of Delhi under the aegis of DBT STAR College Scheme and IQAC from September 30-October 1, 2021. Member of organizing committee of International e-conference on "Mitigating Contemporary Environmental issues by sustainable approaches" (ICMCESA-2022) organized by Acharya Narendra Dev College, University of Delhi From February 22-28, 2022.
10. Resource Person in one-day interaction programme “Science Adda”, organized under the DBT Star College Scheme by Acharya Narendra Dev College, held on December 20, 2021.
11. Organizing committee for one-day interaction programme “Science Adda”, held on December 20, 2021, organized under the DBT Star College Scheme by Acharya Narendra Dev College.
12. Successfully completed six-day online workshop titled "*A First Step Towards Developing Virtual Lab Using Mern Stack*" organized by FOSS Club, Department of Computer Science in association with Internal Quality Assurance Cell, Acharya Narendra Dev College, University of Delhi, from *October 9-24, 2021(On Weekends)* under DBT Star College Scheme (2021-2022).
13. Contributed as Scientific Co-Chair for one week online International e-conference on Mitigating Environmental Issues by Sustainable Approaches (ICMCESA-2022) under the aegis of IQAC and DBT Star College Scheme, February 22- 28, 2022. **Sunita Hooda with Sandeep Goyal**
14. Contributed as Session chair in International E-Conference on 'Mitigating Contemporary Environmental Issues by Sustainable Approaches [ICMCESA – 2022]' from 22 - 28 February 2022.
15. Successfully organizes and participated as resource person in the “**National Workshop on Skill Enhancement of Non-teaching Staff**”, under the agies of DBT Star College Scheme and IQAC from July 13-17th 2022.
16. Successfully organizes a National workshop on “**Career and Skill Enhancement to Non-teaching Staff**” in Acharya Narendra Dev College, From September 15-21, 2022.

Papers Presented by Students

1. Gayatri Batra, Orally Presented a paper in National Seminar on “**Innovative, Advances Research in Bio-medical and Environmental Dynamics**”, on 9-10th 2015, Department of Chemistry, Dyal Singh College, University of Delhi.
2. Chanchal, Pooja, Ankit, Kajal, Akriti Gupta, Ankit, Gayatri, Lisha, Sakshi, Urvashi, Aakriti Kataria, Monisha Khanna, **Sunita Hooda**, Ravinder K Sagar, Prateek Kumar, Payal Das and Renu Solanki (2016) Role of microbial extracellular enzymes in bioremediation of wastes presented at XL All India Cell Biology Conference & International Symposium on Functional Genomics and Epigenomics, held at Galav Sabhagar, Jiwaji University, November 17-19,2016.
3. Chanchal, Pooja, Ankit, Kajal, Akriti Gupta, Ankit, Gayatri, Lisha, Sakshi, Urvashi, Aakriti Kataria, Monisha Khanna, **Sunita Hooda**, Ravinder K Sagar (2016) “Biodegradation of wastes by microbial extracellular enzymes”. Poster presented in National Symposium on Tends in Research and Innovations in Life Sciences at Undergraduate Level organized by Department of Zoology Deen Dayal Upadhyaya College , March 30th, 2016.
4. Ravina Yadav, Geetu Gambhir*, **Sunita Hooda**, Drashya, “**Remediation of heavy metal ion toxicity from waste water using functionalized chitin**”. Poster presented in International Conference of the Public Health

Foundation of India and Pacific Basin Consortium, 14-16th November, 2017, India Habitat Centre, New Delhi, India.

5. A. B. Dharmani, Nikhil Kumar and **Sunita Hooda**, **Air Purification by Electricity Inter particle attraction**, Paper Presentation Competition organized by RASGANDHYAN, The chemical Society of Gargi College, 3rd March 2020.
6. Laishram Saya Devi, W. Rameshwar Singh, **Sunita Hooda**, **Natural Polysaccharide Based Graphene Oxide Semi-Synthetic Nano Composites as Potential Candidates in Waste Water Remediation**, Online International Conference “**Rethinking Science for Sustainable Development**”(RSSD - 2021) organized by Department of Chemistry, Rajdhani College, University of Delhi , 20th and 21st April, 2021, published in proceeding on P-. 45
7. Vipin Malik and **Sunita Hooda**, **Tamarind - coated iron oxide nanocomposite as an effective adsorbent for Crystal violet dye**, Online International Conference “**Rethinking Science for Sustainable Development**”(RSSD - 2021) organized by Department of Chemistry, Rajdhani College, University of Delhi , 20th and 21st April, 2021, published in proceeding on P-50.
8. Laishram Saya, Geetu Gambhir, **Sunita Hooda**, Rameshwor Singh, **Guar Gum Based Nanocomposites as Efficient Adsorbents for Dyes and Metal Ions from Waste Water**, 6th Annual International Conference of Indian Network for Soil Contamination Research (INSCR), on Microbes in Sustainable Development, 15-18th Nov.2021.
9. Drashya, **Sunita Hooda**, Laishram Saya ,Geetu Gambhir, **Inclusive approach of innovative research with biopolymers as remediating agents in waste water treatment** 6th Annual International Conference of Indian Network for Soil Contamination Research (INSCR), on Microbes in Sustainable Development, 15-18th Nov.-2021.
10. Drashya Gautam, **Laishram Saya**, Geetu Gambhir, **Sunita Hooda**, Oral presentation on the paper entitled “**Bio-nanocomposite of Guar gum Decorated with Iron-oxide nanoparticles as Promising Adsorbent for Reactive green 19 Dye**” during International e-conference on ‘Mitigating environmental issues by sustainable approaches (ICMCESA-2022)’ organized by Acharya Narendra Dev College from February 22-28, 2022 under the aegis of IQAC and DBT Star College Scheme.
11. Drashya Gautam, Laishram Saya, Geetu Gambhir, **Sunita Hooda**, ‘**Improvement of Characteristics and Adsorption Performance of Chitin for Rhodamine 6G By Sonication**,’ during International e-conference on ‘Mitigating environmental issues by sustainable approaches (ICMCESA-2022)’ organized by Acharya Narendra Dev College from February 22-28, 2022 under the aegis of IQAC and DBT Star College Scheme.
12. Sahil Kohli, Ramesh Chandra and **Sunita Hooda**, Oral presentation of paper titled “**Al₂ O₃/CuI/PANI catalyzed one pot synthesis of 2,3-Dihydroquinazolin-4(1H)-ones under green solvent conditions**,” during International e-conference on ‘Mitigating environmental issues by sustainable approaches (ICMCESA-2022)’ organized by Acharya Narendra Dev College from February 22-28, 2022 under the aegis of IQAC and DBT Star scheme.
13. Sahil Kohli, Ramesh Chandra and **Sunita Hooda**, delivered a young mind talk on “**Environmental Sustainability** entitled “**Al₂O₃/CuI/PANI catalyzed one pot synthesis of benzimidazoles under green solvent conditions**” in Third International conference on Entrepreneurship, Research and Innovation for Environmental Sustainability & Planetary Health on 7-8th April 2022, organized by Research cell of Bhagini Nivedita College, University of Delhi, and secured 1st position at Vasudhev Kutumakam-3 (VK3).
14. Sahil Kohli, Ramesh Chandra and **Sunita Hooda**, Oral presentation of paper titled “**Fabrication of CuI Nano Particles by Self Assembly Approach for the Synthesis of benzimidazole**” in international conference on Recent Advances in Nano Medical Sciences (RANMS-2022) on 16th-17th June 2022, Organized by Institute of Nano Medical Sciences (INMS) and Institution of Eminence IOE), University of Delhi.
15. Bipasa Arya, Abhijit Roy, Drashya Gautam, Laishram Saya, Dinesh Kumar Arya, Geetu Ghambhir, **Sunita**

Hooda, Hydrothermal Synthesis of Magnetic Nanoparticles and their UV-Visible Analysis, A-014, International Conference on Nanotechnology: Opportunities and Challenges(ICNOC 2022),organized by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi, India, P-104, Nov. 28-30, 2022.

16. Yashank, Akshat, Drashya Gautam, Laishram Saya, Geetu Ghambhir, **Sunita Hooda, Magnetised Nanocomposite of Graphene Oxide /Ground Nut Husk/Guar gum for adsorption of reactive Green 19**, A-027. International Conference on Nanotechnology: Opportunities and Challenges(ICNOC 2022),organized by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi, India, P-115 Nov. 28-30, 2022.
17. Puneet Chauhan, Soven Kumar Samal, Drashya Gautam, Laishram Saya, **Sunita Hooda, Geetu Ghambhir, Synthesis & analysis of Tamarind Kernel- Coated Magnetic Iron Oxide Nanoparticles** A-123, International Conference on Nanotechnology: Opportunities and Challenges(ICNOC 2022),organized by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi, India, P-213, Nov. 28-30, 2022..
18. Eniya, Geni, Drashya Gautam, Laishram Saaya, Geetu Ghambhir, Sunita Hooda, Investigative Study of Magnetised Groundnut Husk for the Adsorptive Removal of Rhodamine 6G Dye from Aqueous Solution, C-065, International Conference on Nanotechnology: Opportunities and Challenges(ICNOC 2022),organized by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi, India, P-586, Nov. 28-30, 2022.

Research Projects

Extra Mural Funded Project

- Characterization and sequence determination of 4-Vinyl Pyridine Copolymers, by University Grant Commission, India (Oct. 1998- Oct. 2001), Amount: Rs.1, 09,000/-.
- Synthesis and characterization of 2- Hydroxy ethyl methacrylate copolymers by NMR spectroscopy, Young Scientist project under Fast Track Scheme by Department of Science and Technology, (May 2004 - May 2007), Amount: Rs. 9,12,000/-.
- Fabrication of Novel Polysaccharide based biosensors as Ion Exchanger; Under Innovation and Entrepreneurship Development Centre, Department of Science and Technology, India, (April 2012- April 2013), Amount: Rs. 1,00,000/-.
- Development of Charcoal Based Chelating Resin for Waste Water treatment, IEDC, DST, April 2014 - March 2015), Amount: Rs. 85,000/-..
- Biodegradation of Waste by Microbial Extracellular Enzymes, Innovation Project from College, funded by Delhi University, (July 2015- June2016), Amount: Rs. 6,46,000/-.

Summer Projects (ELITE)

- Guided a student of B.Sc. (Hons.) Chemistry, Part - II, Ms. Priya Barua, for Summer Project, entitled **“Lead Ion Selective Electrode for Environmentally Green Chemical Processes.”** in college (2008).

- Guided a student of B.Sc. (Hons.) Chemistry, Part - III, Ms. Vimmy Suvarna & Uday Mahajan, for Summer Project, entitled “**Lead (II) - PVC Membrane Selective Electrodes Based on 1- Naphthyl Amine as an Ionophore**” in college (2009).
- Guided two students of B.Sc. (Hons.) Chemistry, Part - III, Aakriti Jakhmola & Akshay Kalra, for Summer Project, entitled “**Copper and Nickel Ions Selective Electrodes for Monitoring Metallons**” in college (2010).
- Guided two students of B.Sc. (Prog.) Part III, Ms. Yasmin and Neeraj, along with Dr. Madhu Bala Raigar, entitled, “**Removal of Heavy Toxic Metal Ions From Effluents by Using Polysaccharide based Ion Exchange Resin**” in college (2010).
- Guided two students of B.Sc. (Hons.) Chemistry, Part-III, Mr. Durgesh Nandan and Mr. AshishKumar entitled “**Fabrication of Poly heterocyclic Based Electrochemical Sensors**” for Summer Project, (2011).
- Guided one student of B.Sc. (Prog). Phy. Sci. Part III, Ms. Neha Tiwari, along with Dr. MadhuBala Raigar, entitled “**Polysaccharide Based Resin**” for summer project in college (2011).
- Guided four students of B.Sc. (Prog.) Life sciences, Part III, along with Dr. Madhu Bala Raigar Entitled “**Role of Polysaccharide Based Ion exchange Resin in Removal of toxic Metal Ions fromWaste water**” for summer project in college (2013).
- **I) Synthesis and Characterization of Ion exchange resin by Guar gum with Sulphanilic acid(2014).** STUDENTS: ATUL SHARMA, RAGHUVVEER VERMA, B.Sc (H) Chem. III Sem. along with Dr. Madhu Bala Raigar as mentor.
- **II) Synthesis and Characterization of Ion exchange resin by cellulose with Sulphanilic acid(2014).** Student: Sonu Kumar, B.Sc (H) Chemistry III Sem. along with Dr. Madhu Bala Raigar as mentor.
- **I) Fabrication of ion-exchange resin from natural protein (casein). (2015)** Student: Meenu Upadhyay, B. Sc. (Hons.) Chemistry, II Sem. along with Dr. Madhu Bala Raigar as mentor.
- **II) Synthesis and Characterization of Ion Exchange Resin by Guar Gum with N, N- DimethylAniline, (2015)** Student: Gayatri Batra, Sakshi Tyagi B. Sc. (Hons.) Chemistry, II Sem. along with Dr. Madhu Bala Raigar as mentor.
- **III) Synthesis and characterization of ion exchange resin by cellulose with N, N-Dimethylaniline, (2015)** Student: Kajal Singhal and Yogesh Kumar, B. Sc. (Hons.) Chemistry, II Sem. along with Dr. Madhu Bala Raigar as mentor.
- **Determination of some soft drink constituents and contamination by some heavy metals, (2016)** Simran Agarwal and Harshit Srivastava, B.Sc. Chemistry (Hons.) III Sem. along with Dr. Geetu Gambhir as mentor.
- **Preparation of Bioactive Styryl Coumarins for The Study of its Fluorescent Property, (2016)** Devendra Sharma and Simran Agarwal, B.Sc. Chemistry (Hons.) III Sem. along with Dr. Geetu Gambhir as mentor.
- **Chemical Analysis of Soil, (2016)** Harshit Shrivastava and Devendra Sharma, B.Sc. Chemistry (Hons.) III Sem. along with Dr. Geetu Gambhir as mentor.

- **Adsorption of heavy metals on EDTA - functionalized chitin (2017)**, Ravina, Chem(Hons).V Sem along with Dr. Geetu Gambhir as mentor.
- **Modification of Graphene oxide using polysaccharide for water purification (2019)**, Manisha Gupta - Life Sciences III Sem. along with Dr. Geetu Gambhir as mentor.
- **EFFECT ON SONICATION ON GRAPHENE OXIDE (GO) (2019)**, Sneha Mahar, Life Science IIISem. Along with Dr. Geetu Gambhir as mentor.
- **Improved Hummer's method formulates Graphene oxide corollary of temperature on Grapheneoxide.** Narain Swami , B.Sc. Life Sciences III Sem. along with Dr. Geetu Gambhir as mentor.
- **EFFECT OF SONICATION ON GRAPHITE (2019)**, Maghna Singh Life Sciences III Sem along with Dr. GeetuGambhir.
- **Investigative study of magnetic groundnut husk for the adsorptive removal of dyes from waste water (2022)**, Geni yao and Eniya tapo, B.Sc Life Science, IV Sem., Prof. Sunita Hooda and Dr. Geetu Gambhir.
- **Purification of water by removal of RG-19 dye from wastewater by the nanocomposites of guar gum, (2022)** Yashank Chauhan, B.Sc Life Science, VI Sem., Prof. Sunita Hooda and Dr. Geetu Gambhir.
- **Water purification of Ciprofloxacin and Levofloxacin by a Husk, Guar-gum, and Graphene Oxide Nanocomposite, (2022)** Akshat Bhanu Dharmani, B.Sc Life Science, VI Sem., Prof. Sunita Hooda, Dr. Geetu Gambhir and Pragati Malik.
- **Absorbance studies of ciprofloxacin (antibiotic) on CuO-Guargum nanocomposite, (2022)** Inshul Bansal and Astha Pujara, B.Sc Life Science, VI Sem, Prof. Sunita Hooda and Dr. Geetu Gambhir.
- **Graphene Oxide/Chitin Nanocomposites as Ion Sensors from Aqueous Systems: A DFT Study, (2022)** Arnav Bhatt, B.Sc Life Science, IV Sem., Prof. Sunita Hooda, Dr. Geetu Gambhir and Dr. Pragati Malik.

Star Project under DBT

- i. Application of magnetic chitin composites for the removal of Toxic Metal and Organic Dyes From Industrial Effluents.** Students involved: Ravina Yadav, Chem (Hons.) III Sem., Heena Malik, Chem (Hons.) III Sem., Aniket, Chem (Hons.) III Sem., Mariyam, Chem (Hons.) III Sem., Monika, Chem (Hons.) III Sem., Akarsh Pandey , Chem (Hons) I Sem., Tanuja Sharma Zoo (Hons) III Sem., Senjuti Sengupta, Zoo (Hons) III Sem., Partho Proteem Das Zoo (Hons) III Sem., Akshit Chauhan, Zoo (Hons) III Sem. Aug. 2017 - 2019.

Teachers involved: Dr. Sunita Hooda, Dr. Geetu Gambhir and Dr. Sarita Kumar.

- ii. Heavy metal adsorption and microbial study of Functionalized Chitin with EDTA.** Students involved: Narain Swami, LS (III Sem), Meghna Singh LS (III Sem), Sneha Mahar LS (III Sem), Manisha Gupta LS III Sem. Akshit Chauhan, Zoo (Hons) III Sem., Senjuti Sengupta, Zoo (Hons) III Sem., 2019-2020.

Mentors : Dr. Sunita Hooda, Dr. Geetu Gambhir and Dr. Sarita Kumar.

- iii. To study gas sensing response of various tailor made multi-Dimensional nanocomposites.**

Mentors: Dr.Geetu Gambhir, Prof. Sunita Hooda, Prof. Charu Khosla Gupta and Dr. Arijit Choudhry, 2021-2022

- iv. Fabrication of Guargum Nanocomposites and their applications in Water Purification.**

Mentors: Prof. Sunita Hooda and Dr. Geetu Gambhir, 2021-2022.

Awards and Distinctions

-Women's Achievement Award, on International Women's Day celebrations, at New Delhi, 8th March, 2008, organized by court of Governors of Women International Network and its Departments.

-, Meritorious Teacher Award by Smt. Sheila Dixit Hon'ble Chief Minister of Delhi, By Delhi Govt., May 2012.

-Nishtha Service Award, In Appreciation of 25 Years of dedication and outstanding service to the college (1992-2017), Acharya Narendra Dev College Delhi University, 22-03-2018.

- National Distinguished Researcher Award 2021 in recognition of consistent superior performance **in Polymer Chemistry** on the eve of World Science Day and National Education Day 2021, by International Multidisciplinary Research Foundation (IMRF) Institute of Higher Education, Vijaywada, Andhra Pradesh, India, on 11th Nov. 2021.

- International Distinguished Education Excellence Award 2021 in Environment Chemistry, Global Annual Education & Research Excellence Awards being conferred on December 18th, 2021 at Centre for Professional Advancement, Vijayawada, India.

Other Academic Contributions

List of Books Published

i Laboratory Manual for Environmental Chemistry

By Sunita Hooda and Suman Jit Kaur, S. Chand and Company (1999).

ii. Chemistry for X

by Sunita Hooda, Saraswati House Publication (2003).

iii. Chemistry for IX

By Sunita Hooda, Pyragon International Publication (2005).

iv. How to face Chemistry, Class XI

By Sunita Hooda, Seema Gupta and Pooja Bhagat, Pyragon International Publication (2005).

v. Science and technology, for class VI

By Sunita Hooda, Sarita Kumar, Vinay Kumar, Sultan Chand publication, (2006).

NCERT Assignment

i. Workshop on "Development of content for creating an Internet Based Virtual Lab for class X Science (Chemistry) Practicals" organized by Central Institute of Educational Technology, NCERT, 14 -15th May 2007.

ii. Attended the program entitled "Development of Exemplar problems in Chemistry for Class XI based on NCF - 2005, 8 -12th Oct. 2007, Organized by Department of Education in Science and Mathematics (DESM), NCERT.

iii. Attended the program entitled "Development of Exemplar problems in Chemistry for Class IX based on NCF - 2005, 10 - 14 May 2008, Organized by Department of Education in Science and Mathematics (DESM), NCERT.

ii. Workshop on Development of Internet Based Virtual Lab for Science Practicals for Secondary Stage (Class 10th) Chemistry" organized by Department of Education in Science in Science & Mathematics, NCERT, 5-7 Nov. 2008.

ILLL Assignment (e learning)

Working as a resource person in Institute of Life Long Learning (ILLL) for development of Question bank for B.Sc. Programme Part -I and Part -II.

Working as a resource person in Institute of Life Long Learning (ILLL) for development of video lecture for B.Sc. Programme Part -I.

e-Content

Develop e- content on Thermochemistry in Easy Now workshop held in AND college.

IGNOU Assignment

Workshop for Development and translation of question bank for Foundation Course in Science & Technology (FST) for Bachelors Degree Programme (BDP)" by National Centre for Innovations in Distance Education (NCIDE) in IGNOU, 18-20 Aug. 2009.

Association With Professional Bodies

- Indian Society of Analytical Scientists, Indian Oil Corporation Ltd., Faridabad, India.
- Member of American Society, K.G. Marg, New Delhi.
- Member of Indian Science Congress.
- Member of Indian Association of Chemistry Teachers, Mumbai.



Signature of Faculty Member