

Name: Dr. Pallavi Jain

Associate Professor, Department of Chemistry

Head-B.Tech First Year

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Area or Subject: Chemistry

Affiliation: SRM Institute of Science and Technology,

Delhi-NCR Campus, Modinagar-201204 U.P.

Education

B.Ed	Science	CCS University, 2021
Ph.D	Coordination Chemistry	Banasthali Vidyapith, Rajasthan, 2018
M. Tech	Chemical Technology (Oil Technology)	Harcourt Butler Technological University, Kanpur, 2004
M.Sc.	Physical Chemistry	CCS University, 2001

Industrial Experience

Chemical Consultant in Century Chemicals, Hapurfrom December 2004-August 2006 (1.5 years)

Academic Experience

Assistant Professor, SRM IST, DELHI-NCR Campus, August 2006-January 2022. Head-Chemistry, SRM IST, DELHI-NCR Campus, June2018-September 2022. Associate Professor, SRM IST, DELHI-NCR Campus, February 2022-till date. Head-B.TechIst Year, SRM IST, DELHI-NCR Campus, May 2023-till date.

Aditional Responsibilities

DRC-Chairmanof Chemistry, June 2018- till date
NAAC Coordinator (Criteria 2) at Institute level
UHV Coordinator of NCR Campus
Enrollment Coordinator at NCR campus for all courses
Core member of Event Management Team

Research Interests

Coordination Chemistry, Analytical Chemistry and Transition Metal Complexes

Selected Publications (SCI index: 34, Scopus: 6)

- 1. In silico study on antidiabetic and antioxidant activity of bioactive compoundsinFicus carica L, **Journal of Biomolecular Structure and Dynamics**, (2023) DOI:10.1080/07391102.2023.2240425 Impact Factor: 4.4
- 2. Recent advances in synthesis of heterocyclic Schiff base transition metal complexes and their antimicrobial activities especially antibacterial and antifungal, **Journal of Molecular Structure**DOI:10.1016/j.molstruc.2023.136346. **Impact Factor: 3.8**
- 3. Bioactive Thiosemicarbazone Coordination Metal Complexes: Synthesis, Characterization, Theoretical analysis, Biological Activity, Molecular Docking and ADME analysis, Chemistry and Biodiversity, (2023)DOI:10.1002/cbdv.202300760. Impact Factor: 2.27
- 4. Eutectic Mixtures to Enhance the Solubility of Active Pharmaceutical Ingredients: Density Functional Theory and Infrared Spectroscopy Approaches, **ChemistrySelect**,8, e202300824 (2023) DOI: 10.1002/slct.202300824. **Impact Factor: 2.23**

- 5. Synthesis, antibacterial and antifungal activities of Schiff base rare earth metal complexes: a review of recent work, **Journal of Coordination Chemistry**(2023). DOI:10.1080/00958972.2023.2231608. **Impact Factor: 1.87**
- 6. In vitro, In silico, ADME and Theoretical Analysis of Mn(II) and Co(II) Complexes Derived from Methyl-(Z)-N'-Carbamothioylcarbamohydrazonate Schiff Base Ligand, **Chemistry and Biodiversity**, (2023)DOI:10.1002/cbdv.202300042. **Impact Factor: 2.27**
- 7. Exploration of DFT and TD-DFT Computation to investigate the interaction between paracetamol and lithium or its compounds, **Journal of Molecular Liquids**, (2023) DOI:10.1016/j.molliq.2023.122114. **Impact Factor: 6.633**
- 8. Investigate the designing of eutectic mixture using DFT computation and evaluate their biological potency using molecular docking, **Journal of Molecular Liquids**, 381, 121723(2023) DOI: 10.1016/j.molliq.2023.121723. **Impact Factor: 6.633**
- 9. A comparison between the observed and DFT calculations on structure of noscapine in different solvents, **Journal of Physical Organic Chemistry**, e4502 (2023) DOI:10.1002/poc.4502. **Impact Factor: 2.155**
- 10. An Investigation for the interaction of Gamma Oryzanol with the Mpro of SARS-CoV-2 to combat COVID-19: DFT, Molecular docking, ADME and Molecular Dynamics Simulations, Journal of Biomolecular Structure and Dynamics, 41, 1919–1929(2023) DOI:10.1080/07391102.2022.2029770 Impact Factor: 4.4
- 11. Pharmacological aspects of Co(II), Ni(II) and Cu(II) schiff base complexes: An insight, **Results in Chemistry**, 5, 100849 (2023).DOI: 10.1016/j.rechem.2023.100849.**SNIP: 0.67**
- 12. A comparative study of 5- fluorouracil, doxorubicin, methotrexate, paclitaxel for their inhibition ability for Mpro of nCoV: Molecular docking and molecular dynamics simulations, **Journal of Indian Chemical Society**, 99(12), 100790(2022).DOI:10.1016/j.jics.2022.100790.**Impact Factor: 0.243**
- 13. A Review on Interactions between Amino Acids and Surfactants as Well as Their Impact on Corrosion Inhibition, ACS Omega, 7(51), 47471-47489(2022) DOI:10.1021/acsomega.2c03629 Impact Factor: 4.132
- 14. An update on Graphene Oxide: Applications and toxicity, **ACS Omega**, (2022) DOI: 10.1021/acsomega.2c03171.**Impact Factor: 4.132**
- 15. Polymeric membranes as Sustainable Material for Water Desalination: A review, **Desalination and Water Treatment**, 269, 1-20 (2022)DOI: 10.5004/dwt.2022.28753. **Impact Factor: 1.25**
- 16. An Update on Synthesis, Properties, Applications and Toxicity of the ILs, **Journal of Molecular Liquids**, 364, 119989 (2022) DOI:10.1016/j.molliq.2022.119989.**Impact Factor: 6.165**
- 17. DFT Calculations, Molecular Docking and QSAR investigation for the formation of Eutectic Mixture based on Thiourea and Salicylic acid, **Journal of Molecular Liquids**, 362, 119650 (2022) DOI: 10.1016/j.molliq.2022.119650. **Impact Factor: 6.165**
- 18. Investigate oxoazolidine-2, 4-dione based eutectic mixture via DFT calculations and SAR, **Journal of Indian Chemical Society**, 99, 100570 (2022) DOI: 10.1016/j.jics.2022.100570**Impact Factor: 0.243**
- 19. Co(II) and Ni(II) Complexes of a Heterocyclic Ligand: Synthesis, Characterization, Docking and Biological Activity, **Iranian Journal of Science and Technology: Transaction A**,46, 793–805(2022) DOI: 10.1007/s40995-022-01312-7.**Impact Factor: 1.553**
- 20. An insight of Nanomaterials in Tissue Engineering from Fabrication to Applications, **Tissue Engineering and Regenerative Medicine,** 19, 927–960 (2022)DOI: 10.1007/s13770-022-00459-z.**Impact Factor: 4.169**

- 21. An *In Silico* investigation for acyclovir and its derivatives to fight the COVID-19: Molecular docking, DFT calculations, ADME and td-Molecular dynamics simulations, **Journal of Indian Chemical Society**, 99, 100433 (2022) DOI:10.1016/j.jics.2022.100433. **Impact Factor:0.243**
- 23. In Silico Evaluation of Binding of 2-Deoxy-D-Glucose with Mpro of nCoV to Combat COVID-19, **Pharmaceutics**14(1), 135 (2022). DOI: 10.3390/pharmaceutics14010135. **Impact Factor: 6.321**
- 24. Hunting the Main Protease of SARS-CoV-2 by Plitidepsin: Molecular docking and Temperature dependent Molecular Dynamics Simulations, **Amino acids**, 54(2), 205–213 (2022).DOI:10.1007/s00726-021-03098-1.**Impact Factor: 3.520**
- 25. An Insight of Novel Eutectic Mixture between Thiazolidine-2,4-dione and Zinc Chloride: Temperature dependant DFT Approach, **Journal of Physical Organic Chemistry**, 35(3), e4305 (2022) DOI: 10.1002/poc.4305.**Impact Factor: 2.155**
- 26. An insight for the interaction of drugs (acyclovir/ganciclovir) with various ionic liquids: DFT calculations and molecular docking, **Journal of Physical Organic Chemistry**, 35(1), e4287 (2022) DOI: 10.1002/poc.4287.**Impact Factor: 2.155**
- 27. Assembly of Cerium Impregnated Pectin/Silica-Gel bioplumeric material for effective utilization for fluoride adsorption studies, **Materials Today: Proceedings**, 50, 273–281 (2022) DOI:10.1016/j.matpr.2021.06.327.**SNIP: 0.575**
- 28. Exploring the effect of temperature on inhibition of non-structural protease 3 of Chikungunya virus using molecular dynamics simulations and thermodynamics parameters, **Journal of Molecular Liquids**, 335, 116164 (2021) DOI: 10.1016/j.molliq.2021.116164. **Impact Factor: 6.165**
- 29. A review targeting the infection by CHIKV using computational and experimental approaches, **Journal** of Biomolecular Structure and Dynamics,40, 8127-8141 (2022) DOI: 10.1080/07391102.2021.1904004.**Impact Factor: 4.4**
- 30. Promising iron(II) complexes of curcumins: designing, density functional theory, and molecular docking, **Journal of Physical Organic Chemistry**, 43, e4196 (2021) DOI: 10.1002/poc.4196. **Impact Factor: 2.155**
- 31. Cytotoxic T-lymphocyte elicited therapeutic vaccine candidate targeting cancer against MAGE-A11 carcinogenic protein, **Bioscience Reports**, 40, BSR20202349 (2021) DOI:10.1042/BSR20202349.**Impact Factor: 3.840**
- 32. Ni(II) and Cu(II) complexes of bidentate thiosemicarbazone ligand: Synthesis, structural, theoretical, biological studies and molecular modeling, **Applied Organometallic Chemistry**, 34 (9), e5736 (2020). DOI: 10.1002/aoc.5736.**Impact Factor: 4.105**
- 33. Antitussive noscapine and antiviral drug conjugates as arsenal against COVID-19: a comprehensive chemoinformatics analysis, **Journal of Biomolecular Structure and Dynamics**, 1-16 (2020) DOI: 10.1080/07391102.2020.1808072.**Impact Factor: 4.4**
- 34. Assessing the nanotechnology on the grounds of costs, benefits, and risks, **Beni-Suef University Journal of Basic and Applied Sciences**, 9, 63 (2020) DOI: 10.1186/s43088-020-00085-5.**SNIP: 0.924**
- 35. Dynamic imine bond-based chitosan smart hydrogel with magnified mechanical strength for controlled drug delivery, **International Journal of Biological Macromolecules**, 160, 489-495(2020) DOI: 10.1016/j.ijbiomac.2020.05.221. **Impact Factor: 6.953**
- 36. Experimental and theoretical studies of Mn(II) and Co(II) metal complexes of a tridentate Schiff's base ligand and their biological activities, **Applied Organometallic Chemistry**, 34(2), e5371 (2020)DOI:doi.org/10.1002/aoc.5371.**Impact Factor: 4.105**
- 37. Biological Applications of Co(II) and Ni(II) Complexes of Semicarbazones and Thiosemicarbazones", **Asian Journal of Chemistry**,31, 1-8 (2019).DOI:10.14233/ajchem.2019.21475**SNIP: 0.255**

- 38. Prospects of Biologically Active Schiff's Base Ligand and Metal Complexes in Drug Discovery, **Advanced Science, Engineering and medicine**,11, 144-154(2019)DOI: 10.1166/asem.2019.2302.
- 39. Antibacterial Screening of Nitrogen and Sulphur Donor Atom Containing Methylcarbamatethiosemicarbazone and its Mn(II) and Co(II) Complexes: Synthesis, Spectroscopic Approach, Molecular Modeling, **Iranian Journal of Science and Technology: Transaction A,** 43(2), 477-487(2019)DOI:10.1007/s40995-018-0573-1.**Impact Factor: 1.553**
- 40. Synthesis and spectroscopic study of biologically active tridendtate Schiff's base ligand 2-Acetyl-5-methyl-furanthiosemicarbazone and its Mn(II) and Co(II), Ni(II) and Cu(II) complexes, **Iranian Journal of Science and Technology: Transaction A**, 42(2), 557-565(2018)DOI: 10.1007/s40995-016-0140-6.**Impact Factor: 1.553**
- 41. Synthesis, Spectroscopic Approach, Biological Screening and Geometrical Optimization of Bidentate Schiff's Base Ligand and their Mn(II) and Co(II) Complexes, **Asian Journal of Chemistry**, 30(7), 1664-1670 (2018) DOI:10.14233/ajchem.2018.21347.**SNIP: 0.255**
- 42. FT-IR analysis on the leaves of Meizotropispellita, **Asian Journal of Microbiology, Biotechnology & Environmental Sciences**,19(1), 185-188 (2017).**SNIP: 0.365**
- 43. Role of digital learning, virtual labs and classrooms in Applied sciences, **International Journal of Research and Analytical Reviews**, 5, 256-261, 2018. (E-ISSN 2348 –1269)
- 44. Computational Linguistics A Futuristic Approach, **International Journal of Research and Analytical Reviews**, 5, 274-279, 2018. (E-ISSN 2348 –1269)
- 45. Synthesis, IR, EPR, UV-Visible characterization and in vitro antimicrobial activity of macrocyclic Schiff's base and its metal complexes of Mn(II) and Co(II), **World Journal of pharmacy and Pharmaceutical sciences**, 3(10) 953-964 (2014).
- 46. Schiff's Base Ligands and their transition metal complexes as Antimicrobial agents, **Journal of Chemical, Biological and Physical Sciences**, 4(3), 1946-1964 (2014).
- 47. An Overview on Evaluation of Biological Activity of Quinazoline Based Heterocycles, **Turkish Journal** of Engineering, Science and Technology, 3, 56-61 (2013).
- 48. Women Entrepreneurship in India: An overview**International Journal of IT and Management**, ISSN: 2249-0558 3(12), 208-219 (2013).
- 49. Study of Environmental awareness among the Science teachers at Secondary Level, **International Journal of IT and Management**, ISSN: 2249-0558, 3(12), 220-233 (2013).

Book Published

1. Structural and Biological Applications of Schiff Base Metal Complexes, Eds: Pallavi Jain, Prashant Singh (2023)**CRC Press, Taylor and Francis Group,**ISBN 9781032271255

Book Chapters Published (Springer/Scopus: 9, Elsevier: 6, Wiley: 10, CRC press: 6, MRF, USA:7)

- 1. Recombinant E.Coli in the rejuvenation of the polluted environment In: Genetically EngineeredOrganism in Bioremediation, **CRC Press**, 2024, DOI: 10.1201/9781003188568. ISBN: 9781003188568.
- 2. Molybdenum-Modified Carbon Allotropes Wastewater Treatment In: Chandrabhan in Verma, Chaudhery Mustansar Hussain (eds) Carbon Allotropes and Composites: Materials for Remediation, Environment Protection and Wiley-Scrivener Publisher, 2023 DOI:10.1002/9781394167913.ch6. ISBN: 9781394167913
- 3. Processing of Indian Species for Extraction of Active Principles In: Sankhadip Bose, Sutapa Biswas Majee, Sabyasachi Banerjee(eds) Medicinal Spices and Herbs from India: Therapeutic Properties and

- Molecular Mechanisms, Apple Academic Press (Exclusive Co-publishing with CRC Press, Taylor and Francis Group), 2024 ISBN: 9781774916940
- 4. Selective treatment of tumors using nanocarriers In: Inamuddin, Jorddy Neves Cruz, Tariq Altalhi (eds) Green Sustainable Process for Chemical and Environmental Engineering and Science: Recent Advances in Nanocarriers, **Elsevier**261-276, 2023. ISBN: 9780323951715
- 5. An involvement of ionic liquids and other small molecules as promising corrosion inhibitors in recent advancement of technologies in chemical industries, In: Jamal Akhter Siddique, Shahid Pervez Ansari, Aftab AslamParwaz Khan and Abdullah M. Asiri(eds) Advanced Applications of Ionic Liquids, Elsevier 223-245, 2023. DOI: 10.1016/B978-0-323-99921-2.00004-5.
- 6. Market demand for smart packaging versus consumer perceptions. In: Inamuddin, Tariq Altalhi, Jorddy Neves Cruz (eds)Green Sustainable Process forChemical And Environmental Engineering And Science Methods for Producing SmartPackaging (ISBN: 978-0-323-95644-4). Elsevier 115-128, 2023. DOI:10.1016/B978-0-323-95644-4.00011-5
- 7. Oil-Water Separation, In: Inamuddin, Mohd Imran Ahamed, RajenderBoddula, Tauseef Ahmad Rangreez (eds) Applied Water Science Volume 1: Fundamentals and Applications, **Wiley-Scrivener Publisher**, 103-124 (2023) DOI: 10.1002/9781119725237.ch3.
- 8. Use of organic compounds as Medical Products for the therapeutic Treatment exposed to CWs agents, In: Sangita Das, Sabu Thomas and ParthaPratim Das (eds) Sensing of Deadly Toxic Chemical Warfare Agents, Nerve Agent Simulants, and their Toxicological Aspects, Elsevier 359-379, 2023. DOI: 10.1016/B978-0-323-90553-4.00012-3
- 9. Smart hydrogel nanostructured sensor for detection of organophosphorus chemical warfare nerve agents. In: Sangita Das, Sabu Thomas and ParthaPratim Das(eds) Sensing of Deadly Toxic Chemical Warfare Agents, Nerve Agent Simulants, and their Toxicological Aspects, Elsevier 203-220, 2023. DOI:10.1016/B978-0-323-90553-4.00003-2
- 10. In-situ Composite Formation by Polymerization on the Hectorite or Other Clay Materials, In: Amir Al-Ahmed and Inamuddin (eds) Advance Applications of Micro and Nano Clay: Synthetic Polymer Composites, **Materials Research Forum LLC, USA**129, 1-23, 2022 DOI: 10.21741/9781644902035-1
- 11. Recent Advances and Applications of Nanogenerators in Sensors, Photovoltaic, Wind, and Blue EnergyIn: Inamuddin, Mohd Imran Ahamed, RajenderBoddula, Tariq Altalhi (eds) Nanogenerators: Basics, Design strategies and applications, **CRC Press Taylor & Francis Group**, 323-334 (2022) DOI: 10.1201/9781003187615
- 12. HNT-cellulose based Nano-composite and Applications In: Amir Al-Ahmed and Inamuddin (eds) Advance Applications of Micro and Nano Clay: Biopolymer Composites, **Materials Research Forum LLC, USA**125, 254-274(2022) DOI: 10.21741/9781644901915-11
- 13. Fundamental of Advanced Oxidation Processes, In: Muthu, S.S., Khadir, A. (eds) Advanced Oxidation Processes in Dye-Containing Wastewater, Sustainable Textiles: Production, Processing, Manufacturing& Chemistry. **Springer**, Singapore.1-19 (2022) DOI: 10.1007/978-981-19-0987-0_1
- 14. Fundamental of Aerobic and Anaerobic Processes in Dye Wastewater, In: Khadir, A., Muthu, S.S. (eds) Biological Approaches in Dye-Containing Wastewater. Sustainable Textiles: Production, Processing, Manufacturing& Chemistry. **Springer**, Singapore.39-75 (2022) DOI:10.1007/978-981-19-0545-2_2
- 15. Carbon Dioxide Conversion to Useful Chemicals and its Thermodynamics. In: Inamuddin, Boddula R., Ahamed M.I., Khan A. (eds) Carbon Dioxide Utilization to Sustainable Energy and Fuels. Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development). **Springer,** Cham. 311-322 (2022) DOI:10.1007/978-3-030-72877-9_16

- 16. Waterborne Polyurethanes Additive Technologies In: Inamuddin, Boddula R., Khan A. (eds) Sustainable Production and Applications of Waterborne Polyurethanes. Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development). **Springer**, Cham. (2021) DOI:10.1007/978-3-030-72869-4_4
- 17. Application of biosurfactant in the refinery of crude oil In: Green Sustainable Process for Chemical and Environmental Engineering and Science, **Elsevier**, 235 (2021) DOI:10.1016/B978-0-12-823380-1.00018-6
- 18. Advanced Oxidation technologies for the treatment of Wastewater, In: Inamuddin, Mohd Imran Ahamed, RajenderBoddula, ,Tauseef Ahmad Rangreez (eds) Applied Water Science II: Remediation Technologies, **Wiley-Scrivener Publisher** (2021) DOI: 10.1002/9781119725282.ch14.
- 19. Nanocellulose-Based Absorbent for Dye Adsorption. In: Dinesh Kumar (ed) Nanocellulose and Its Composites for Water Treatment Applications. **CRC press**, 125 (2021).
- 20. Nanocellulose-Based Materials for Desalination of Saline Water. In: Dinesh Kumar (ed) Nanocellulose and Its Composites for Water Treatment Applications. **CRC press**, 135 (2021).
- 21. Nanocellulose-Based Materials for the Removal of Organic Toxicants and Antibacterial Applications. In: Dinesh Kumar (ed) Nanocellulose and Its Composites for Water Treatment Applications. **CRC press**, 183 (2021).
- 22. Alginates: Properties and Applicatins, In: Inamuddin, Mohd Imran Ahamed, RajenderBoddula, Tariq Altalhi (eds) Polysaccharides: Properties and Applications, **Wiley-Scrivener Publisher**, 392-422 (2021) DOI: 10.1002/9781119711414.ch19.
- 23. Graphene-Based Electrodes for Flexible Supercapacitors, In: Inamuddin, Mohd Imran Ahamed, RajenderBoddula, Tariq Altalhi (eds) Flexible Supercapacitor Nanoarchitectonics, **Wiley-Scrivener Publisher**, 43-57 (2021) DOI: 10.1002/9781119711469.ch3.
- 24. Aerogels for Sensor Application, In: Inamuddin, Mohd Imran Ahamed, RajenderBoddula, Tariq Altalhi (eds) Aerogels II Preparation, Properties and Applications, **Material research Forum LLC, USA** 97, 145-167 (2021) DOI: 10.21741/9781644901298-8.
- 25. The Role of Carbon Nanocomposite Membranes for Water and Wastewater Treatment. In: Jawaid M., Ahmad A., Ismail N., Rafatullah M. (eds) Environmental Remediation Through Carbon Based Nano Composites. Green Energy and Technology. **Springer**, Singapore, (2021) DOI: 10.1007/978-981-15-6699-8_2.
- 26. Composition and Arrangement of Carbon-Derived Membranes for Purifying Wastewater. In: Jawaid M., Ahmad A., Ismail N., Rafatullah M. (eds) Environmental Remediation Through Carbon Based Nano Composites. Green Energy and Technology. **Springer,** Singapore, (2021) DOI: 10.1007/978-981-15-6699-8 8.
- 27. Green corrosion inhibitors for technological applications, In: Sustainable Corrosion Inhibitors, **Material research Forum LLC, USA**, 86, 127-160 (2021) DOI: 10.21741/9781644901052-5.
- 28. Absorber materials solar cells, In: Materials for solar cell technology, **Material research Forum LLC**, **USA** 88, 236-258 (2021) DOI: 10.21741/9781644901090-8.
- 29. Policy Approaches to Promote Women Entrepreneurship in India, In: Sustainable and Responsible Entrepreneurship and Key Drivers of Performance, **IGI Global**, 147-165 (2021).
- 30. Rural Innovation Using Technology in Progressive Agriculture: Empowering Women Towards Sustainable Rural Development, In: Driving Factors for Venture Creation and Success in Agricultural Entrepreneurship, **IGI Global** (2021). DOI:10.4018/978-1-6684-2349-3
- 31. Magnetic Aerogels In: Aerogels: Preparation, Properties and Applications Volume 1, **Material research** Forum LLC, 84, 155-171 (2020) DOI: 10.21741/9781644900994-6.

- 32. Tailor-Made Aerogels, In: Aerogels: Preparations, Properties and Application, **Material research Forum LLC**, 84, 201-213 (2020) DOI: 10.21741/9781644900994-8.
- 33. Recent patents on aerogels, In: Aerogels: Preparation, Properties and Applications, **Material research** Forum LLC, 84, 230-249 (2020) DOI: 10.21741/9781644900994-10.
- 34. Fundamentals, Mechanisms and key performance in K-ion batteries in Rechargeable Batteries, In: Potassium-ion Batteries: Materials and Applications, **Wiley-Scrivener Publisher**, Ch. 9, 191-212 (2020).
- 35. Alloys for K-Ion Batteries, In: Alloy Materials and Their Allied Applications, **Wiley-Scrivener Publisher**, Ch. 10, 191-211 (2020).
- 36. Mn-based materials for K-ion Batteries, In: Potassium-ion Batteries: Materials and Applications, **Wiley-Scrivener Publisher**, Ch. 4, 99-121 (2020).
- 37. History and Development of zinc batteries, In Zinc Batteries: Basic Development and Applications, Wiley-Scrivener Publisher, Ch. 11, 167-186 (2020).
- 38. Emerging Diagnostic Techniques for Lung Cancer Detection, In: Research Trends in Multidisciplinary Research, **AkiNik Publisher**, Ch. 7,119-135 (2019).
- 39. E-learning: Foundation of Trends and Resources, **Digital India: Transforming India through Education**, NCDITIE'2016,219-224 (2016). (ISBN: 978-93-84935-87-0)
- 40. A review paper on erucamide: Its synthesis, physical and chemical properties, **New Trends in Chemical Physics Research**, 109-150, **NOVA PUBLICATIONS**, New York (2011).
- 41. Synthesis of alkyl (Lauryl) poly-glucoside and effect of temperature, catalyst and time on reaction product, **Heavy metal pollution**, 167-195, **NOVA PUBLICATIONS**, New York (2008).

Conference Proceeding Publications

- 1. Computer Assisted Language Learning", PSEPI, 272-275 (2014). (ISBN 978-93-83083-61-9)
- 2. The need of Future: Schiff's Base metal Complexes, **Proceeding of New Approach in Chemical Sciences & Advancement in Renewable energy**, 67-72, (2014). (ISBN: 978-93-83083-67-1)
- 3. A review on the principles and roles of Green chemistry to reduce chemical related impact on human health and virtually eliminate contamination of the environment", **Proceeding of NCGC**, 208-212 (2010).

Conferences

- 1. Paper presented entitled "A review on the principles and roles of Green chemistry to reduce chemical related impact on human health and virtually eliminate contamination of the environment" In NCGC-10, Organized by SRM University, Modinagar (2010).
- 2. Paper presented entitled "**E-Learning:Foundation of trends and resources**" Organized by SRM University, Modinagar on 7th April 2012.
- 3. Paper presented entitled "Quantitative separations of toxic heavy metal ions by using an ion exchange material" in GTER-2012, organized by Gurukul Kangri University, Haridwar on 11-13 May 2012.
- 4. Paper presented entitled" **Nanomedicine: A boon of new Era**" in ICNANO-2013, organized by Ansal University, Gurgaon on 25-26th July 2013.
- 5. Paper presented entitled "**Inquiry based learning in Chemistry supported by E-Learning: An overview**" in ICRTC-13, Organized by SRM University, Modinagar on 4-5th Oct 2013.

- 6. Paper presented entitled "**Green Chemistry: A boon of new era**" in ISST-2013, Organized by Indra Prastha Engineering college, Ghaziabad on 30 Nov 2013.
- 7. Paper presented entitled "Schiff's base metal complexes: versatile therapeutic agents" in ACES-2014, Organized by Arya PG College, Panipat, Haryana on 27-28th Feb 2014.
- 8. Paper presented entitled "**The need of future: Schiff's base metal complexes**" in NCNACSAR-14, Organized by SRM University, Modinagar on 4-5th April 2014.
- 9. Paper presented entitled "Computer Assisted Language Learning" in PSEPI, Organized by SRM University, Modinagar on 9th May 2014.
- 10. Paper presented entitled "Antifungal Screening of Nitrogen, Oxygen And Sulphur Donor Atom Containing Tridentate Ligand MethylCarbamatethiosemicarbazoneandits Cu(II) And Ni(II) Complexes: Synthesis, spectroscopic Approach, Molecular Modeling" Organized by IMS Engineering College, Ghaziabad on 16th July2016.
- 11. Paper presented entitled "**Impact of nanotechnology on pharmaceutical research**" in GiAgT-2016, Organized by Scientific educational Research society, Meerut and SRM University, Modinagar on 9-11 September 2016.
- 12. Paper presented entitled "Synthesis, characterization and spectroscopic studies of Transition metal complexes of 2-Acetyl-5-methyl-furanthiosemicarbazone and their biological activities" in National conference on Science and technology for national development, Organized by Gurukul Kangri Vishwidyalaya in association with The Indian science Congress association: Haridwar chapter, Haridwar on 20-22 November 2016.
- 13. Paper presented entitled "Synthesis, spectrscopic approach, biological screening and geometrical optimization of bidentate schiff's base ligand and their Metal complexes" in the Research Day, Organized by SRM Institute of Science & Technology, Kattankulathur on 1st March2018.
- 14. Paper presented entitled "Antibacterial Screening Of Nitrogen And Sulfur Donor Atom Containing Methylcarbamatethiosemicarbazone And Its Mn(II) And Co(II) Complexes: Synthesis, Spectroscopic Approach, Molecular Modeling" in 3rd International Conference on Global trends in pure and applied Chemical Sciences, Organized by SRM University, Modinagar in association with Asian Publication Corporation on 8-9 December, 2017.
- 15. Paper presented entitled "**Prospects of Biologically active Schiff's base ligand and metal complexes in Drug discovery**" in 1st International conference on Recent trends in Environmental and Sustainable Development, Organized by Vivekananda Global University, Jaipur in association with Institute of exploring advances in Engineering, Rajasthan Region on 23-25 February 2018.
- 16. Paper presented entitled "**Role of literature in moulding our Environment**" in 3rd International Conference on Emerging Trends in Language, Literature and Culture, organized by SRM Institute of Science & Technology, Modinagar on 23-25 March 2018.
- 17. Paper presented entitled "Role of Digital Learning, Virtual Labs and Classrooms in Applied Sciences" in International conference on Technology for Education, Training and Business, Organized by Noida International University, Greater Noida in association with Academic Research in Science, Engineering, Art & Management Foundation, New Delhi on 5-6 April, 2018.
- 18. Paper presented entitled "Synthesis, Spectroscopic, Characterization, Molecular Modelling, and Biological Evaluation of Bidentate Schiff's Base Ligand and Transition Metal Complexes" in 3rd International conference on Recent Advances in Material Chemistry (ICRAMC-2019) at SRM IST, Kattankulathur on 13-15th February 2019.

- 19. Paper presented entitled "Bidentate thiosemicarbazone and its coordination complex: structure elucidation and biological investigation" in Symposium on Recent Trends in Allied Science & Research Scholar Meet-2019 organized by UkaTarsadia University, Bardoli on 13-15th February 2019.
- 20. Paper presented entitled "Structure Evaluation and Biological Studies of Inorganic Coordination Compounds derived from Thiosemicarbazide" in 2nd International Conference on Innovations in Chemical, Biological & Environmental Sciences (ICICBES-2019) organized by Arya PG College, Panipat, Haryana on 27-28th Feb 2019.
- 21. Paper presented entitled "The consequence of imine bond origination: A biomaterial with robust Self-healing property for sustained release of highly water-soluble Levofloxacin"in the Research Day, organized by SRM Institute of Science & Technology, Kattankulathur on 28th Feb 2019.
- 22. Paper presented entitled "Co (II)और Ni (II)केजैविकअनप्रयोगकीसंभावनाएंतथासेमिकार्बोज्ञोनऔरथियोसेमिकार्बोज्ञोनकेसमन्वययौगिक'' in **Applications** of **Technical** Terminology in Modeling, Optimization and Computing in Science and Technology in association of MHRD organized by SRM Institute of Science & Technology, Delhi NCR campus on 26-28th April 2019.
- 23. Paper presented entitled "Transition metal (II) complexes of a novel Schiff's base ligand: Synthesis, characterization, theoretical, molecular modeling and biological studies" in National conference on New Imperatives in drug design and discovery organized by UkaTarsadia University, Bardoli on 22-23rd November 2019.
- 24. Paper presented entitled "Bioactive Thiosemicarbazone ligand and its metal(II) complexes: Synthesis, Structural characterization, computational studies and biological evaluation" in 2nd International conference on Recent trends in Environmental and Sustainable Development (RTESD-2019), Organized by Vivekananda Global University, Jaipur in association with Material Research Society of India (MRSI), Rajasthan Chapter on 17-19th October, 2019.
- 25. Paper presented entitled "Schiff Base Transition Metal Complexes: Synthesis, Characterization, Theoretical Analysis and Biological Potency" in International conference on Recent Advances in Basic and Applied Sciences at Baba Mantnath University, Rohtak during 27-28th August 2021.
- 26. Paper presented entitled "**Preparation, spectral analysis and biological applications of Schiff base ligand and its transition metal complexes**" in Virtual International Conference on Smart Waste Management, on 11-12th October 2021.
- 27. Paper presented entitled "An insight for the interaction between thiazolidine-2,4-dione with zinc chloride to get deep eutectic solvents through DFT calculations" in Virtual International Conference on Smart Waste Management, on 11-12th October 2021.
- 28. Paper presented entitled "A comparative study for the potential of 2-Deoxy-D-glucose, 2-Deoxy-D-ribose and 2-Deoxy-glucose against the Mpro of nCoV to combat COVID-19: A temperature dependent Molecular Dynamics Simulations" in 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 8-9th October on virtual platform.
- 29. Paper presented entitled "Synthesis, Spectral characterization and Pharmacological applications of Schiff base ligand and its Transition Metal Complexes" in International Online Conference on Advances in Chemical Sciences, organized by Department of Chemistry, H.V.M.

(P.G.) College Raisi, Haridwar, U.K. in collaboration with Uttarakhand State Council for Science and Technology, Uttarakhand from 21st–22ndDecember 2021.

Work in Progress

- 1. Wind energy: From Past to Present technologies In:Wind Energy Storage and Conversion: From Basics to Utilities, **Wiley-Scrivener Publisher**, 2023 (Submitted)
- 2. Ferroic materials: From Past to Present In:Ferroic Materials Based Technologies: Basics to Applications, **Wiley-Scrivener Publisher**, 2023 (Submitted).
- 3. Microplastics and Nano-Plastics: Sources, Distribution, Behaviors and FateIn:Toxic Effects of Micro- and Nanoplastics: Environment, Food and Human Health, Wiley-Scrivener Publisher, 2023 (Submitted).
- 4. Solar energy concentrator research: Past & Present In:Solar Energy Concentrators: Essentials and Applications, **Wiley-Scrivener Publisher**, 2023 (Submitted).
- 5. Biofuels: Past to Present TechnologyIn:Technological Advancements in Solid-Gaseous Biofuels Production, Wiley-Scrivener Publisher, 2023 (Submitted).

Workshops /Seminars/Conferences

- Coordinator of the National conference on Green Chemistry (NCGC-10) held at SRM University, Modinagar during 16-17th Sep 2010.
- Participated in Seminar on Innovative ideas for 'Make in India' held at SRM University, Modinagar on 23rd Jan 2012.
- **Participated** in two days FDP titled "**Paradigm Shift on Pedagogy & EIM**" held at SRM University, Modinagar, during 8-9th Feb 2012.
- Coordinator of the National conference on Green Chemistry (NCGC-12) held at SRM University, Modinagar during 18-19th Sep 2012.
- Participated in five days FDP titled "Image Processing, Computer Vision and Pattern Recognition" held at National Institute of Technology, Delhi during 18-22nd June 2013.
- Participated in five days FDP titled "Advance Research Methodology & Data Analytical Tools" held at Jaipuria Institute of Management, Vasundhara during 10-14th July 2013.
- Organizer of the National workshop on Mathematical analysis and Modelling (NWMAM-13) held at SRM University, Modinagar on 5th April 2013.
- Coordinator of the National workshop on Mathematical analysis and Matlab (NWMAM) held at SRM University, Modinagar on 25th Oct 2013.
- Participated in National seminar on Essential oils, Fragrances, Flavors& Cosmetics Industry organized by Mewar University, Rajasthan on 23rd Nov 2013.
- Co-Convener of the National conference in Chemical Sciences & Advancement in Renewable Energy held at SRM University during 4-5th April 2014.
- Coordinator in Robotic Workshop, Organized by SRM University, Modinagar, 2015.
- **Participated** in fifteen days Workshop titled "**Entrepreneurship Development Programme**" conducted by NIESBUD, Govt. of India during 18 February 4 March 2015.
- Coordinator in International conference on Global initiatives in Applied Sciences and Green Technologies held at SRM University during 9-11 September 2016 in collaboration with Scientific Educational Research Society, Meerut.

- Coordinator for Student Development Program (S.D.P) conducted at SRM University during 15-17 September 2016 by Innovation and Entrepreneurship Development Centre (IEDC) in association with CONSULTANCY SERVICES CELL, State Bank of India.
- Coordinator for Entrepreneurship Development Program (E.D.P) conducted at SRM University from 20th September 2016 by Innovation and Entrepreneurship Development Centre (IEDC) in collaboration with The National Institute for Entrepreneurship and Small Business Development (NIESBUD), Noida.
- Coordinator for Impressions 2K16, A National level Business Plan Competition (BPC) conducted at SRM University on 29th January 2016 by Innovation and Entrepreneurship Development Centre (IEDC).
- **Organizing Committee** in DST-Inspire Internship Science Camp, sponsored by DST, Government of India and Organized by SRM University, Modinagar in 2017.
- Faculty Coordinator in 3rd International Conference on Global trends in pure and applied Chemical Sciences, Organized by SRM University, Modinagar in association with Asian Publication Corporation during 8-9 December, 2017.
- **Participated** in Faculty Development Programme **ERUDITIA 2018** in June, 2018.
- **Organizing Committee member** in **IEEE Conference** of ECE Dept held at SRM-IST, Delhi-NCR Campus during 28-29th September 2018.
- Organizing Committee member in 5th International Conference on recent Trends in Computing (ICRTC-18) at SRM-IST, Delhi-NCR Campus held during 27-28th December 2018.
- Participated in Workshopon SWAYAM for development of MOOCs: Growth and Opportunities in collaboration with National institute of Open Schooling (NIOS), ministry of Human Resource development (MHRD), Gov. of India at Noida International University, Greater Noida on 22nd April 2019
- Organizing Committee member in Applications of Technical Terminology in Modeling, Optimization and Computing in Science and Technology in association of MHRD held at SRM-IST, Delhi-NCR Campus during 26-28th April 2019.
- Organized 3rd International Conference on Micro-Electronics and Telecommunication Engineering (ICIMETE-2019) at SRM-IST, Delhi-NCR Campus held during 28-29th September 2019.
- Organized 5th International Conference on Intelligent Computing and Applications (ICICA-19) at SRM-IST, Delhi-NCR Campus held on 6-8th December 2019.
- Organized a Guest Lecture on A big world of small things at SRM IST, Delhi NCR campus in February 2020.
- Organized a Guest Lecture on Roles of Computational tools in treatment of Chickungunya Virus at SRM IST, Delhi NCR campus inFebruary 2020.
- Organized a Guest Lecture (Webinar) on Research Publications: Skills, Ethics and Misconducts at SRM IST, Delhi NCR campus in May 2020.
- Organized a Guest Lecture (Webinar) on Approach to Mitigation of Environment-assisted degradation, Graphene: Ultra-thin coatings at SRM IST, Delhi NCR campus in June 2020.
- Organized a National seminar on Astrology at SRM IST, Delhi NCR campus in Feb 2020.
- Participated in 2-days National Open Workshop on "Getting Aligned to the Publishing Process-Author Workshop" at Elsevier on 25th September 2020.
- Participated in 2-days National Open Workshop on "Getting Aligned to the Publishing Process-Scopus + ScienceDirect" at Elsevier on 28th September 2020.
- Participated in "International Webinar on New horizons in Chemical Sciences & Technology" organized by Ch. Chhotu Ram (P.G.) college, Muzaffarnagar on 29th September 2020.

- Participated in webinar session on "Carbon Nanotubes: From Synthesis to Applications" organized by The Biomics on 18th October 2020.
- **Participated** in webinar session on "**Stem cells**" organized by The Biomics on 08th November 2020.
- **Participated** in 20 days FDP titled "**Recent Advances in Chemical Sciences**" organized by SRM IST, Kattankulathurduring 9-20th July 2020.
- **Participated** in "Webinar Series to celebrate Wildlife Week 2020", organized by Enprotec India Foundation during 2-8th October 2020.
- Participated in Webinar on "NEP 2020: Higher Education Curricular Issues and Implications" organized by National Institute of Technical Teacher's Training and Research, Bhopal on 11th November 2020.
- **Participated** in International Webinar on "Scientific Writing" organized by IIS, Jaipur with Association of chemistry Teachers (ACT) during27-28thNovember 2020.
- Participated in webinar session on "Low-cost renewable energy driven (LC-RED) wastewater treatment options" organized by Pandit Deendayal Petroleum University, Gujrat on 20nd February 2021.
- **Participated** in International webinar on "Sustainable Chemistry (IWS-2021)" organized by Association of chemistry Teachers (ACT), C/O Homi Bhabha Centre for Science education (TIFR), Mumbai on 18th March 2021. (Certificate no.K81YP8-CE000444)
- **Participated** in National ONLINE Lecture Series on "**Subverting Social Inequities**" organized by Sharda University &Azim Premji University during 24-26th March 2021.
- **Participated** in National level one week FDP titled "**Research Methodology**" organized by Kamla Nehru Mahavidyalaya, Nagpur from during 26th April-1st May 2021. (Certificate no.2QKSIY-CE002282)
- Participated in "International E-conference on Recent Advances in Chemical, Physical and Biological Sciences (RACPBS-2021)" organized by Nadira Mahavidyalaya, Kotal and Association of Chemistry Teachers, Mumbai during 29-30th June 2021. (Certificate no. RTB4IS/CE001580)
- **Participated** in National Webinar on "**Nano Materials Innovative Applications**" organized by Arya PG College, Panipat, Haryana on 9th July 2021. (Certificate no.APGC/Webinar/2021/11)
- **Participated** in International Webinar on "**Drug Discovery (IWDD-2021)**" organized by Atma Ram Santan Dharma College, University of Delhi on 20th July 2021. (Certificate no. IWDD-ARSD-196)
- **Participated** in National Webinar on "Recent Advances in Chemistry" organized by IQAC, Govt. G.N.A. PG College, Bhatapara on 26th July 2021. (Certificate no. EKYRG4-CE000149)
- Participated in National level Webinar on "Writing and Evaluation of Scientific Research Articles" organized by Seth KesarimalPorwal College of Arts, Science and Commerce, Kamptee & Taywade College, Mahadula-Koradi on 31st July 2021.
- Participated in "Virtual International conference on Multifunctional Advanced Materials (VICMAM-2021)" organized by JVM's Degree College in association with Association of Chemistry Teachers, Mumbai during 9-10th August 2021.
- Participated in online one week FDP titled "Applied Chemistry: A catalyst for Scientific Transformations" organized by Lavoisier's association, Department of Chemistry, SGT University, Gurugram from during 23-28th August 2021. (Certificate no. SGTU/12551/2021)
- **Participated** inOne-Day Online Workshop on "**How to Conduct the Student Induction (SIP) Program**" organized by All India Council for Technical Education (AICTE) on 20th September 2021. (Certificate no. AICTE/FDP-SI/OnlineDemoWorkshop/2254)
- Participated in Three-Days Online Workshop on "Analytical and Numerical Methods for Non-Linear Vibrations" organized by SRM Institute of Science and Technology, Kattankulathur during 23-25th September 2021.

- **Participated** inTwo-daysWorkshop on "**Space Physics**" organized by SRM IST, Delhi NCR campus during 8-9th October 2021.
- Participated in International Conference on "Recent Trends in Drug Discovery and Development" organized by Department of Chemistry under the aegis of IQAC, Maitreyi College, University of Delhi held during 8-9th October on virtual platform.
- Participatedin"Ten Days National level Lecture Series" organizedby Nabira Mahavidyalaya, Kotalduring 21-31st January 2022.
- **Participated**inInternational Webinar on "**Chemistry Education** (**IWCE-2021**)" organized by Department of Chemistry, Kamla Nehru Mahavidyalaya, Nagpur and Govt. Madhav science PG College, Ujjain, in association with Association of Chemistry Teaches (ACT) Mumbai during 4th-5th February 2022.(Certificate no. QZZBQA-CE000847)
- **Participated** in the guest lecture on "**The usage & Application of ReaxysDatabase**" organized by SGT University, Gurugram on 12th February 2022. (Certificate no. SGTU/1821/2022)
- **Participated**inWebinarseries on "**Advances in Bio-Sensing technologies**" organized by Department of Biomedical Engineering, SRM IST, KTR campus during 17th-18th February 2022.
- ParticipatedinInternational Webinar on "Empowering Diversity in Science" organized by Department of Chemistry, Kamla Nehru Mahavidyalaya, Nagpur, Association of Chemistry Teaches (ACT) Mumbai & Department of Chemistry, Kalasalingam Academy of Research and Education (KARE), in collaboration with International Union of Pure & Applied Chemistry (IUPAC), Global Women's Breakfast-2022 (Certificate no. E8O9DU-CE003162)

Faculty Development Program

- Completed successfully ATAL FDP on "Research and Innovation for Growth" organized by BNM Institute of Technology, Banglore from 23-27th August 2021. (Certificate no. ATAL/2021/1628663679)
- Completed successfully ATAL FDP on "Lean thinking for Sustainable Business Practices" organized by SRM Institute of Technology, Delhi NCR Campus from 16-20th August 2021. (Certificate no. ATAL/2021/1627573848)
- Completed successfully ATAL FDP on "Nano Materials for Next-generation Applications" organized by M S Ramaiah Institute of Technology, Bangalore from 12-16th July 2021. (Certificate no. ATAL/2021/1624322906)
- **Completed** successfully ATAL FDP on "**Novel Materials**" organized by Malvaya National Institute of Technology, Jaipur from 4-8thJanuary2021. (Certificate no. ATAL/2020/1607318363)
- Completed short term training programme on "Training of Trainers (TOT) for teacher educators" organized by National Institute of Technical Teacher's Training and research, Bhopal, MHRD, Govt. of India from 5-9th October 2020.
- Completed online FDP on "Entrepreneurial education as a tool for promoting Women employment in India" conducted by National Institute of Entrepreneurship and Small Business development from 26-30th October 2020.
- Completed successfully ATAL FDP on "Green Technology & Sustainability Engineering" organized by Gandhi Institute of Technology and Management (Off Campus), Bengaluru from 16-20thNovember 2020. (Certificate no. ATAL/2020/1604120899)
- **Completed** successfully ATAL FDP on "**Waste Technology**" organized by B.M.S College of Engineering, Bangalore from 23-27thNovember, 2020.(Certificate no. ATAL/2020/1605869630)
- Completed successfully ATAL FDP on "Green Technology & Sustainability in Chemistry" organized by Adhiyamaan College of Engineering, Taminadu from 02-06th August 2021. (Certificate no. ATAL/2021/1627573928)
- **Completed** successfully One-week International FDP on "**Research Methodology**" organized by Amar Sewa Mandal's Kamla Nehru Mahavidyalaya, Nagpurfrom 02-07thMay 2022 (Certificate no: 5BEK1K-CE000132)

- Successfully completed FDP on "Modern trends of Organic-inorganic hybrid functional materials and their prospective in Energy and Environmental applications (MOIHFEE-2022)" organized by Department of Chemistry, SRMIST, KTR from 09-16th May 2022.
- Completed successfully One-week International FDP on "Microbes' Potential to Bail Out the Energy Crisis" organized by Department of Biochemical Engineering, School of Chemical Technology, Harcourt Butler Technical University, Kanpur from 15-20thDecember, 2022.
- **Completed** successfully 5-days National Workshopon Research Methodology and Applied Statistics, organized by Modern College of Professional Studies from 12-17-21st April, 2023
- Completed successfully Oneweek National e-Workshopon Innovation and Intellectual Property Rights (NeW IPR-2023) organized by Innovative Technology Enabling Centre (InTEC), CSIR-IMMT, Bhubaneswar from 12-17th June, 2023
- Completed successfully One Week Online National FPD on Research Methodology, FDP-2023" organized by Kamla Nehru Mahavidyalaya, Nagpur from 24-29th June, 2023.

Achievements and Awards

- Awarded with Gold Medal on Research Day'2018 for Oral Presentation (Institutional Level), 2018
- Online Certificate from NPTEL in **Organometallic Chemistry** in Jan-Feb 2019
- Online Certificate from NPTEL in **Coordination Chemistry** in July- Oct 2019.
- Keynote speaker in the Conference on **Translational (Engineering) and Regenerative Medicine** (CoTERM 2020) at Noida International University, Greater Noida on 21-23rd January 2020.
- Organized 5-days workshop on Intellectual Property Rights (IPR) in collaboration of CIPAM, Department for promotion of industry & Internal Trade, Ministry of Commerce & Industry, Government of India, during 2-6th November 2020.
- Local coordinator in "Neo Hindi Writers Workshop" organized by SRM Institute of Technology, Delhi NCR Campus in collaboration with at Central Hindi Directorate, Ministry of Education, Department of Higher Education, Govt. of India during 3-10thDecember 2021.
- Appointed as Expert to review books under "Shiksha Puruskarr Yojna-2020" at Central Hindi Directorate, Ministry of Education, Department of Higher Education, Govt. of India on4th and 6th January 2022.
- Evaluated Ph.D Thesisentitled "Formulation and Development of Silver Nanoparticles Gel Synthesized from Brassica Oleracea and its Antimicrobial Efficacy" of Department of Chemistry, Noida International University, Greater Noida.
- Evaluated Ph.DThesisentitled"Studies on Pharmacological Approaches for Treatment of Type 2 Diabetes Mellitus Patients" of Department of Chemistry, Noida International University, Greater Noida.

Patent

Published patent entitled "A method of parenting &programming of outdoor education centers in Urban areas". Application Number-202111022169, Publication date: 28.5.2021

Memberships

- Life member of The Indian Science Congress Association, Kolkatta (Membership no. L29077), 2016
- Life member of The Association of Chemistry Teachers, Mumbai (Membership no. LM1820), 2016
- Life member of The Indian Chemical society, Kolkatta (Membership no. F/7865LM), 2016
- Life member of The Indian Science Congress Association, Haridwar Chapter, Kolkatta (Membership no. L0167), 2014
- Member of International Society for Energy, Environment and Sustainability (Membership no. 23010), 2023 (5 years)

Research Guide: Yes

Research Scholars: 05 (Pursuing)			
Languages Known: English and Hindi (Skilled in speaking and writing).			