

Dr. Nidhi Goel

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Academic Qualification:

- ❖ Ph.D. (Indian Institute of Technology Roorkee).

Professional recognition, awards, fellowships:

- ❖ Gold medallist in B.Sc. & M.Sc.
- ❖ Qualified all India National Eligibility Test (CSIR-NET) and all India Level Junior Research Fellowship (CSIR-JRF) in Chemical Sciences conducted by Council of Scientific and Industrial Research, New Delhi, India.
- ❖ Junior Research Fellowship (JRF) and Senior Research Fellowship (SRF) awarded by Council of Scientific and Industrial Research, New Delhi, India.
- ❖ Selected for SERB Fast Track Scheme (Department of Science and Technology, New Delhi, India).
- ❖ Selected (two times) for Dr. D. S. Kothari Post-Doctoral Fellowship Scheme (UGC, New Delhi, India).

Research experiences:

- ❖ Young Scientist in Indian Institute of Science Bangalore, Karnataka, India.

Projects Completed:

- ❖ Principal Investigator (PI), SERB, DST, New Delhi (Project Cost: 30 Lakhs Rupees).

Research Area:

- ❖ Organic Synthesis
- ❖ Crystal engineering and X-ray Crystallography
- ❖ Supramolecular materials
- ❖ Metal Organic Frameworks
- ❖ Chemical Sensors, Gas adsorption, Magnetic & biological applications

Full List of publications:

National Journals = 0, International Journals = 30

1. Exploration of phenolic compounds as multi-target agents against cancer and inflammation, *Journal of Biomolecular Structure and Dynamics*, ISSN: 1538-0254 (2018), Accepted.
2. A dual functional luminescent Tb(III) metal-organic framework for the selective sensing of acetone and TNP in water, *RSC Advances*, ISSN: 2046-2069, (2018), 8, 10746.
3. A stable nonanuclear Tb(III) cluster for selective sensing of picric acid, *Inorganica Chimica Acta*, ISSN: 0020-1693, (2017), 463, 14.
4. Quantum chemical, ADMET and molecular docking studies of ferulic acid amide derivatives with a novel anticancer drug target, *Medicinal Chemistry Research*, ISSN: 1054-2523, (2017), 26, 1822.
5. Study of new Cu(II) metal-organic frameworks: syntheses, structural, gas sorption and magnetic properties, *Inorganica Chimica Acta*, ISSN: 0020-1693, (2016), 450, 330.
6. A uranium (VI) complex: synthesis, structural and thermal kinetic analysis, *Journal of Molecular Structure*, ISSN: 0022-2860, (2016), 1117, 1.
7. Structural, thermal and quantum chemical studies of *p*-coumaric and caffeic acids, *Journal of Molecular Structure*, ISSN: 0022-2860, (2015), 1085, 242.
8. Mononuclear and binuclear lanthanide(III) complexes: syntheses, structural, photophysical and thermal properties, *Journal of Coordination Chemistry*, ISSN: 1029-0389, (2015), 68, 529.
9. Syntheses, structural and thermal analysis of Tb(III) complexes with 4-nitrophenol, 2,6-dinitrophenol and 1,10-phenanthroline ligands, *Journal of Molecular Structure*, ISSN: 0022-2860, (2015), 1080, 1.
10. Study of supramolecular frameworks having aliphatic dicarboxylic acids, *N,N'*-bis(salicyl)ethylenediamine and *N,N'*-bis(salicyl)butylenediamine, *Journal of Molecular Structure*, ISSN: 0022-2860, (2014) 1071, 60.
11. Syntheses, structural, computational and thermal analysis of acid-base complexes of picric acid with N-Heterocyclic Bases, *Journal of Physical chemistry A*, ISSN: 1089-5639, (2013), 117, 10428.
12. Study of picrate salts with amines, *Journal of Molecular Structure*, ISSN: 0022-2860, (2013), 1036, 427.
13. Syntheses, structural and thermal studies of Eu(III) and Gd(III) complexes with 2,6-dinitrophenol and 1,10-phenanthroline/2,2'-bipyridine ligands, *Inorganica Chimica Acta*, ISSN: 0020-1693, (2012), 387.

14. Supramolecular architecture of picric acid and pyrazoles: Syntheses, structural, computational and thermal studies, *Supramolecular Chemistry*, ISSN: 1029-0478, (2012), 24, 285.
15. Lanthanoid metal nitrates with hydrogen bonded hexamethylene-tetramine: preparation, characterization and kinetics of thermolysis, *Journal of Thermal Analysis and Calorimetry*, ISSN: 1572-8943, (2012), 114, 5.
16. Preparation, characterization and thermal behaviour of polymeric complex of cadmium hexamethylenetetramine nitrate, *Solid State of Science*, ISSN: 1293-2558, (2012), 14, 495.
17. Synthesis of anionic hypervalent cyclic selenenate esters: relevance to the hypervalent intermediates in nucleophilic substitution at the selenium(II) center, *Chemistry-A European Journal*, ISSN: 1521-3765, (2012), 18, 1444.
18. Preparation, characterization and thermolysis of nitrate salts of aminopyridine, Part-85, *Journal of Molecular Structure*, ISSN: 0022-2860, (2012), 1012, 62.
19. Selenadiazolopyridine: A synthon for supramolecular assembly and complexes with metallophilic interactions, *Inorganic Chemistry*, ISSN: 0020-1669, (2012), 51, 8128.
20. Methyl ester function: An intramolecular electrophilic trap for the isolation of aryltellurenyl hydroxide and diorganotellurium dihydroxide, *Organometallics*, ISSN: 0276-7333, (2011), 30 (14), 3892.
21. Synthesis and structural characterization of pincer type bicyclic diacyloxy- and diazaselenuranes, *Dalton Transactions*, ISSN: 1477-9226, (2011), 40, 9858.
22. Photocleavage of coordinated NO under visible light from two different classes of organometallic ruthenium nitrosyl complexes: Reversible binding of phenolato function, *Organometallics*, ISSN: 0276-7333, (2011), 30, 2498.
23. Synthesis, structural characterization and DNA interaction studies on a novel copper complex: nuclease activity via self-activation, *Inorganic Chemistry Communications*, ISSN: 1387-7003, (2011), 14 (3), 489.
24. DNA interaction, superoxide scavenging and cytotoxicity studies on new copper(II) complexes derived from a tridentate ligand, *Polyhedron*, ISSN: 0277-5387, (2011), 30, 2667.
25. Preparation, X-ray crystallography and thermolysis of transition metal nitrates of 2, 2'-bipyridine (Part 63), *Journal of Thermal Analysis and Calorimetry*, ISSN: 1388-6150, (2012), 107, 325.
26. Preparation, characterization and thermolysis of nitrate and perchlorate salts of 2,4,6-trimethylaniline, *Journal of Hazardous Materials*, ISSN: 0304-3894, (2010), 173, 173-180.

27. Stabilization of Mn(II) and Mn(III) in mononuclear complexes derived from tridentate ligands with N₂O donors: synthesis, crystal structure, superoxide dismutase activity and DNA interaction studies, *Journal of Inorganic Biochemistry*, ISSN: 0162-0134, (2010), 104, 9.
28. Oxidative cyclization of phenolic schiff base and synthesis of cyclometallated ruthenium nitrosyl complex: photoinduced NO release by visible light, *Inorganic Chemistry*, ISSN: 0020-1669, (2010), 49, 7235.
29. Preparation, X-ray crystallography and thermal decomposition of transition metal perchlorate complexes with perchlorate and 2,2'-bipyridyl ligands, *Inorganica Chimica Acta*, ISSN: 0020-1693, (2009), 362, 4091.
30. 1-(2-Bromobenzyl)-3-isopropylbenzimidazolin-2-one, *Acta Crystallographica, Section E*, eISSN: 1600-5368, (2009), 65, o2836.