



DEPARTMENT OF COMMERCE
DYAL SINGH COLLEGE, UNIVERSITY OF DELHI
FACULTY DETAIL



Title	Professor	First Name	Dr. Navneet	Last Name	Manav	
Designation	Professor					
Address		C-569, GF, Vikaspuri, New Delhi - 110018				
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Residence						
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Link to Web-Page or Resume						
Educational Qualifications						
Degree		Institution			Year	
M.Sc. – Chemistry		G.N.D.U, Amritsar			1991	
M.Phil.		University of Delhi			1998	
PhD		University of Delhi			2002	
Career Profile						
Administrative Assignments (From 1 st July 2021 onwards)						
S.N o.	Nature of Activity	Designation	Institution/Departm ent	Period		
					From	To
1	Administration	Vice Principal	Dyal Singh College University of Delhi	Nov 2022	Till date	
2	Staff Council	Secretary	Dyal Singh College University of Delhi	2021	2022	
3	Academic committee	Convener	Dyal Singh College University of Delhi	2019	2022	
4	Admission Committee, Chemistry Department	Member	Departme nt of Chemistry Dyal Singh College, University of Delhi	2021	2022	

3.	Function organising committee- Azadi ka Amrut Mahotsav	Nodal officer	Dyal Singh College, University of Delhi	2020	2022	
4.	North East society	Nodal officer	Dyal Singh College, University of Delhi	2014	2026	
6.	Faculty Promotion committee	Convenor	Dyal Singh College University of Delhi	2021	2022	
7	Committee for the preparation of syllabus, books for the Indian Knowledge System	Member	University of Delhi	2021	2022	
8	Committee for the Syllabus of B Sc Physical Science and B Sc Life Science	Member	University of Delhi	2021	2022	

Areas of Interest / Research

INORGANIC CHEMISTRY, Environmental Chemistry, Nano-mixed metal oxides

Subjects Taught

B Sc Chemistry (H) Vth and VIth sem Inorganic Chemistry Theory

B Sc Chemistry (H) Ist, IInd, IVth, Vth and VIth sem Inorganic Chemistry Practicals B Sc Life Sci and B Sc Phy Sci Chemistry Practicals

Research Guidance

1. Guiding one Ph. D. student
2. Summer internship programme
3. Guiding one undergraduate 4th-year student

Publications Profile (including Research Papers, Books and Book Chapters)

Publications

Publications

1. Navneet Manav , A. K. Bhagi, Amit Kumar, Rohith P. John, Mukesh Kumar*, A Highly Efficient Salen-Palladium Complex as a Homogeneous Catalyst for the Suzuki–Miyaura Coupling Reaction: DFT, Photoluminescence, and Electrochemical Properties, *ChemistrySelect* 2025, 10, e02726.
2. R Kumar, K. Seema, D K Singh, P Jain, N Manav, B Gautam and S Kumar Synthesis, antibacterial and antifungal activities of Schiff base rare earth metal complexes: a review of recent work, *Journal of Coordination Chemistry*, 2023, 76(9–10), 1065–1093
3. A K Bhagi, K P Singh, A Kumar, Priya, N Manav, one pot synthesis of benzopyranones and benzoxazinones catalyzed by MMO, *Indian Journal of Chemistry*, 2022, 1173-1179
4. M Kumar, A Kumar, S Kishor, S Kumar, N Manav, A K Bhagi, RP John, N-diethylaminosalicylidene based "turn-on" fluorescent Schiff base chemosensor for Al³⁺ ion: Synthesis, characterisation and DFT/TD-DFT studies, *Journal of Molecular Structure*, 2022, 1247, 131257-131268
5. S Gautam, S Chandra, J Singh, **N Manav**, V K Paliwal, A Kumar, Structural Features, computational studies and biological analysis; Schiff's Base Ligand and its coordination compounds, *Indian drugs*, 2021, 58(07), 22-31
6. M Kumar, A Kumar, S Kishor, S Kumar, **N Manav**, A K Bhagi, RP John, A binuclear gadolinium complex of 8-hydroxyquinoline-2-carbaldehyde salicylhydrazone: structural characterization and photoluminescence properties, *Reasearch on chemical intermediates*, 47 (12) (2021) 5119-5133.
7. Jasleen Kaur, **Navneet Manav*** and A.K. Bhagi, Removal of heavy metal ions from laboratory effluents by Phytoremediation, *International Research Journal of Management Science & Technology* Vol 8 Issue 11, 2017, ISSN 2250 – 1959 (Online) 2348 – 9367 (Print)
8. **N. Manav**, A.K. Bhagi, Adsorption of toxic metal ions from laboratory effluents by agricultural waste, *J Integr.Sci.Technol.*, 2016, 4(2), 70-75.
9. K. K. Saini , **N. Manav**, A.K. Bhagi, A. Kumar, the Therapeutic Properties of Naturally Occuring Flavanoid-Quercetin: A Magical Therapeutic Agent, *International Journal of Therapeutic Applications*, 32 (2016) 20-27. (ISSN: 2320-138X).
10. A. Kumar, A.K. Bhagi, **N. Manav**, DFT-based comparative study of the antioxidant properties of Rosmarinic Acid and Aloe Emodin, *International Journal of Therapeutic Applications*, 2015, 136, 672–681.
11. **Navneet Manav**, Vatsala Dwivedi and A. K. Bhagi, Degradation of DDT, a Pesticide by Mixed Metal Oxides Nanoparticles Green, *Chemistry in Environmental Sustainability and Chemical Education Proceedings of ICGC 2016*, 93-101, Springer, ISBN 978-981-10-8390-7

(eBook)

12. Rajesh Kumar, Manish Kumar, Vipin K. Maikhuri, **Navneet Manav**, Ashok K. Prasad and Divya Mathur, Recent Progress in the Chemistry of Tri-substituted Triazole via [3 + 2] Cycloaddition of Azide and Double Bond: An Overview Green Chemistry in Environmental Sustainability and Chemical Education Proceedings of ICGC 2016,119-131, Springer, ISBN 978-981-10-8390-7 (eBook)
13. **N. Manav**, Amit Kumar, C.Jain, J Rautela, Adsorption kinetics of removal of metal ions from laboratory effluents by agricultural wastes, proceedings of national conference in chemistry on environment and harmonious development 2016. ISBN: 9789385824012
14. **N. Manav**, J. Kaur, C.Jain, J Rautela, A.K. Bhagi, Eichhornia Crassipes and Salvinia Molesta as scavengers of heavy metals from chemistry laboratory effluents, Proceedings of national seminar on water and air quality in urban ecosystems, March 2016,36-40.ISBN: 978-93-5267-493-0
15. A. Kumar, K. K Saini, **N. Manav**, A. K. Bhagi, Novel Synthetic Strategy for nitration Reaction of Toluene by employing acidified NC- ZrO₂-La₂O₃ Mixed Metal Oxide, proceedings of national conference in chemistry on environment and harmonious development, April 2016. ISBN: 9789385824012
16. N. Manav,A. K. Bhagi, J. Kaur, N. Bhandari, "A study of removal of toxic metal ions Cu²⁺, Cd²⁺ and Pb²⁺ from laboratory effluents by adsorption on agricultural waste", Proceedings of International Conference on Climate Change and developing World, 2015,ISBN: 9788192599168
17. A.K. Mishra, S.B. Mishra, **N. Manav**, N.K. Kaushik, Synthesis and characterization of palladium (II) complexes, *Reviews in Inorganic Chemistry*, 2007, 27(6) 449-458.
18. A.K. Mishra, S.B. Mishra, **N. Manav**, N.K. Kaushik, Thermal and spectral studies of palladium(II) complexes, *Journal of Thermal Analysis and Calorimetry*, 2007, 90(2), 509-515.
19. A.K. Mishra, S.B. Mishra, **N. Manav**, N.K. Kaushik, Platinum(IV) and palladium(II) thiosemicarbazide and thiodiamine complexes: A spectral and antibacterial study, *Journal of Coordination Chemistry*, 2007, 66, 1042-1047.
20. A.K. Mishra, S.B. Mishra, **N. Manav**, N.K. Kaushik, Platinum(IV) thiohydrazide,thiodiamine and thiohydrazone complexes: A spectral,antibacterial and cytotoxic studies, *Spectrochimica Acta, Part A : Molecular and Biomolecular Spectroscopy* 2007, (17-19),1923-1932
21. A.K. Mishra, S.B. Mishra, **N. Manav**, N.K. Kaushik, Preparation, spectral characterization, cytotoxic and thermal studies of Platinum (IV) thiohydrazone Complexes, *J. Thermal Biol.*, 2006, 31, 611-616.

22. A.K. Mishra, S.B. Mishra, **N. Manav**, D. Saluja, R. Chandra, N.K. Kaushik, Synthesis, characterization, antibacterial and cytotoxic study of platinum (IV) complexes, *Bioorg. Med. Chem.* 2006, 14 (18), 6333-6340.

23. **N. Manav**, A.K. Mishra, N.K. Kaushik, In vitro antitumour and antibacterial studies of some Pt (IV) dithiocarbamate complexes, *Spectrochimica Acta, Part A : Molecular and Biomolecular Spectroscopy*, 2006, 65, 32-35.

24. A.K. Mishra, **N. Manav**, N.K. Kaushik, Organotin(IV) complexes of thiohydrazones: synthesis, characterization and antifungal study, *Spectrochimica acta. Part A, Molecular and biomolecular spectroscopy*, 2005, 61(13-14), 3097-101.

25. **N. Manav**, A.K. Mishra, N.K. Kaushik, Triphenylphosphine adducts of platinum(IV) and palladium(II) dithiocarbamate complexes: a spectral and in vitro study, *Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy*, 2004, 60A(13), 3087-3092.

26. **N. Manav**, Narender Kumar Kaushik, Preparation, spectral characterization, in vitro antitumor and thermal studies of new platinum(IV) and palladium(II) thiohydrazone complexes, *Transition Metal Chemistry*, 2002, 27(8), 849-855.

27. **N. Manav**, N. Gandhi, N.K. Kaushik, Some tribenzyl tin (IV) complexes with thiohydrazides and thiodiamines. Synthesis, chararacterization and thermal studies, *Journal of Thermal Analysis and Calorimetry*, 2000, 61(1), 127-134.

International Conference

1. Paper presented on Degradation of DDT, a pesticide by mixed metal oxides nanoparticles, International Conference on Green Chemistry in Environmental Sustainability & Chemical Education (ICGC-2016), November17-18, 2016
2. Paper presented on “Phytoremediation of laboratory effluents by Eichhoornia and Salvania to remove heavy metal ions”, International Conference on Climate Change and developing World, January21-25, 2015, CMS College, Kottaym.
3. Paper presented on “A study of removal of toxic metal ions Cu^{2+} , Cd^{2+} and Pb^{2+} from laboratory effluents by adsorption on agricultural waste” International Conference on Climate Change and developing World, January21-25, 2015, CMS College, Kottaym
4. Poster presented in the IUPAC sponsored Second International Symposium on Green/Sustainable chemistry, held at Department of Chemistry, University of Delhi from January10-13, 2006
5. Poster presented in International Conference on Chemistry Biology Interface; Synergistic New Frontiers organized by Dr.B.R.Ambedkar center for biomedical research, University of Delhi from November 21-26, 2004.

6. Poster presented in International Symposium on Trends in Medicinal Chemistry and Biocatalysis held at Department of Chemistry, University of Delhi from January 26-29, 2000.

National Conferences

1. Paper presented on Pesticides degradation in water samples by mixed metal oxides nanoparticles, national conference on Environmental Sustainability in Wastewater Remediation: Current Status and future Prospects" (ESWR-2017). January 19-20, 2016
2. Oral presentation on removal of some metal ions from laboratory effluents by phytoremediation in National Seminar on "Emerging Economics and challenges to Sustainability towards Developing nations" March 29th-30th, 2016 at SRI AUROBINDO COLLEGE
3. Oral presentation on Adsorption kinetics of removal of metal ions from laboratory effluents by agricultural wastes in national conference in chemistry environment and harmonious development on April 7-8, 2016, at Indian international centre.
4. Poster presented in First national conference on emerging trends and future challenges in chemical sciences on 3-4th Feb, 2016 held at DU
5. Participated in workshop on recent trends in technical terminology in science on 15-16th Feb, 2016 held at SRI AUROBINDO COLLEGE
6. Poster presented on phytoremediation of chemistry laboratory effluents by Eichhornia and salvinia sp. in national conference on environmental concerns of 21st century Indian and Global context at Zaquir Hussain college.
7. Poster presented on 22nd Feb, 2016, at the national seminar on water and air quality in urban ecosystem at Shivaji College.
8. Attended a day seminar on "Frontier Technologies in Chemical, Biological and Horticultural" Shivaji College.
9. Attended a one-week short-term course on "Induction Training for Engineering Teachers" sponsored by AICTE-ISTE from Feb 16-20, 2004.
10. Poster presented in the First National Symposium on Green Chemistry held at the Department of Chemistry, University of Delhi from January 11-13, 1999.

11. Poster presented in National Seminar on Perspectives in Interfacial Areas of Chemistry and Biology held at Department of Chemistry, University of Delhi from January 20-22,1998.

Research projects undertaken

- 1 “Chemistry Learning: Eco- Friendly and Inquiry-model based experimental chemistry with inherent safety aspects.” Project Code: DS-103, innovation project of one year duration funded by Delhi University in 2012
- 2 “Removal of toxic chemicals from laboratory effluents by green technologies” Project Code: DSC-201, innovation project of one year duration funded by Delhi University in 2014
- 3 “Degradation of Pesticides using Mixed Metal Oxide (MMO) Nanoparticles as catalysts, Whole cell organisms and Enzymes”, Project Code: DS-305, innovation project of one year duration funded by Delhi University in 2015

Conference Organised

1. Organised a two-day National Seminar on “Chemistry Education and Research in 21st Century” organised by the Department of Chemistry, Dyal Singh College (University of Delhi), Lodhi Road, New Delhi-03, held on February 07-08, 2008.
2. Organised a two-day National Seminar on “Chemistry Education and Research in 21st Century” organised by the Department of Chemistry, Dyal Singh College (University of Delhi), Lodhi Road, New Delhi-03, held on February 05-06, 2009.

Books

1. PRACTICAL CHEMISTRY for undergraduate for discipline course I and II (SEMESTER I TO VI) published by Ane Books Pvt.Ltd ISBN: 978-93-8212-790-1
2. Contributed in online content for undergraduate by ILLL, Delhi University.
3. An article entitled Pollution Concerns of Chemistry Laboratory Wastes in the book Environment and Chemistry, ISBN 978-81-8030-432-3
4. Edited a book, Environmental issues, published by Vidyanidhi Prakashan, ISBN: 978-93-80615-91-0
5. Practical inorganic chemistry, published by Manakin Press, ISBN: 978-93-84370-66-4
6. Chemistry Inorganic and Physical, published by Manakin Press, ISBN: 978-93-88342-23-0
7. “IPR and biotechnological innovations” chapter in a book Intellectual Property Rights: challenges and prospects, Imperial publications, ISBN: 978-81-949439-8-3

8. Edited the class 6 science book of the Bhartya Shiksha Board in 2023-24.

Edited Chapter

1. “IPR and biotechnological innovations” chapter in a book Intellectual Property Rights: Challenges and Prospects, Imperial Publications, ISBN: 978-81-949439-8-3

Conference Organisation/ Presentations (From 1st July 2021 onwards)

Research Projects (Major Grants/Research Collaboration) (From 1st July 2021 onwards)

Awards and Distinctions (From 1st July 2021 onwards)

Association With Professional Bodies

Indian society for analytical scientists, Delhi chapter

Other Activities like MOOCs/ Patents etc. (From 1st July 2021 onwards)

Signature of Faculty Member