

## FACULTY PROFILE PROFORMA

Title (Ms/Mr/Dr/Prof)	<b>Dr.</b>	First Name	<b>GEETA</b>	Last Name	<b>YADAV</b>	Photograph
Designation	Assistant Professor					
Department	Chemistry					
Address (Official)	Department of Chemistry, Kalindi College (University of Delhi), East Patel Nagar, New Delhi-110008					
Phone No.	8010905097					
Email	geetadevi@kalindi.du.ac.in					
<b>Education</b>						
Subject	Institution		Year		Details	
Asymmetric Synthesis	University of Delhi		2017		Ph.D.	
Chemistry (Organic)	University of Rajasthan		2011		M.Sc.	
Chemistry	University of Rajasthan		2009		B.Sc.	
<b>Career Profile</b>						
Organization/Institution	Designation		Duration		Role	
Kalindi College	Assistant Professor		08-01-2024 to Till Date		Teaching & Administrative Duties	
Department of Chemistry, University of Delhi	Women Scientist Scheme–A (WOS-A)		06-07-23 to 07-01-24		Research work	
Swami Shradhhanand College	Assistant Professor		22-02-2021 to 10-10-22		Teaching & Administrative Duties	
Department of Chemistry, University of Delhi	Research Associate		16-02-2018 to 31-12-2020		Research work	
Department of Chemistry, University of Delhi	Assistant Professor		20-7-2016 to 19-01-2017		Teaching & Administrative Duties	
<b>Research Interests/Specialization</b>						

Asymmetric synthesis and catalysis			
<b>Administrative Assignments/Contribution to corporate life</b>			
<ul style="list-style-type: none"> <li>• Convenor of student feedback and student satisfaction survey, 2024-25.</li> <li>• Committee Member of BA program committee, 2024-25.</li> <li>• Committee Member of outstation and foreign student cell, 2024-25.</li> <li>• Committee Member of repository committee, 2024-25.</li> </ul>			
<b>Teaching Experiences (Subject/Courses taught)</b>			
<ul style="list-style-type: none"> <li>• BSc (P) Life Sciences Semester V: Coordination Chemistry and its application in biological systems</li> <li>• BSc (P) Life Sciences Semester VI: Polynuclear hydrocarbons and UV-IR</li> <li>• BSc (H) Chemistry Semester I: Atomic Structure &amp; Chemical Bonding</li> <li>• BSc (H) Chemistry Semester V: Applied Organic Chemistry</li> </ul>			
<b>Research Guidance</b>			
N.A.			
<b>Publication (Peer Reviewed/Indexed Journals)</b>			
<b>Year of Publication</b>	<b>Title</b>	<b>Journal (Name of the journal, Vol. Issue ISSN)</b>	<b>Co-Author</b>
2024	Pyrrolidine-based C 1-symmetric chiral transition metal complexes as catalysts in the asymmetric organic transformations	<i>Tetrahedron Letters</i> , 134 154835, ISSN: 0040-4039	Pooja Chaudhary, B. Pani And S. Singh
2024	Homogeneous catalytic epoxidation of olefins	Elsevier volume 4, 257, ISBN: 978-0-443-15620-5	Deepa Uppal, Priyanka Jhaharia and Surendra Singh
2022	Synthesis and structural studies of Pd(II) complexes of bidentate Schiff bases and their catalytic activities as pre-catalysts in the Mizoroki-Heck reaction	<i>Polyhedron</i> , 222, 115931, ISSN	Dhan Raj Meena, Deepa, Mohd Jubair Aalama, Pooja Chaudhary, Surendra Singh

2022	A simple protocol for the determination of enantiopurity of amines using BINOL derivatives as chiral solvating agents via <sup>1</sup> H- and <sup>19</sup> F-NMR spectroscopic analysis.	<i>RSC. Advances</i> , 12, 25457, ISSN-2046-2069	Pooja Chaudhary, Surendra Singh
2022	Synthesis of new chiral Mn(III)–salen complexes as recoverable and reusable homogeneous catalysts for the asymmetric epoxidation of styrenes and chromenes.	<i>New J. Chem.</i> 46, 1308, ISSN-1144-0546	Pooja Chaudhary, Krishna K. Damodaran, Surendra Singh
2021	DABCO Based Chiral Ionic Liquids as Recoverable and Reusable Organocatalyst for Asymmetric Diels-Alder Reaction.	<i>Chirality</i> , 34, 134, ISSN-1520-636X	M. J. Aalam, Deepa, P. Chaudhary, D. R. Meena, S. Singh
2021	Cellulose sulfate: An Efficient Heterogeneous Catalyst for the Ring Opening of Epoxides with alcohols.	<i>Synthetic Communications</i> , 51, 1834, ISSN- <a href="#">0039-7911</a>	P. Chaudhary, Deepa, D. R. Meena, M. J. Aalam, S. Singh
2020	Chiral Imidazolidin-4-one with a Catalytic Amount of Dicationic Ionic Liquid act as a Recoverable and Reusable Organocatalyst for Asymmetric Diels-Alder Reaction.	<i>Chirality</i> , 32, 64, ISSN-1520-636X	Deepa, P. Chaudhary, M. J. Aalam, D. R. Meena, S. Singh
2019	Prolinamide-catalyzed Asymmetric Organic Transformations.	<i>ChemistrySelect</i> 4, 5591-5618, ISSN-2365-6549	Deepa, S. Singh
2019	Synthesis of Dihydropyrimidinones (DHPMs) and Hexahydro Xanthene Catalysed by 1,4-Diazabicyclo [2.2.2] Octane Triflate Under Solvent Free Condition.	<i>Current Organic Synthesis</i> , 16, 1-25, ISSN-15701794	Deepa, P. Chaudhary, M. J. Aalam, S. Singh

2018	Asymmetric Henry reaction catalyzed by chiral Cu(II) salalen and salan complexes derived from (S)-proline.	<i>Inorganic Chimica Acta</i> , 479, 240-245, ISSN-0020-1693	A. Dixit, P. Kumar, S. Singh
2017	1,4-Diaza-bicyclo[2.2.2]octane trifluoroacetate: A highly efficient organocatalyst for the cyanosilylation of carbonyl compounds under solvent-free condition.	<i>ChemistrySelect</i> , 2, 4830, ISSN-2365-6549	S. Singh
2016	<i>N</i> -Arylprolinamide act as an organocatalyst for direct asymmetric aldol reaction of acetone with isatin,	<i>Tetrahedron: Asymmetry</i> , 27, 123, ISSN-0957-4166	S. Singh
2016	<i>trans</i> -4-Hydroxy-( <i>L</i> )-prolinamide as an efficient catalyst for direct asymmetric aldol reaction of acetone with isatins.	<i>Tetrahedron: Asymmetry</i> , 27, 463, ISSN-0957-4166	S. Singh
2016	( <i>l</i> )-Prolinamide imidazoliumhexafluorophosphate ionic liquid as an efficient reusable organocatalyst for direct asymmetric aldol reaction in solvent-free condition,	<i>RSC Advances</i> , 6, 100459, ISSN-2046-2069	S. Singh
2016	( <i>S</i> )-Pyrrolidine-containing chiral manganese (III)-salalen and salan complexes as catalyst for the asymmetric Henry reaction,	<i>Synlett</i> 27, 267, ISSN-0939-2661	P. Kumar, M. S. Chauhan, S. Singh
2016	Salts of 1-(Chloromethyl)-DABCO: A highly efficient organocatalyst for the alcoholysis of epoxides,	<i>Current catalysis</i> 5, 203, ISSN-2211-5447	A. Dixit, M. S. Chauhan and S. Singh
2016	Surfactant-directed Ag <sub>1</sub> -xNi <sub>x</sub> alloy nanoparticle catalyzed synthesis of aromatic azo derivatives from aromatic amines,	<i>Applied Catalysis A General</i> , 525, 50, ISSN-0926-860X	M. Kumar, K. Soni, S. Singh, S. Deka

2015	Methyloxonium triflate: An efficient catalyst for ring opening of epoxides with alcohols under ambient conditions,	<i>Current Catalysis</i> 4, 133, ISSN-2211-5447	M. Mishra, S. Singh
2015	Direct asymmetric aldol reaction catalyzed by <i>trans</i> -4-hydroxy-( <i>S</i> )-prolinamide in solvent-free conditions.	<i>Tetrahedron: Asymmetry</i> , 26, 1156, ISSN-0957-4166	S. Singh
2014	Ring-opening of epoxides with alcohols using Fe(Cp) <sub>2</sub> BF <sub>4</sub> as catalyst.	<i>Tetrahedron Lett.</i> 55, 3979, ISSN-0040-4039	S. Singh
2014	Fe(Cp) <sub>2</sub> BF <sub>4</sub> : An efficient Lewis acid catalyst for the aminolysis of epoxides,	<i>Synthesis</i> , 629, ISSN-0039-7881	M. S. Chauhan and S. Singh

#### Seminar/Workshop/Conferences Presentation/Organisation

- राष्ट्रीय स्वयं सेवक संघ: राष्ट्रीय स्वत्व के जागरण के सौ वर्ष इंद्र प्रस्थ अध्ययन केंद्र, दिल्ली एवं नॉन कॉलेजियेट महिला शिक्षा बोर्ड दिल्ली विश्वविद्यालय के संयुक्त तत्वाधान में समायोजित राष्ट्रीय संगोष्ठी में विज्ञान रास्त्र वाद का एक उपमा: आचार्य प्रफुल्ल चन्द्र राय और उपनिवेशोत्तर उपविषय पर दिनांक 26-27 अप्रैल 2025 को शोध पत्र प्रस्तुत किया।
- मेधाविनी सिन्धु सृजन, दिल्ली प्रान्त द्वारा आयोजित रास्त्र निर्माण में लोकमाता अहिल्या बाई होलकर का अवदान पर एक दिवसीय राष्ट्रीय संगोष्ठी में पूण्य श्लोका अहिल्या बाई होलकर: धैर्य कि प्रतिपूर्ति, कर्तव्य परायण, प्रेरणा दायक नेतृत्व और कुशल प्रशासक उपविषय पर दिनांक 11 अप्रैल 2025 को शोध पत्र प्रस्तुत किया।
- Presented a **Poster presentation** in the 24<sup>th</sup> National Conference on catalysis (**CATSYMP-24**), (**CSCME-2025**) Department of Chemistry and biochemistry, Thapar institute of engineering and technology, India on **24-26, February 2025**, entitled “(L)-Prolinamide imidazolium hexafluorophosphate ionic liquid as an efficient reusable organocatalyst for direct asymmetric aldol reaction” **G. D. Yadav** and S. Singh\*.

- Presented an **Oral presentation** in the 2<sup>nd</sup> International Conference on Advanced materials for green chemistry and sustainable environment K. R. Mangalam University, Gurugram & Shivaji College, University of Delhi, India on **20-21, March 2025**, entitled “*trans*-4-hydroxy-(*L*)-prolinamide imidazolium hexafluorophosphate ionic liquid as an efficient reusable organocatalyst for direct asymmetric aldol reaction” **G. D. Yadav** and S. Singh\*.
- Presented an **oral presentation** in the 2<sup>nd</sup> National Conference on (ETFC-2020), Department of Chemistry, Kirori Mal College, University of Delhi, Delhi, India on **10-11, January 2020**, entitled “Development of Reusable (*L*)-Prolinamides as organocatalysts in direct asymmetric aldol reaction” **G. D. Yadav** and S. Singh\*.
- Presented an **oral presentation** in the national conference on (NFCFA 2019), Department of Chemistry, Bits pilani, Goa Campus, Goa, India on **20-22, December 2019**, entitled “(*L*)-Prolinamide imidazolium hexafluorophosphate ionic liquid as an efficient reusable organocatalyst for direct asymmetric aldol reaction in solvent-free condition”, **G. D. Yadav** and S. Singh\*
- Presented an **oral presentation** in DU-JAIST Symposium 2016, Department of Chemistry, University of Delhi, Delhi, India on **26-27, February 2016**, entitled “Ionic liquid of *trans*-4-hydroxy-(*L*)-prolinamide with imidazole as efficient recoverable organocatalyst for direct asymmetric aldol reaction”, **G. D. Yadav** and S. Singh\*
- Presented an **oral presentation** in international conference on FCASI-2016 at Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan on **25-26, April 2016**, entitled “Salts of 1,4-diaza-bicyclo[2.2.2]octane: A highly efficient organocatalyst for the cyanosilylation of carbonyl compounds”, **G. D. Yadav** and S. Singh\*
- Presented an **poster presentation** in the national conference on OCSD-2016 at Department of Chemistry, BITS, Pilani Rajasthan on **29-30, August 2016**, entitled “Development of Reusable (*L*)- Prolinamides as organocatalysts in direct asymmetric aldol reaction”, **G. D. Yadav** and S. Singh\* (**Awarded as Best Poster Presentation**)
- A **poster presentation** in 22<sup>nd</sup> National Symposium on Catalysis (CATSYMP 22) at CSIR-CSMCRI, Bhavnagar, Gujarat, India on **January 7-9, 2015**, entitled “*Trans*-4-hydroxy-*L*-prolinamide act as an efficient catalyst for asymmetric aldol reaction”, **G. D. Yadav** and S. Singh\*
- A **poster presentation** in National Conference on Frontiers at the Chemistry-Allied Science Interface (FCASI) at Rajasthan University, Jaipur, India on **March 13-14, 2015**, entitled “Synthesis of 4-hydroxy-(*L*)-prolinamide as efficient catalyst for the asymmetric direct aldol reaction”, **G. D. Yadav** and S. Singh\*

- A **poster presentation** in International Conferences on Current Challenge in Drug Discovery Research. (CCDDR 2015) held at MNIT, Jaipur, India on **November 23-25, 2015**, entitled “Direct asymmetric aldol reaction ketone with isatins catalyzed by (S)- prolinamide”, **G. D. Yadav** and S. Singh\*
- A **poster presentation** in National Conference on Recent Advancement in Chemical Sciences (RAICS 2015) held at MNIT, Jaipur, **August 21-23, 2015** entitled “N-Arylprolinamide act as an organocatalyst for direct asymmetric aldol reaction of acetone with isatin”, **G. D. Yadav** and S. Singh\*
- Presented an **oral presentation** in National Conference on Chirality (NCC)-2013 at Department of Chemistry, M. S. University of Baroda, Vadodara, Gujarat, **18-19, December 2015**, entitled “Prolinamide derived from (S)- $\alpha$ -methylphenyl amine act as an efficient catalyst for asymmetric aldol reaction”, **G. D. Yadav** and S. Singh\*
- **Presented a poster** in 20<sup>th</sup> ISCB conference at University of Delhi, Delhi, India, **1-4 March 2014**, entitled “Ring-opening of epoxides with alcohol using Fe(Cp)<sub>2</sub>BF<sub>4</sub> as catalyst”, **G. D. Yadav** and S. Singh\*
- **Presented a poster** in One-day Symposium on Emerging trends in translation research in India at Shiv Nadar University, India on **12<sup>th</sup> April, 2014**, entitled “Highly efficient regio-selective methanolysis of epoxide catalyzed Fe(Cp)<sub>2</sub>BF<sub>4</sub>”, **G. D. Yadav** and S. Singh\*
- A **poster presented** entitled National Conference on Mastering in Molecules and Materials (**M<sup>3</sup>-2014**) at NIT Krukshetra, Haryana, India on **16-17 Oct 2014**, “Fe(Cp)<sub>2</sub>BF<sub>4</sub> as a Lewis acid catalyst for ring opening of epoxides with amines”, **G. D. Yadav** and S. Singh\* (**Awarded as Best Poster Presentation**)
- **Presented a poster** in National Conference on Chirality (NCC)-2013 at Department of Chemistry, M. S. University of Baroda, Vadodara, Gujarat, India on **7-8 December 2013**, entitled “Synthesis and Characterization of Chiral Prolinamide modified with ionic liquid for asymmetric Aldol Reaction”, **G. D. Yadav** and S. Singh\*
- Attended the Workshop on Electronic Structure, Atomistic and Statistical Modeling in Chemistry, Materials and Life Sciences at Department of Chemistry, University of Delhi, Royal Society of Chemistry London (North India Section) and Schrodinger GmbH, Bangalore, India on **Oct. 8-10, 2014**.
- Participated in the Workshop on Emerging Trends in Development of Drugs and Devices at Department of Chemistry, University of Delhi and three national Science Academies of India on **Jan. 21-23, 2013**.

<b>Awards &amp; Distinctions</b>
<ul style="list-style-type: none"> <li>• <b>Best Poster Award in the</b> national conference on OCSD-2016 at the Department of Chemistry, BITS, Pilani Rajasthan on <b>29-30, August 2016.</b></li> <li>• <b>Best Poster Award in the</b> National Conference on Mastering in Molecules and Materials (<b>M<sup>3</sup>-2014</b>) at NIT Kurukshetra, Haryana, India on <b>16-17 Oct 2014,</b></li> <li>• <b>Senior Research Fellowship 2013</b></li> <li>• <b>Junior Research Fellowship 2011</b></li> </ul>
<b>Public Service/University Service/Consulting Activity</b>
<b>Faculty Development Programme (FDP)/FIP/Refresher Course attended:</b>
<ol style="list-style-type: none"> <li>1. Orientation program on “NEP Orientation &amp; Sensitization Programme” organized by UGC-Malviya Mission Teacher Training Centre, in collaboration with SGTB Khalsa College, University of Delhi from 3rd September- 13th September 2024</li> <li>2. Refresher Course on Chemistry conducted by the Centre for Professional Development in Higher Education (CPDHE), UGC-HRDC, University of Delhi, held from 12th July 2022 – 25th July 2022</li> <li>3. One Week (Online) Interdisciplinary Faculty Development Programme on ‘Creation and development of MOOCs while managing online classes’ (24th August – 31st August 2021) organised by Keshav Mahavidyalaya, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi</li> </ol>
<b>Professional Societies Memberships</b>
NA
<b>Projects (Major Grants/Collaborations)</b>
NA
<b>Other Details</b>



**Dr. Geeta Devi Yadav**

**Department of Chemistry**

**Kalindi College**