




# SLC (University of Delhi) Shyam Lal College



NAAC A++

## Faculty Profile

Title	Dr	First Name	Radhika	Last Name	Gupta	Photograph
Designation		Assistant Professor				
Department		Chemistry				
Address		2B/151, Second Floor, Sector-2, Vaishali, Ghaziabad, Uttar Pradesh 201010				
Email		<a href="mailto:rguptachem@shyamlal.du.ac.in">rguptachem@shyamlal.du.ac.in</a> , <a href="mailto:radgupta123@gmail.com">radgupta123@gmail.com</a>				
Web-Page		<a href="https://scholar.google.co.in/citations?user=5bwfC8cAAAAJ&amp;hl=en">https://scholar.google.co.in/citations?user=5bwfC8cAAAAJ&amp;hl=en</a>				

### Educational Qualification

Degree	Subject	University/ College/Institution	Year
PhD	Chemistry	Department of Chemistry, University of Delhi, Delhi, India	2022
MSc	Chemistry	Indian Institute of Technology, Delhi, Delhi, India	2015
BSc (H)	Chemistry	Hans Raj College, University of Delhi, Delhi, India	2013

### Experience

	Name of the University/College/ Institute/Organisation	Designation & Status (Permanent/Ad-hoc)	From	To	Effective time period
Teaching	Department of Chemistry, Shyam Lal College, University of Delhi	Guest	04-Feb-2021	01-June-2023	2 Years 4 Months
	Department of Chemistry, Shyam Lal College, University of Delhi	Permanent	02-June-2023	Present	
Research/ Corporate					
Consultancy					

### Teaching-Learning Process (Academic Year 2022-23 Onwards)

Are You using ICT (LMS, E-Resources)?	If yes, please give the details below:	
	Name	Total Numbers
E-Resources		
Techniques and Platforms		

<b>Career Advancement and Contribution to College Corporate Life (2022-23 Onwards)</b>								
	Name of the Committee/ Centre/ Society/ Cell	Designation	From	To				
Convenor/Member of Committees	Website Committee	Member	08-July-2023	Present				
	Computer Committee	Member	08-July-2023	Present				
Any Other Administrative Responsibility (Bursar, Coordinator, Superintendent etc.)								
<b>Areas of Interest/Specialisation</b>								
S.No.	Areas of Interest/ Specialisation							
1	Green Chemistry, Heterogeneous Catalysis, Nanocatalysis, Catalysis through Explicit Hydrogen Bonding Interactions							
2	Immobilization of Ionic Liquids, Ionic Liquids as Catalysts							
3	Development of Nanomaterials and their Characterization, Covalent Organic frameworks, Water Remediation							
<b>Subjects Taught</b>								
S.No.	Subject		S.No.	Subject				
1	Atomic Structure and Chemical Bonding		5	Inorganic Materials of Industrial Importance				
2	Chemistry of s- and p- block Elements		6	Green Chemistry				
3	Conductance and Chemical Kinetics		7	Polynuclear Hydrocarbons				
4	Quantum Chemistry and Spectroscopy		8	UV Vis and IR Spectroscopy				
<b>Publications: Citation Index in Scopus/Web of Science or Pub Med/ Indian Citation Index</b>								
Title of Paper	Name of the Author	Title of the Journal	Year of Pub.	Citation Index	h-Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citations	Impact factor, if any (2024)
Synthesis of iron-oxide palladium nanoparticles and its catalytic applications for direct coupling of acyl chlorides with alkynes	R. K. Sharma, M. Yadav, R. Gaur, R. Gupta, A. Adholeya, M. B. Gawande	ChemPlusChem	2016			University of Delhi	30	3.21
Deep eutectic solvents compatible Aspergillus niger cellulase and its utility	R. Gupta, A. Sadaf, J. Grewal, S. K. Khare	Journal of Energy and Environmental Sustainability	2017			IIT Delhi	6	

for in situ pre-treatment and saccharification of wheat straw								
A straightforward one-pot synthesis of bioactive N-aryl oxazolidin-2-ones via a highly efficient Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> -supported acetate-based butylimidazolium ionic liquid nanocatalyst under metal- and solvent-free conditions	R. Gupta, M. Yadav, R. Gaur, G. Arora, R. K. Sharma	Green Chemistry	2017			University of Delhi	70	11.034
A novel and template-free synthesis of multifunctional double-shelled Fe <sub>3</sub> O <sub>4</sub> -C nanoreactor as an ideal support for confined catalytic reactions	G. Arora, M. Yadav, R. Gaur, R. Gupta, R. K. Sharma	ChemistrySelect	2017			University of Delhi	17	2.307
Aerobic Oxidation of Thiols to Disulfides by Silver-Based Magnetic Catalyst	R. Gaur, M. Yadav, R. Gupta, G. Arora, P. Rana, R. K. Sharma	ChemistrySelect	2018			University of Delhi	23	2.307
Cross-dehydrogenative C(sp <sup>3</sup> )-C(sp <sup>3</sup> ) coupling via C-H activation using magnetically	P. Rana, R. Gaur, R. Gupta, G. Arora, R. K. Sharma	Chemical Communications	2019			University of Delhi	39	6.222

retrievable ruthenium-based photoredox nanocatalyst under aerobic conditions								
Synthesis of magnetic nanoparticles using potato extract for dye degradation: a green chemistry experiment	R. K. Sharma, S. Yadav, R. Gupta, G. Arora	Journal of Chemical Education	2019			University of Delhi	43	3.0
Silica-coated magnetic nanoparticles supported DABCO-derived acidic ionic liquid for the efficient synthesis of bioactive 3,3-di(indolyl)indolin-2-ones	R. Gupta, M. Yadav, R. Gaur, G. Arora, P. Rana, P. Yadav, A. Adholeya, R. K. Sharma	ACS Omega	2019			University of Delhi	49	4.1
Ni(II)-loaded magnetically separable nanoreactor scaffold: fabrication and potential catalytic application in confined synthesis of unsymmetrical diaryl sulfides in water	G. Arora, M. Yadav, R. Gaur, R. Gupta, P. Rana, P. Yadav, R. K. Sharma	RSC Advances	2020			University of Delhi	10	3.9
Recent Development of Covalent Organic Frameworks (COFs): Synthesis and Catalytic (Organic-Electro-Photo) Applications	R. K. Sharma, P. Yadav, M. Yadav, R. Gupta, P. Rana, A. Srivastava, R. Zboril, R. S. Varma,	Materials Horizons	2020			University of Delhi	309	14.356

	M. Antonietti, M. B. Gawande							
Fabrication of copper-based silica-coated magnetic nanocatalyst for efficient one-pot synthesis of chalcones via A3 coupling of aldehydes-alkynes-amines	P. Yadav, M. Yadav, R. Gaur, R. Gupta, G. Arora, P. Rana, A. Srivastava, R. K. Sharma	ChemCatChem	2020			University of Delhi	22	5.497
Endocrine Disruption and Obesity: A current review on Environmental Obesogens	R. Gupta, P. Kumar, N. Fahmi, B. Garg, S. Dutta, S. Sachar, A. S. Matharu, K. S. Vimalawan	Current Research in Green and Sustainable Chemistry	2020			University of Delhi	60	5.66
Magnetically supported ionic liquids: a sustainable catalytic route for organic transformations	R. Gupta, M. Yadav, R. Gaur, G. Arora, P. Yadav, R. K. Sharma	Materials Horizons	2020			University of Delhi	41	14.356
Magnetically retrievable copper ionic liquid nanocatalyst for cyclooxidative synthesis of 2-phenylquinazolin-4(3H)-ones	R. Gupta, G. Arora, P. Yadav, R. Dixit, A. Srivastava, R. K. Sharma	Dalton Transactions	2021			University of Delhi	11	4.0
Ultrasonically-mediated one-pot synthesis of substituted	G. Arora, R. Gupta, P. Yadav, R. Dixit,	Current Research in Green and Sustainable	2021			University of Delhi	13	5.66

imidazoles via sulfamic acid functionalized hollow magnetically retrievable solid-acid catalyst	A. Srivastava, R. K. Sharma	Chemistry						
Fabrication, functionalization and advanced applications of magnetic hollow materials in confined catalysis and environmental remediation	G. Arora, M. Yadav, R. Gaur, R. Gupta, P. Yadav, R. Dixit, R. K. Sharma	Nanoscale	2021			University of Delhi	18	6.7
An Efficient and Sustainable Approach to Decarboxylative Cross-Coupling Using Silica Coated Magnetic Copper Nanocatalyst for the Synthesis of Internal Alkynes	M. Yadav, A. Srivastava, R. Gaur, R. Gupta, G. Arora, R. K. Sharma	Frontiers in Chemistry	2022			University of Delhi	2	5.5
Chemistry of magnetic covalent organic frameworks (MagCOFs): from synthesis to separation applications	P. Yadav, M. Yadav, R. Gaur, R. Gupta, G. Arora, A. Srivastava, A. Goswami, M. B. Gawande, R. K. Sharma	Materials Advances	2022			University of Delhi	10	5.0
Synthesis of phenol esters by direct C-H activation of	P. Yadav, R. Gupta, G. Arora, A.	New Journal of Chemistry	2022			University of Delhi	2	3.591

aldehydes using a highly efficient and reusable copper-immobilized polyimide covalent organic framework (Cu@PI-COF)	Srivastava, R. K. Sharma							
One-pot Synthesis of Propargylamines using Aldehydes-Amines-Acetylene via an Efficient Nickel-Based Silica-Coated Magnetic Nanocatalyst	P. Yadav, R. Gupta, G. Arora, A. Srivastava, R. K. Sharma	ChemistrySelect	2022			University of Delhi		2.307
Sunlight-driven N-acetylation of anilines: a green chemistry approach	A. Gupta, I. T. Sidhwani, R. Gupta, Y. Monga, R. K. Sharma	New Journal of Chemistry	2023			SLC, University of Delhi		3.591
Heterogeneous Catalysis under Continuous Flow Conditions	A. Gupta, R. Gupta, G. Arora, P. Yadav, R. K. Sharma	Current Organic Chemistry	2023			SLC, University of Delhi		1.933
4-Amino-3-hydrazino-5-mercapto-1,2,4,-triazole (PURPALD) in organic chemicals analysis: Distinguishing aldehydes and ketones	B. M. Kandpal, R. Tyagi, S. Tehlan, S. Singh, R. Gupta, Y. Monga, A. Gupta	Journal of Integrated Science and Technology	2023			SLC, University of Delhi	-	2.533
<b>Books and Chapters in Edited Volumes/Books published, and papers in National /International conference Proceeding per teacher during the Year</b>								
Title of Book/Paper/ Book Chapter		Publisher			National/International		Year	

Water Quality and Sustainability in India: Challenges & Opportunities	Elsevier Publications	International	2017
Other Potential Catalytic Applications & Future Perspectives in: Silica-Based Organic-Inorganic Hybrid Nanomaterials	World Scientific Publications	International	2019
Catalytic Applications of Silica based Organic-Inorganic Hybrid nanomaterials for different organic transformations in: Silica-Based Organic-Inorganic Hybrid Nanomaterials	World Scientific Publications	International	2019
Silica encapsulated magnetic nanoparticles in: Silica-Based Organic-Inorganic Hybrid Nanomaterials	World Scientific Publications	International	2019
Green and Sustainable Pathways for Wastewater Purification in “Advances in Water Purification Techniques: Meeting the Needs of Developed and Developing Countries”	Elsevier Publications	International	2019
Current Status of Heavy Metal Contaminants and their Removal/Recovery Techniques in “Current status of environmental research on water contaminants”	American Chemical Society	International	2020
Alternative Reaction Media in “Green chemistry for beginners”	Jenny Stanford Publishing	International	2020
Catalysis: A Promising Green Technology in “Green chemistry for beginners”	Jenny Stanford Publishing	International	2020
Design, development, and application of organic–inorganic hybrid nanocatalysts for organic reactions in aqueous medium in “Aqueous Mediated Heterogeneous Catalysis”	De Gruyter	International	2022
Supported ionic liquids for advanced catalytic applications in “Non-Conventional Solvents”	De Gruyter	International	2023

**Conference/ Seminar/ Symposium/ Workshop/ Presentation**

Sr. No.	National/ International/state	Topic	Presentation/Attended /Resource Person	Date	Duration	
1.	National	RSC Workshop Chemistry for Tomorrow’s World	Best Poster Presentation Award	Dec, 2015		
2.	National	RSC Workshop on	Poster Presentation	Oct,		



		Green Chemistry and Water Treatment		2016		
3.	International	Green Chemistry: Teaching and Technology	Oral Presentation	Oct, 2016		
4.	National	RSC Workshop on Recent Advances in Chemistry and Biology	Best Oral Presentation Award	Dec, 2016		
5.	National	Environmental Sustainability in Wastewater Remediation: Current Status and Future Prospects	Poster Presentation	Jan, 2017		
6.	International	Indo-UK Scoping Workshop on Development of Rural Biorefineries in India: From Waste to Wealth	Oral Presentation	Feb, 2017		
7.	International	Advancing Green Chemistry: Building a Sustainable Tomorrow	Poster Presentation	Oct, 2017		
8.	International	Effects of Pollution on Human Health	Participation	Dec, 2017		
9.	International	Emerging Trends in Drugs Development and Natural-Products	Participation	Jan, 2018		
10.	National	American Chemical Society on Campus	Participation	Feb, 2018		
11.	International	Sustainable Initiatives in Water Management	Best Oral Presentation Award	Mar, 2018		
12.	National	Green Chemistry Workshop	Oral Presentation	Aug, 2018		
13.	National	Chemistry for Human Health and Environment	Best Oral Presentation Award	Dec, 2018		
14.	International	6th World Congress on Nanomedical Sciences Chemistry Biology Interface: Synergistic in New Frontiers & Science & Technology for the Future of Mankind	Poster Presentation	Jan, 2019		
15.	National	Green Chemistry for Clean Environment	Oral Presentation	July, 2019		
16.	National	Recent Trends in Chemical Sciences	Organizing Committee Member	Sep, 2019		
17.	National	Green Chemistry: Designing Chemistry for Human Health and	Oral Presentation	Oct, 2019		

		Environment				
18.	International	INDO-UK Workshop on Green Chemistry for Societal Needs: Healthcare, Pollution and Circular Economies	Oral Presentation	Dec, 2019		
19.	International	ACS Workshop on Greening our Education System: Initiatives for Propagating and Preaching Beyond Benign Concepts in Classrooms and Laboratories	Organizing Committee Member	Dec, 2019		
20.	National	Hands on Scientific Software Training Programme at SLC	Resource Person	Feb, 2021		
21.	National	Hands on Capacity Building Training Workshop for Non-Teaching Staff at SLC	Resource Person	Mar, 2021		
22.	National	Essay Writing Competition organized at Rasaynika 2021 at SLC	Event Coordinator	April, 2021		
23.	International	Sustainable Circular Economy: A Solution to Global Issues at SLC	Teacher Coordinator	July, 2021		
24.	National	SLC Eminent Lecture Series 2021-2022	Teacher Coordinator	Sep, 2021		
25.	National	Inter College 2021 Short Term Certificate Course on „Preparation & Application of Magnetic Nanoparticles and Hands-on Software Training“ at SLC	Teacher Coordinator	Sep, 2021		
26.	National	Outreach Programme on „Virtual Workshop on Laboratory Set-Up“ at SLC	Teacher Coordinator	Dec, 2021		
27.	National	Water Quality Assessment of Indian Rivers at SLC	Teacher Coordinator	Feb, 2022		
28.	International	Bharatiya Business Practices: A Roadmap to Future Sustainability	Oral Presentation	April, 2023		

29.	National	World Standards Day 2023 Celebrations	Teacher Coordinator	Oct, 2023		
30.	National	Inauguration of The Catalyst Club Chem (H) Society and The Excited State	Event Coordinator	Nov, 2023		
31.	International	International Science Partnership Fund: Resilient Planet Symposium hosted by British Council India	Participated	March, 2024		

#### Research Projects/ Innovation Projects (Major Grants/Research Collaboration)

S.No.	Title of the Project	Funding Agency	Status/Output

#### Research Guidance (Ph. D./ M. Phil.)

	No. of Ph.D. Students	No. of M.Phil. Students
Awarded		
Submitted		
Under Progress		

#### Fellowships/Awards /Distinctions/Recognitions

Year of Award	Name of the Fellowship/Award/ Distinction/ Recognition	Designation	Name of the Academic Bodies /Association	International /National/ State
2016-2020	Junior Research Fellowship	Rank 17	CSIR-UGC	National
2015	GATE	Qualified	GATE	National
2013	IIT JAM	Rank 117	IIT	National
2010-2015	Inspire Fellowship		DST, GoI	National

#### Incentive to the teachers who receive recognition/awards

State	National	International

#### Association with the Professional Bodies

	Name of the Organisation	Year
Membership	American Chemical Society, Royal Society of Chemistry	
Any Other	Green Chemistry Network Centre	

#### Development of E-Learning Delivery Process/Material

S.No.	Title of the Module	Recognized by/Submitted at/ Delivered at any government setup

#### Refresher/ Orientation Programme/ FDP / Other Specialised Courses

S.No.	Topic	Name of the Organiser	Place	Duration and Year
1	<b>Attended</b> 4-Week Faculty Induction/Orientation Programme	Teaching Learning Centre, Ramanujan College, University of Delhi	Delhi	4 week, 22 June - 21 July, 2023
2	<b>Attended</b> Advanced Research	Teaching Learning Centre,	Delhi	2 week, 22 Aug -

	Methodology	Ramanujan College, University of Delhi		05 Sep, 2023
3	<b>Attended</b> One Week FDP on Recent Advances in Basic and Applied Sciences	SLC University of Delhi and Mahatma Hansraj Faculty Development Centre, Hansraj College	Delhi	1 week, 11 Dec - 16 Dec, 2023
4	<b>Resource Person</b> in One Week Interdisciplinary FDP on Integrating Sustainability in Higher Education	SLC University of Delhi and Mahatma Hansraj Faculty Development Centre, Hansraj College	Delhi	11-Dec-2023

### Declaration

I do hereby solemnly declare that the information given and the statements made by me are correct and true to the best of my knowledge.



(Dr Radhika Gupta)

**Signature with Full Name**