

JSS Mahavidyapeetha JSS Academy of Technical Education, Noida





FACULTY PROFILE

Department: Chemistry

1. Personal Details

NAME	Dr. Shikha Sharma	
DEPARTMENT	Chemistry	A S
DESIGNATION	Assistant Professor	
PHONE	8105614933	
EMAIL ID	shikha.sharma@jssaten.ac.in	
Date of Joining	06-11-2024	
(JSSATEN)		

2. Experience

Total Experience in	Teaching: 3 Years	Industry: -	Research: 1 Years
Years			

3. Qualifications

Courses	Specialization	Year of award	Institution	University
B.Sc.	Chemistry	2012	St. Stephen's College	University of Delhi
M.Sc.	Chemistry	2014	Indian Institute of Technology IIT Roorkee	Indian Institute of Technology IIT Roorkee
Ph.D.	Organic Electronics	2020	Indian Institute of Science IISc Bangalore	Indian Institute of Science IISc Bangalore

4. Research & Publications

Papers Published in Web	06	
of Science indexed		
Journals		
Papers Published in	06	
SCOPUS indexed		
Journals		
Papers Published in	00	
other Journals		
Papers Presented in		
Conferences /	07	
Symposium		
Books / Book	00	
chaptersPublished		

5. Research Guidance

PhD Guide? Give field	Yes,	University:
& University	Chemistry, Porous Organic	Netaji Subhas University of
	Polymers for	Technology NSUT Dwarka, Delhi
	Environmental	and JSS Academy of Technical
	Remediation	Education, Noida
PhDs / Projects Guided	Ph.D. Guiding: 01 (One)	Projects at Master's Level: 05

6. Grants

i. Funds Received (Projects)

Project Name	Grant Amount	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
Dr DS Kothari Post-	7.2	September	3Years	DST
Doctoral Fellowship	Lakhs x	2021		
	3			

ii. Patents

Sl.	Title Details	Details of award of patent /
No.		Filed
1	Non-aqueous redox flow battery with	Applicant: Indian Institute
	Diketopyrropyrrole derivatives based redox active	of Science;
	electrolyte	Sharma S.; Rathod S.;
		Aetukuri N.; Shukla A. K.;
		Patil S.
		IPTeL Ref No: CS-SSCU-
		2019-022
		Status: Granted
		Patent Certificate No.:
		450702
		Filing date: 25/09/2020

iii.Consultancy

Title of the work	Amount	Date of	Duration	Grant issuing authority/
	in Rs.	receiving		Body / Organization
		the Grant		
	Nil			

7. Awards Received

Awards	
1	Received "Best presentation award" in paper presentation held at IISc in 2016.
	The competition involved presenting research work and was judged on the basis
	of presentation skills and the quality of the research.
2	Awarded DST-INSPIRE scholarship for the academic year 2009-2014
	(awarded to only top 1% students based on their performance at the
	National level)
3	Awarded KPMG scholarship in 2011 awarded to students with a consistent and
	strong academic track record of excellence
4	Stood 2nd rank in B.Sc. Chemistry (hons.) in Delhi University (DU) for year
	2009-2012.
5	Awarded "Ramesh Goel Memorial Prize" in year 2010-2011 for being the best

student in II year at St. Stephen's college, Delhi.

Awarded "Sardar Hansa Singh Memorial Chemistry Prize" in year 2010-2011 at St. Stephen's college, Delhi.

8. Publications

6

i. International Journals

S	Title of the paper	Name(s) of	Name of	Volume No.	wo	Imp	Publi
l.		Author(s)	the	Issue No. Year	S/	act	sher
N			Journal		Sco	Fac	
0					pus	tor	
					,		
					Bot		
					h		
1	Enhanced	Pritee, Pritee;	Langmuir	2024 , 40 (49),	Bot	3.7	ACS
1			Langmuir	, , , , ,		3.7	ACS
	Photocatalytic	Dhariwal,		26007-26017	h		
	Degradation of	Neeraj;					
	Environmental	Yadav,					
	Pollutants using A	Preety;					
	Triphenylamine-	Sharma,					
	based Polymer:	Shikha*,					
	Synthesis,	Thakur,					
	Characterization	Sanjeeve*					
	and Mechanistic	[*Correspon					
	Insights	ding author]					
2	Development of a	Pritee, Pritee;	Chemistry	2024 (Accepted)	Bot	2.3	Sprin
	Novel Pyrimidine	Sharma,	Africa		h		ger
	based Hydroxy Azo-	Shikha*,					
	Polymer for the	Thakur,					
	Selective Removal of	Sanjeeve*					
	Cationic Dyes	[*Correspon					
		ding author]					
3	Electrochemical	Sharma S.;	Chemistry:	2021 , <i>27</i> , 1-10.	Bot	3.9	Wiley
	Evaluation	Rathod S.;	A European		h		-VCH
	of	Yadav S. P.;	Journal				
	Diketopyrrolopyrrole	Chakraborty					
	Derivatives for Non-	A.; Shukla A.					

	aqueous Redox Flow	K.; Aetukuri					
	Battery	N.; Patil S					
4	Fermi Level Pinning	Sharma S.;	ACS Applied	2020, 2 (1),	Bot	4.4	ACS
	Induced	Ghosh S.;	Electronic	66-73.	h		
	by Doping in Air	Ahmed T.;	Materials				
	Stable N-type	Ray S.; Islam					
	Organic	S.; Salzner					
	Semiconductor	U.; Ghosh A.;					
		Seki S.; Patil					
		S.					
5	Inverted perovskite	Sharma S.;	Solar	2019, <i>186</i> , 9-	Bot	6.0	Elsev
	solar cells	Sakai N.; Ray	Energy	16.	h		ier
	with air stable	S.; Senanayak					
	Diketopyrrolopyrrole	S. P.;					
	-based electron	Sirringhaus					
	transport layer	H.; Snaith H.					
		J.; Patil S.					
6	Synthesis and	Ray S.;	Journal of	2017 , <i>121</i> , <i>30</i> ,	Bot	3.3	Elsev
	Characterization of	Sharma S.;	Physical	16088-16097	h		ier
	Quinoidal	Salzner S.;	Chemistry				
	Diketopyrrolopyrrole	Patil S.	C				
	Derivatives						
	with Exceptionally						
	High Electron						
	Affinities						
7	Diketopyrrolopyrrole	Sharma S.;	ECS	2019, <i>3</i> , 449-449	NA	NA	Abstr
	Based Derivative for	Suman R.;	Meeting				acts
	Non-	Aetukuri N.;	Abstracts				
	Aqueous Redox	Shukla A. K.;					
	Flow Battery	Patil S.					

ii. National Journals

Sl.	Title of the	Name(s)	Name	Volume	WOS/	Impact	Publisher
No.	paper	of	of the	No. Issue	Scopus	Factor	
		Author(s)	Journal	No. Year	/ Both		
		11441101 (5)	o o car mar	1100 1001	, 20011		

iii. Conferences

Sl.	Title of the paper	Name(s)	Name of	Volum	WOS /	Impac	Publishe
No		of	the	e No.	Scopu	t	r
		Author(s	Conferenc	Issue	s	Factor	
)	e	No.			
				Year			
01	Diketopyrrolopyrrole	Sharma	235 th ECS	26 th to	NA	NA	NA
	Based Derivative for	S.; Suman	Meeting	30 th			
	Non-	R.;	Symposium,	May			
	Aqueous Redox	Aetukuri	Texas,	2019			
	Flow Battery	N.; Shukla	Dallas				
		A. K.;					
		Patil S.					
02	Presented at Review	Shikha	Advancing	Oct	NA	NA	NA
	cum discussion	Sharma	the	2015			
	meeting: Newton-		Efficiency				
	Advancing the		and the				
	Efficiency and the		Production				
	Production potential		potential of				
	of Excitonic Solar		Excitonic				
	Cells (APEX)-II		Solar Cells				
			(APEX)-II,				
			Brunel				
			University,				
			London				
3	APEX meeting	Shikha	IISER Pune	Feb	NA	NA	NA
		Sharma		2016			
4	Presented a brief	Shikha	DST-RCUK	Feb	NA	NA	NA
	review on Device	Sharma	consortium	2015			
	development-Bulk		on the				
	heterojunctions		'Advancing				
			the				
			Efficiency				
			and				
			Production				
			Potential of				
			-				

			Excitonic				
			Solar Cells				
			(APEX)',				
			IIT Delhi				
5	Presented poster entitled "Inverted Perovskite Solar Cells with Air Stable Diketopyrrolopyrrole -based Electron Transport Layer"	Shikha Sharma	International Workshop and Conference on Perovskite and Hybrid Photovoltaic s (ICPHPV- 2019), IIT	Feb 4 th -8 th 2019	NA	NA	NA
			Delhi				
6	Presented poster entitled "Interplay between Stability and Diradicaloid character of Quinoidal molecules"	Shikha Sharma	International Conference on Advanced Materials for Emerging Technologie s (ICAMET- 2023) held at Department of Physics, NSUT Dwarka	4 th -6 th May 2023	NA	NA	NA

iv. Workshops /Conferences Attended

Sl.	Name of the workshop /	Organizer	Date	
No.	Conference			

1	Attended the Ten-Days "NEP 2020	Malaviya Mission	December 02, 2024 to
	Orientation & Sensitization	Teacher Training	December 11, 2024
	Programme" under Malaviya Mission	Centre, University of	
	Teacher Training Programme (MM-	Allahabad	
	TTP) of University Grants		
	Commission (UGC)		
2	Completed the Six-Days	Department of	December 16, 2024 to
	Online AICTE-Training & Learning	Mechanical	December 21, 2024.
	(ATAL) Academy, Funded Faculty	Engineering, JSS	
	Development	Academy of Technical	
	Programme (FDP) on "CHALLENGES	Education, Noida	
	AND INNOVATION IN DIFFERENT		
	ENERGY STORAGE		
	TECHNOLOGIES"		
3	Attended the one day IPR awareness	IPR	3 Jan 2022
	programme conducted online		
4	Attended INDO-German workshop on	SSCU, IISc Bangalore	2017
	Renewable Energy (Organic Solar Cells)		
	and Curriculum Innovation in Science		
	Education		
5	Attended HORIBA Optical School held	JNCASR, Bangalore	22 nd May 2017 to 26 th
	at JNCASR, Bangalore	and HORIBA Scientific	May 2017
		Group	

v. Workshops / Conference (Organized)

Sl.	Name of the workshop /	Organized by	Date	Role
No.	Conference			
1	Organized and hosted the	Department of Chemistry,	4-5 th Nov	Co-
	webinar on "Career Prospects	NSUT, Dwarka	2022	Convener
	in Science"			
2	Organized the International	Department of Physics,	4 th -6 th May	Technical
	Conference on Advanced	NSUT Dwarka	2023	Committee
	Materials for Emerging			Member
	Technologies (ICAMET-2023)			

vi. Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

Sl.	Name of the workshop /	Organizer	Date
No.	Conference		
	Nil		

9. Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organized by	Date of completion / Award	Grade / Marks
1				

10. Membership of Professional Bodies:

$11. \ Any \ other \ information \ you \ will like to \ share \ about \ your \ professional \ experience$ i. FDP attended

S.No.	Title of FDP	Venue & Date
1.	Successfully completed the Ten-Days "NEP 2020 Orientation & Sensitization Programme" under Malaviya Mission Teacher Training Programme (MM- TTP) of University Grants Commission (UGC) organized by Malaviya Mission Teacher Training Centre, University of Allahabad	Online Mode December 02, 2024 to December 11, 2024
2	Successfully completed the Six-Days Online AICTE-Training & Learning (ATAL) Academy, Funded Faculty Development Programme (FDP) on "CHALLENGES AND INNOVATION IN DIFFERENT ENERGY STORAGE TECHNOLOGIES"	Online Mode December 16, 2024 to December 21, 2024

	ii. Administrative responsibility
1	Role as M.Sc course chairperson and involved in preparation of syllabus and curriculum at NSUT Dwarka during Dec 2021- Sep 2023.
2	Role as B.Tech course coordinator for preparation of syllabus and other academic activities
3	at NSUT Dwarka during Dec 2021- Sep 2023. Played role as time table coordinator at NSUT Dwarka during Dec 2021- Sep 2023.
4	Participated in design and establishment of modern M.Sc laboratory at NSUT Dwarka during
5	Dec 2021- Sep 2023. Involved in NBA accreditation for B.Tech and M.Sc. at NSUT Dwarka during Dec 2021- Sep
	2023.

Dr. Shikha Sharma

Assistant Professor, Dept of Chemistry

JSS Academy of Technical Education, Noida