



### **FACULTY DETAIL PERFORMA**

Title	First Name: Dr. Meenakshi	Last Name: Sharma		
Designation	Assistant Professor			
Department	Botany and life sciences			
E-mail	msharma@dr.du.ac.in			
Address	Sector 1, Dwaraka, Delhi-110075			
Office mail id/ Ph.no	daulatramcollegedu@gmail.com. 01127667863			



Educational Qualification: B.Sc., M. Sc., M. Phil., Ph. D., PDF

Degree	Institution	Year
Bachelor of Science	CCS University, Meerut	1999
(Life Sciences)		
Masters in science	CCS University, Meerut	2001
(Botany)		
Masters in philosophy	Department of Botany, University of Delhi.	2003
(Plant Microbiology and Biotechnology)		
Doctorate in Philosophy	Department of Environmental Studies,	2010
(Environmental Microbiology and Biotechnology)	University of Delhi	
Post-Doctoral Fellow	Institute of Genomics & Integrative Biology, Council of	2011-2012
(Environmental Microbiology and Biotechnology)	Scientific and Industrial Research, Delhi	

# Full Time Research Experience

Designation	Institute	Time period	Nature of Appointment
M.Phil.+ Ph.D.+ Research Associate	Botany, Environmental Science, CSIR-Institute of Genomics & Integrative Biology. Delhi	2003-2012 (9 Year)	Project Based

# Full time Teaching Experience:

S.no	Designation	Institution	Time Period	Nature of Appointment
1	Assistant Professor	Daulat Ram College, University of Delhi	July 2012-Jan 2023	Ad-hoc
			Jan 2023-till date	Permanent
2	Assistant Professor	ANDC, University of Delhi	4 Months	Ad-hoc
3	Assistant Professor	Miranda House College, University of Delhi	4 Months	Guest

### **Administrative Assignments:**

### **NEP course content Project (Theory & Practical):**

- Work as a course committee core team member for the preparation of DSC/SEC/GE paper for B.Sc. Botany Hons, 4 years full-time undergraduate course (2022)
- Core Team of Bioinformatics, Molecular Biology papers (syllabus up-gradation) for B.Sc. Botany Hons 2019-2022
- Core Team of Environmental management and Restoration Ecology paper (**syllabus up-gradation**) for B.Sc. Botany Hons 2021-2022

# Examination and evaluation duties assigned by the college / university or attending the examination paper evaluation:

S.No.	Nature of Activity	Designation	Institution/ Department	Year
1.	Paper setter and Examiner for B.Sc. III(H), Paper Bioinformatics	Assistant Professor	Botany, University of Delhi	April, 2023
2	Paper setter and Examiner for B.Sc. III(H), Paper Molecular Biology	Assistant Professor	Botany, University of Delhi	April, 2023
3	Paper setter and Examiner for B.Sc. III(H), Paper Biostatistics	Assistant Professor	Botany, University of Delhi	March, 2023
4	Paper setter and Examiner for B.Sc. III(H), Paper Bioinformatics	Assistant Professor	Botany, University of Delhi	August, 2022
5.	Paper setter and Examiner for B.Sc. III(H), Paper Bioinformatics	Assistant Professor	Botany, University of Delhi	August, 2022
6.	Paper setter and Examiner for B.Sc. III(H), Paper Bioinformatics	Assistant Professor	Botany, University of Delhi	April, 2022
7.	Paper setter for B.Sc. II(H), Paper Fundamental of Molecular Biology	Assistant Professor	Botany, University of Delhi	August, 2022
8.	Paper setter for B.Sc. II(H), Paper Fundamental of Molecular Biology	Assistant Professor	Botany University of Delhi	April, 2022
9.	Paper setter and Examiner for B.Sc. III(H), Paper Bioinformatics	Assistant Professor	Botany, University of Delhi	May, 2015
10.	UG OBE Invigilation duties	Assistant Professor	Daulat Ram College	2019-2021
11.	Evaluation of UG OB Exam scripts of  Bioinformatics Biostatistics Molecular Biology Genetics Industrial Microbiology Analytical Techniques in Plant Sciences Cell Biology	Assistant Professor	Botany University of Delhi	2019-2021
12	External/ Internal Practical examiner/ Theor Examination Duties	Assistant Professor	Botany University of Delhi	2012-2022

	<ul> <li>Bioinformatics</li> <li>Biostatistics</li> <li>Molecular Biology</li> <li>Genetics</li> <li>Industrial Microbiology</li> <li>Analytical Techniques in Plant Sciences</li> <li>Cell Biology</li> </ul>			
13.	Non-teaching staff exam Invigilation duty	Assistant Professor	Daulat Ram College	15th July 2021
14.	Non-teaching staff exam Evaluation duty	Assistant Professor	Daulat Ram College	30th July 2021
15	Non-teaching staff exam Invigilation duty	Assistant Professor	Daulat Ram College	31st July 2021
16	Non-teaching exam Evaluation duty	Assistant Professor	Daulat Ram College	11th August 2021

### Administrative Assignments as Convener, Co-Convener or Member in last three year:

Name of Institute	Society/Cell/Others	Designation	Time period	Experience
				(year)
Daulat Ram College,	Library Committee	Co-Convener	2022-2023	1
University of Delhi		(Science Section)		
Daulat Ram College,	Botanical Society Vasundhara	Jury Member	2022-2023	1
University of Delhi	(Photography and Poster Making)			
Daulat Ram College, University of Delhi	Film and Photography Society	Co-Convener	2022-2023	1
Daulat Ram College, University of Delhi	Annual Report/ Prospectus Committee	Member	2022-2023	1
Daulat Ram College, University of Delhi	Botanical Society Vasundhara	Jury Member	2019-2021	1
Daulat Ram College, University of Delhi	WDC	Jury Member	2020	1
Maitreyi College,	Fine Art Society	Jury Member	2020	1
University of Delhi				
Maitreyi College,	Fine Art Society and Video making	Jury Member	2021	1
University of Delhi				
Daulat Ram College,	Botanical Society	Convener and	2019-2021	2
University of Delhi	Vasundhara	Staff advisor		
Daulat Ram college, University of Delhi	Placement Cell	Co-Convener	2018-2020	2
Daulat Ram College, University of Delhi	Eco-Club Society	Core team/ Jury Member	2018, 2021	2
Daulat Ram College, University of Delhi	Film and Photography Society Cinemistral (Film Festival)	Co-Convener	16 <sup>th</sup> Sep, 2022	1

### Areas of Interest/ Specialization

Cell Biology, Fundamentals of Molecular Biology, Biochemistry, Bioinformatics, Biostatistics, Genetics and Genomics, Industrial and Environmental Microbiology, Analytical Techniques in Plant Sciences, Biofuels, Microbial Diversity, Ecosystem restoration and Teaching Learning Tools, ICT tools. Al tools

### **Subjects Taught**

S.No	Course	Subject Taught	Semester	Year
1.	B.Sc. (H) Botany	Analytical Techniques, Bioinformatics, Biostatistics, Industrial	V, VI	2012-till date
	III year	and Environmental Microbiology, Plant Biotechnology		
2.	B.Sc. (H) Botany	Molecular Biology	III, IV	2012-till date
	II year	Genetics		
3	B.Sc. (H) Botany	Cell Biology, Microbial Biodiversity, Plant Microbes intrection	I,	2012-till date
	I year			
4.	B.Sc. Life Sciences	Genetics and Genomics, Bioinformatics	V, VI	2012 till date
5.	B.Sc. Biochemistry+ Zoology	Environmental Studies	II	2014, 2016, 2018, 2021, 2022

### Research Guidance:

- 1: Guided one student for their M.Sc. Dissertation 2010 in IGIB-CSIR Lab.
- **2:** Guided six graduate Students of B.Sc. IIIH (2022-2023) in a Project on Stress Biology and Biotechnology and statistical data analysis.

Details of refresher/orientation course/research methodology/workshop/syllabus up-gradation/ teaching – learning-evaluation/technology program /Faculty Development Programme from 2020-2023:

S.	Details	Place		Period		Sponsoring/Organising
N o.			From	То		Agency
1.	National Faculty Induction Programme	Guru Angad Dev Teaching Learning Centre, a centre under PMMMNMTT, MoE, Government of India	25 <sup>th</sup> Feb	27 <sup>th</sup> March	2023	Guru Angad Dev Teaching Learning Centre, a centre under PMMMNMTT, MoE, Government of India
2.	International Workshop	Deshbandhu College, University of Delhi	26 <sup>th</sup>	30 <sup>th</sup> November	2022	NyBerMan Bioinformatics Orieans, France
3.	Faculty Development Programme and Hands-on-session on "Computational Approach to Molecular Docking and Drug Designing and its Scope in the Entrepreneurial World",	Department of Biotechnology, Haldia, West Bengal, India.	25 <sup>th</sup>	29 <sup>th</sup> July	2022	Department of Biotechnology, Haldia Institute of Technology (HIT), I.C.A.R.E Complex, Haldia-721657, West Bengal, India.
4	One week (Online) Faculty Development Programme on	Center for Bioinformatics, Computational and Systems Biology, Deshbandhu College,	02 <sup>nd</sup> - Augu st	07 <sup>th</sup> August, 2021	2021	Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi
5	National Webinar	Deen Dayal Upadhyaya College, DU	24 <sup>th</sup> -	25 <sup>th</sup> September	2021	Botany Department, Deen Dayal Upadhyaya College
6	National Workshop	Acharya Narendra Dev College	1 <sup>st</sup>	3 <sup>rd</sup> (July)	2021	ANDC and IGIB

						DBT Under the Aegis of Star College Scheme
	Orientation Programme for	Teaching Learning Centre, Ramanujan	26 <sup>th</sup> June	24 <sup>th</sup> July	2020	Teaching Learning Centre, Ramanujan College
7	Faculty	College University of Delhi				Ministry of Human Resource Development
						Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching
8	National Workshop on Bioinformatics and Computational tools for Botanical Studies	Department of Botany,	6 <sup>th</sup>	7 <sup>th</sup> February	2020	Daulat Ram College University of Delhi

# Resource Person (Conference/seminar/ workshop/training Programme/ educational trips) from 2020-2023:

S.N o	Type of Event	Name of Event	Venue	Date of Event (Start Date- End Date)	State your role: Convener /Member organizing committee/ Speaker/ Coordinator	Days	participa nt
1	International Conference	"Microplastics and its remediation" Under G20 and UN Environment	DRC, University of Delhi-	14 <sup>th</sup> June, 2023	Convener	1	150
2	Veer Savarkar Jayanti event	"Azadi ka Amrit Mahotsav aur Savarkar"	Library, Daulat Ram College, University of Delhi	30 <sup>th</sup> May, 2023	Co-Convener	1	200
3	National Faculty Induction Programme	FIP	Guru Angad Dev Teaching Learning Centre, a centre under PMMMNMTT, MoE, Government of India	25th February to 27th March, 2023.	Participant With Grade A	30	700
4	Workshop	Training of Grammarly tool	Daulat Ram College, University of Delhi	6 <sup>th</sup> Oct, 2022	Participant	1	100
5.	Workshop	Capacity Building Workshop-Mushroom Cultivation-IQAC	Daulat Ram College, University of Delhi	28 <sup>th</sup> September, 2022	Participant	1	100
6	SDP	"Basics of Online Class tools"	DRC, University of Delhi	2022	Organizer and Resource Person		100
7	SDP	"Basics of Online Class tools"	DRC, University of Delhi	2021	Organizer and Resource Person		100
8	Cynotype Printing Workshop (Oldest Photography Printing)	Daulat Ram College Film and Photography Society-Magic Lantern and Sepia	23 <sup>rd</sup> April, 2022	23 <sup>rd</sup> April, 2022	Co-Convener	1	200

		Daulat Ram College, University					
9	'The Basics of Canva' on World Photography Day	Film and Photography Society-Magic Lantern and Sepia Rotaract Club of Resilience Daulat Ram College, University of Delhi Rotaract Club of Resilience	19 <sup>th</sup> August 2022	19 <sup>th</sup> August 2022	Co-Convener	1	150
10	National Webinar	Intellectual Property Right: Issues and Challenges"	Deen Dayal Upadhyaya College DU	24 <sup>th</sup> -25 <sup>th</sup> September, 2021	Participant	2	>150
11	International Conference	Effective Strategies for Biodiversity Conservation	DRC, University of Delhi	23 <sup>rd</sup> -24 <sup>th</sup> March, 2021	Convener	2	135
12	National Webinar	Future Prospects and career options in Data science	DRC, University of Delhi	29 <sup>th</sup> January, 2021	Convener/ Resource Person	1	125
13	SDP	"Basics of Online Class tools"	DRC, University of Delhi	17 <sup>th</sup> -19 <sup>th</sup> , December, 2021	Convener and Resource Person		100
14	SDP	"Basics of Online Class tools"	DRC, University of Delhi	17 <sup>th</sup> -19 <sup>th</sup> August, 2021	Convener and Resource Person		100
15	National Webinar	A Talk on "National Gene-bank- Conserving Biodiversity for food Security"	Botany Department and NBPGR- Daulat Ram College, University of Delhi	24 <sup>th</sup> June 2021	Convener	1	100
16	Nature Walk	Nature Walk of Yamuna Biodiversity Park	YBP and DRC, University of Delhi	26 February 2021	Convener	1	150
17	Faculty Development Programme	FDP	Faculty Development Programme	24 <sup>th</sup> June-24 <sup>th</sup> July, 2020	Participant	1	250
18	National Webinar	Biodiversity and Conservation	DRC, University of Delhi	8 <sup>th</sup> June, 2020	Convener	1	150
19	Workshop	Bioinformatics and Computational tools for Botanical Studies	Department of Botany, Daulat Ram College University of Delhi	6 <sup>th</sup> -7 <sup>th</sup> Feb, 2020	Co-Convener	2	20
20	International Webinar	Nanomaterials Applications	Centre for Nanotechnology Research (CNR), Vellore Institute of Technology, Vellore	17 <sup>th</sup> – 19 <sup>th</sup> June, 2020	Participant	3	150
21	Placement Cell, Incrementum 2.0	Internship and Career fair	Daulat Ram College, University of Delhi	5 <sup>th</sup> Feb, 2019 12 <sup>th</sup> Feb, 2020	Co-Convener	1	>2000

#### National and International Academic Collaboration:

- Department of Geology and Pedology, Forestry and Wood Technology, Mendel University in Brno, Brno
   Czech Republic. 2017-Till date
- Institute of Chemistry and Technology of Environmental Protection, Faculty of Chemistry, Brno, University of Technology, Brno, Czech Republic 2019-till date
- Department of Botany, Govt. Degree College Nainidanda, Pauri Garhwal, Uttarakhand, India
- Yamuna Biodiversity Park, Jagatpura, Wazirabad, New Delhi, 2012-till Date

### Research Publications in last there year (2020-2023):

#### **INTERNATIONAL:**

S.N o	Title of the paper	Journal Name	Year	Impact Factor	UGC Care List Journal Yes/No	Scopus Indexed Journal Yes/No	ISSN No	Citation
1.	Rhizosphere provides a new paradigm on the prevalence of lysogeny in the environment	Soil and Tillage Research	2020	901	yes	yes	104368	30
2.	Respiratory Quinone Switches from Menaquinone to Polyketide Quinone during the Development Cycle in Streptomyces sp. Strain MNU77	"Microbiology Spectrum" ASM	2022	10.02	Yes	Yes	2165-0497	5
3.	"Pseudomonas sp. A promising biocontrol agent against selected phytopathogens"	Journal of Mountain Research	2023	1.02	Yes	-	2582-5011	-

#### Book Chapters/Articles published in last there year (2020-2023):

S. N o	Author	Name of the paper	Publisher	Year	Author /Edited	ISBN No	Citati on
1	Meenakshi Sharma, Rahul Datta, Vivek Kumar Kedia and Martin Brtnicky	Microbial Potential for Carbon Fixation and Stabilization	Springer Nature	2021	Author	978-981-33-6764-7	3
2	Jitka Prichystalova, Jiri Holatko, Rahul Datta, <b>Meenakshi</b> <b>Sharma,</b> Martin Brtnicky	Biochar Role in Soil Carbon Stabilization and Crop Productivity	Springer Nature	2021	Author	978-981-33-6765-4	1
3	Vibha Gulyani Checker and Meenakshi Sharma	Molecular Signaling during Insect Plant Interaction	Springer Nature	2020	Author	978-981-15-2466-0	2
4	Meenakshi Sharma	Bioinformatics and Future opportunities"	Proceeding (int)	2023	Author	-	-

### PRACTICAL MANUALS AND MAGAZINES (AUTHER OR EDITOR):

- 1. **Author** of the **E-** manual "**Basics of Online Class tools**" for graduate and post graduate students 2020 and 2021.
- 2. **Author** of the Practical manual "Basics of Bioinformatics: Theory & Practice" for the graduate, post graduate and research students 2019.
- 3. Editor of "LIANA" 2017 and 2019-2020, magazine released by Vasundhara, The Botanical Society of Daulat Ram College, University of Delhi.
- 4. **Editor** of SDP manual "Food adulteration and security" organised by Department of Botany Daulat Ram College 3<sup>rd</sup>-14<sup>th</sup> July 2017 University of Delhi.

### **Conference Proceedings publication**

S.n o	Title of the Paper	Year of Publicati on	Name of conference	Venue of conference	ISBN No	Citation
1.	Microbial Factories for Sustainable Biofuel Production and Climate Change"	14 <sup>th</sup> May 2023	International Conference on Environmental, Agricultural, Chemical and Biological Science.	Somnogen Canada Inc, United Nations- SDGS All India Institute of Training and Education-India	Journal of Environmental and Applied Bioresearch- 23198745	-
2.	Impact of Soil Pollution on Crop Production and Human Health	March, 2023	LINA MAGAZINE	Botany Department	978-93-92603- 05-1	-

### Conference Attended and Paper presented: (2020-2023)

S.n o	International/N ational	Name of conference	Venue of conference	Date	Paper Presented on
1	International	International Conference on Environmental, Agricultural, Chemical and Biological Science.	Somnogen Canada Inc, United Nations- SDGS All India Institute of Training and Education-India Hybrid Mode	13 <sup>th</sup> -14 <sup>th</sup> May, 2023	Microbial Factories for Sustainable Biofuel Production and Climate Change" Awarded First Prize for Oral Presentation
2	National and International	>20 Online Webinars	Google Meet and Zoom	March 2019- September 2021	Participated

### Awards:

S.N o	Name of Award	Awarding Agency	Government/ NGO/ International/Private	Recogniti on area	Date of award	Type of Honor received
1	Young Scientist Best Oral Presentation	Somnogen Canada Inc, United Nations- SDGS All India Institute of Training and Education-India	Government	Research	13 <sup>th</sup> -14 <sup>th</sup> May, 2023	Oral Presentation
2	First Prize	Graphic Era University	Private	Research	5 <sup>th</sup> June, 2011	Oral Presentation
3	Third Prize	Deen Dayal Upadhaya College, University of Delhi.	Government	Research	21 <sup>st</sup> Feb, 2015	Poster Presentation
4	First Report on Iron Chelation Capacity of Arthrobacter globiformis	Elsevier	International	Research	June, 2015	Research Paper

## Membership of Professional Bodies/NGO

S.No	Type of Membership	Organization	Year of Membership
1	Lifetime Membership	American Society for Microbiology	ID: 56486459, division: Q, 2009
2	Lifetime Membership	Soil biology and Biochemistry	2009- Till date
3	Lifetime Membership	Journal of Plant Development Sciences	2010-Till date
4	Reviewer	The Open Agriculture Journal	2021-till date
5	Member	The Art of Living Foundation/ Cauvery Calling/ Save Soil	2008/2021/2021

### College/University Examination Work:

- Theory and Practical Examination Papers of B.Sc. (Hons) and B.Sc. Life Science 2012-2023 Evaluation of Theory and Practical Examination Paper of B.Sc. (Hons) and B.Sc. Life
- 2.
- Science 2012-till date 3.
- External/ Internal Examiner for Annual/ Semester Practical Examinations of B.Sc. (Hons) and B.Sc. Life 4. Science 2012-till date.

Dr. Meenakshi Sharma