# **Faculty Profile**

Name: Designation:	Dr. REKHA TRIPATHI Associate Professor	
Qualification:	Ph.D, M.Sc	
Mobile No.:	9958735457	ETC AL
Email:	rekhatripathi@msit.in	
Area of Interest/Specialization	n: Phytochemistry, Pharmacology, Environment	al studies
Experience:	25+years	

# **Educational Qualification**

S No.	Degree/Diploma/Certific	College and/ or	Year	Percentage	Division
	ate or other specialised	University			
	education obtained				
1.	Ph.D.	University of Rajasthan,	1996		
		Jaipur			
2.	M. Sc.	University of Rajasthan,	1991	70%	First
		Jaipur			
3.	B. Sc.	Mohanlal Sukhadia	1989	71%	First
		University, Udaipur			
4.	Higher Secondary	Rajasthan Board, Ajmer	1986	75.75%	First
5.	Secondary	Rajasthan Board, Ajmer	1985	71%	First
6.	Diploma in Gem	Gem Testing Laboratory	1998	Best Student Award for the	
	Identification			year 1998	

## **Employment Record**

S	From [Month	To [Month	Employer Name	Positions Held	No of Years
No.	&Year]	&Year]			
1.	June 2017	Till date	MSIT	Associate Professor	7+years
2	Sept. 2009	May 2017	MSIT	Assistant Professor	8 years
3.	Sept. 2007	April 2008	AIET, Jaipur	Lecturer	8 months
4.	1996	1997	Kanoria Mahila	Temporary Lecturer	10 years
	1998	2007	Mahavidyalaya, Jaipur		
5.	1995	1996	Maharani's College,	Temporary Lecturer	1 year
			Jaipur		
6.	1999	2000	GTL, Jaipur	guest faculty for	1 year
				Diploma Courses	

#### **Key Publications**

20 papers published in various SCI, SCIE, ESCI, SCOPUS International Journal and Conference (Citations: 78, H-index: 6, i10-index: 4)

### **Paper Publications**

- M.Chaudhary, S.Singh ,S. Dhull, R.Tripathi, R. Gupta, "Comprehensive Review of Nanomaterial Synthesis Methods, Characterization and Multifaceted Applications in Medical field" Journal of Polymer & Composites, 2025 (E-SCI)
- 2. R. Tripathi, "Antioxidents: Types, Functions and Usage", IJSRST, 2024 (UGC Care).
- 3. R. Tripathi, "Comparative Antimicrobial Studies of Aerial parts and Roots of Abutilon bidentatum" IJIRSET, 2024 (Google Scholar)
- 4. R. Tripathi, "An Overview of Pharmacological Studies of Mimosa hamata (Willd.) A Medicinal Plant" Heterocyclic Letters, 2023, (E-SCI)
- 5. R. Tripathi, "Seasonal Variation in Ground Water Quality of Baswa Tehsil, Dausa District, Rajasthan: A Statistical Approach", Environment and Ecology, 2023 (**Web of Sci, Zoological record**).
- 6. R. Tripathi & A. Sharma, "Phytochemical and Antimicrobial Analysis of Root Extract of *Aspargus adscendens*", Oriental J. of Chemistry,2022 (E-SCI, Scopus indexed).
- 7. R. Tripathi, "Antimicrobial Studies of Metahnolic Extracts of Leaves, Stem bark and Roots of Holoptelea Integrifolia Planch", IJIRSET,2022(**DOAJ Indexed, Google Scholar, Crossref**)
- 8. R. Tripathi, "Assessment of Fluoride Content in Ground Water and its Impact on Wheat and Vegetables of Dausa District, Rajasthan, India." IJRASET, 2021(**Research Gate,UGC**, **Google Scholar**).
- 9. R. Tripathi, "Antimicrobial Studies of Different Extracts of Holoptelia Integrifolia(ROXB.)Leaves". AJPCR (Asian J Pharm Clin Res)2020(Google Scholar, Elsevier Products (EMBASE) Crossref).
- 10. R.Tripathi, "ANTIMICROBIAL INVESTIGATION OF SOME ARID ZONE PLANTS OF RAJASTHAN", International Journal of Pharmaceutical Sciences and Research, 2017(E-SCI, Scopus indexed).
- R.Tripathi ," Antimicrobial Investigation of Aerial parts and Roots of Heliotropicum elipticum Ledeb, European Journal of Biomedical and Pharmaceutical Sciences,2017(Crossref, Google Scholar,GIF 0.377)
- 12. R.Tripathi ," Pharmacological Study of Aerial Parts of two Malvaceous plants. International Journal of Advanced Research, 2017 (Crossref, Google Scholar, Pubmed)
- 13. R.Tripathi ," Phytochemical and Pharmacological Studies of Abutilon bidentatum Hochst., International Journal of Current Pharmaceutical Research, 2017 (Elsevier Products, Google Scholar, SCI mago)
- 14. R. Tripathi, "Study of Heat Recovery from Waste Heat Recovery Boiler in Dariba Lead Smelter" International Journal for Scientific Research & Development(**Research Gate, Google Scholar**)

- R. Tripathi "Comparative pharmacological study of Aerial parts and roots of ethanolic extract of Hibiscus micranthus Linn" Journal of Medical Pharmaceutical and Allied Sciences(JMPAS),2016 (Scopus, Crossref, Google Scholar)
- R. Tripathi, "Study of Tail Gas Treatment in Dariba Lead Smelter" Int. Res. J. Environment Sci,2017 (Google Scholar,CAS)
- 17. R. Tripathi ,"Pharmacological Investigation of Ethanolic Extract of Roots of Holoptelea integrifolia (Roxb.)Plench", IJRASET(**DOAJ Indexed, Google Scholar, Crossref**)
- 18. R. Jain, S.Alam, R. Arora and S.C. Jain, "Phytochemistry and Bioactivity of Kirganelia reticulata", Journal of Medicinal and Aromatic Plant Sciences, 1998 (Scopus indexed).
- 19. R. Jain and R. Arora, "Phytochemical and Pharmacological Investigation of Heliotropium ellipticum Ledeb.", J. Indian Chem. Soc., 1997 (SCI indexed, Scopus, UGC Care list, Impact factor 0.284)
- 20. R. Jain and R. Arora, "3-O-L Arabinosyl-D-glucosyl morolic acid from Mimosa hamata Willd." Journal of Medicinal and Aromatic Plant Sciences, 1997 (**Scopus indexed**).
- R. Jain, R. Arora and S.C. Jain, "Chemical Constituents and Bioactivity Studies of Hibiscus micranthus Linn.", Indian J. Pharmaceutical Sciences, 1997(SCI indexed, Scopus, UGC Care list, Impact factor - 0.97)
- 22. R. Jain and R. Arora, "Saponin from the roots of Mimosa hamata Willd.", Indian J. Chem.1997 (SCI indexed, Scopus, UGC Care list, Impact factor 0.471)
- 23. R. Jain and R. Arora, S. Alam and S.C. Jain, "Pharmacological Evaluation of Roots of Mimosa hamata", Fitoterapia,1997 (SCI indexed, Scopus, Impact factor 3.204)
- 24. R. Jain, S.C. Jain and R. Arora, "A new cholestance derivative of Abutilon bidentatum Hochst and it's Activity", Die pharmazie, 1996 (SCI indexed , Scopus, Impact factor 2.59)

### Patent/Copyright

- 1. Dr. Rekha Tripathi, Dr. Rinky Dwivedi, Dr Koyel Datta Gupta, Dr. Tripti Sharma, Dr. Archana Balyan, Dr. Meena Rao "Method for authenticating and validating quick response code" published on 9April,2021 with application no. 202121010704 A.
- Maharaja Surajmal Institute of Technology, Prof. Archana Balyan, Prof. Tripti Sharma, Dr. Rekha Tripathi, Dr. Meena Rao, Dr. Bharti Sharma, Dr. Richa Gupta, Dr. Priya Dalal, Ms. Priyanka, Dr. Parul Chaudhary "ARTIFICIAL INTELLIGENCE, BIG DATA, INTERNET OF THINGS, AND BLOCKCHAIN TECHNIQUES AND APPLICATIONS IN SMART ENERGY MANAGEMENT Published on 19/01/2024 with application no. 202311087301.

	S No.	Title of Paper	Name of Conferences/ Seminars	National/ International	Name of Host Institution	Year
-	1	"A Comprehensive Review on Climate Change Mitigation	International Conference of Advance Research and Innovation (ICARI-	International Conference of Advance Research and	Delhi State Center, Institution of Engineers, Delhi on 2 February,	2025

#### **Research Papers presented in Conferences/ Seminars**

2	Strategies and Their Impact on Achieving Sustainability Goals" From Tradition to Innovation: Artificial Intelligence and machine Learning in Molecular Docking	2025) Proceedings of NCRTCES-2024	Innovation (ICARI-2025) National Conference on Recent Trends in Climate Change, energy, and Sustainabilty	MSIT, 11-12 November,	2024
3	Ecological conservation, biodiversity, environmental laws, pollution and environmental impact assessment in India: A brief overview	Proceedings of NCRTCES-2024	National Conference on Recent Trends in Climate Change, energy, and Sustainabilty	MSIT, 11-12 November,	2024
4	A Review on Climate Change and Sustainability A new Saponin from the roots of Mimosa	Proceedings of NCRTCES-2024 Indian Chemical Society	National Conference on Recent Trends in Climate Change, energy, and Sustainabilty National	MSIT, 11-12 November, Univ. Of Rajasthan	2024 1995
6	hamata Willd Phytochemical Studies of Hibiscus micranthus Linn.	Indian Science Congress	National	Univ. Of Rajasthan	1993

## **Book Published**

S No.	Title of Book/Journal	Publisher	National/ Internation al	Volume and Issue no. (in case of journal)	Year of Publication
1	Environmental Chemistry	JAYA Publishing House, Delhi	International	ISBN:978-93-87590- 80-9	2019
2	Energy and Environment	Photon eBooks	International	015-A94510112043	2017
3	Air Pollution by Lead Smelter ⁢'s Control	Lambert Academic Publishing,	International	978-3-659-97819-7	2016

# Trainings and FDPs

S	Name of Training	Name of Training	Type of Training	Period		
No.		Institution, City	and FDPs	From	То	
1	Life Skills Development	through ICT by NITTTR Chandigarh	FDP	27-01-2025	31-01-2025	
2	Developing Healthy Work Culture at Work Place	through ICT by NITTTR Chandigarh	FDP	02-12-2024	06-12-2024	
3	Curriculum Design for Outcome Based Education	through ICT by NITTTR Chandigarh	FDP	03-06-2024	07-06-2024	
4	Energy Storage Materials and Technology	through ICT by NITTTR Chandigarh	FDP	06-05-2024	10-05-2024	
5	Digital Tools for Teaching and Learning	through ICT by NITTTR Chandigarh	FDP	11-03-2024	15-03-2024	
6	Education and Educational Management Department	through ICT by NITTTR Chandigarh	FDP	15-01-2024	19-01-2024	
7	Blended Learning and Flipped Classroom	through ICT by NITTTR Chandigarh	FDP	16-10-2023	20-10-2023	
8	Outcome based Curriculum and Accreditation Criteria	through ICT by NITTTR Chandigarh	FDP	03-07-2023	07-07-2023	
9	Soft Skills & Classroom Teaching	through ICT by NITTTR Chandigarh	FDP	20-03-2023	24-03-2023	
10	Team Building , Motivation & Creativity	through ICT by NITTTR Chandigarh	FDP	12-12-2022	16-12-2022	
11	Entrepreneurship, Innovation & Digital Skills in New Era of AI	MIT Muradabad	FDP	25-07-2022	29-07-2022	
12	Skill Development for Entrepreneurs	AICTE,ISTE, organized by MSIT	FDP	27-12-2021	01-01-2022	
13	Use of ICT in Engineering Education	AICTE	FDP	7-04-2021	13-04-2021	
14	Faculty Development: Planning and Management for Institutional Excellence	through ICT by NITTTR	FDP	18-11-19	22-11-19	

15	Classroom	through ICT by	FDP	28-05-2018	1-06- 2018
	Communication	NITTTR			
16	Comprehensive	HMR Institute of	FDP	8-05-2017	13-05-2017
	Development of	Technology &			
	<b>Technical Teachers</b>	Management, New			
		Delhi.			
17	Orientation Programme	Jaipur	UGC Sponsored	08-06-2005	05-07-2005
			Training		

# Conferences/ Workshops/ Seminars/Webinars Attended

S	Name of Conferences/	Name of	Type of	Peri	od
No.	Workshops/ Seminars	Institution, City	Conferences/ Workshops/ Seminars	From	То
1.	National Intellectual Property Awareness Mission	In MSIT by intellectual property, INDIA	Training Program	12-03- 2022	
2.	Infrared Spectroscopy: Fundamentals & Applications	Deshbandhu College	Seminar	8-04- 2021	
3.	ADMET	MSIT	Conference	5-03- 2021	6-03- 2021
4.	Ancient Indian Education System	NITTTR,Kolkata	Conference	11-11- 2020	12-11- 2020
5.	Artificial intelligence and applications	MSIT	International Conference	6 <sup>th</sup> and 7 <sup>th</sup> Feb 2020	
6.	Managing Self and Learning during Covid-19 Pandemic	MSI	Webinar	08-10- 2020	
7.	National Education Policy 2020	MSIT	Webinar	22-09- 2020	
8.	National Pension Scheme :Pre and Post Covid scenario in India	MSI	Webinar	08-08- 2020	
9.	Covid 19: It's impact on Engineering Disciplines	MSI	Webinar	07-08- 2020	
10.	"Life Enhancement Skills post COVID-19 Pandemic"	MSI	Webinar	29-07- 2020	
11	The Future of Online Teaching in India - Challenges & Solutions	Business Stand Learning	Webinar	24-07- 2020	
12.	Artificial Intelligence with Machine Learning	MSI	Webinar	22-07- 2020	
13.	ICAIA	MSIT	International conference	6-02-2020	7-02- 2020
14.	Single Atomic Layer based Semiconductor Devices and Research Opportunities in South	MSIT	Seminar	3-10-2019	

	Korea				
15.	Paradigm Shift from	MSI	National	28-07-	29-07-
	Developing to Developed India		conference	2017	2017
	through- Digitalization				
16.	Signal and Noise during	MSIT	Seminar	27-02-	
	Electronic Measurements			2016	
17.	Climate change	MSIT	Seminar	20-04-	
				2013	
18.	Plasma and its own world	MSIT	Seminar	08-03-	
				2013	
19.	Positive linear operators	MSIT	Seminar	13-02-	
				2013	
20.	Science For Shaping Future Of	Indian Science	Seminar	26-11-	27-11-
	India	Congress Delhi		2012	2012
		Chapter, Delhi			
21.	Nanotechnology	MSIT	Seminar	16-10-	
				2012	

#### Membership of Professional Bodies

S No.	Name of the Professional Body	Member/Fellow	Remarks
<u>1</u>	Indian Science Congress	Member, ID – L 16817	Life time member

#### **Other Contributions**

- Head of the Department from Sept.2023 to till date.
- Convener Annual day 2024
- Convener Annual day 2023
- Convener of Student Insurance & Institute building / Lift Committee from Sept. 2021
- Convener GGSIPU Academic Audit in 2019-2020 & 2020-2021
- Head of the Department from 2013- Nov 2020
- Member internal complaint committee since 2017
- Member Discipline / anti ragging committee from 2017-2019
- Convener Library committee from 2017-2019
- Co-convener Discipline / anti ragging committee 2016-2017
- Co-convener exam cell 2016-2017
- Member Sexual harassment cell 2016-2017
- •Core committee member International Conference organized in MSIT ICAIA 2020.
- Core committee member Conference organized in MSIT AdMet-2021.

Dr. Rekha Tripathi Associate Professor Applied Science Department Maharaja Surajmal Institute of Technology