

## Faculty Profile

1. Name: Dr Manju Bala Yadav

2. Designation: Professor

3. Department: Chemistry

4. Educational Qualification:



Level	Name of University/Board	Year	Title/ Remark/ Medal
X	AICBSE	1985	I class
XII	AICBSE	1987	I class
B.Sc	Raj. Univ, Jaipur	1989	I class
M.Sc	Raj. Univ, Jaipur	1991	I class
Ph.D	UOK	2010	-
Other	NET-JRF	1993	
	SLET	1993	

5. Experience: Teaching / Research

UG	32 years	PG	32 years	Research	14 years
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6. Membership (Academic Bodies/ Research societies):

7. M.O.O.C (Developed by Faculty):

Lecture on Polythene Bags -Myths and Facts by Dr Beena Sethi on 16 March 2022

National I P Awareness Mission on 15 Feb.2022

8. Awards Received: Best Paper Award Kinetics and Mechanism of Oxidation of L-valine by Osmium(VIII) in Aqueous Alkaline Medium, Bal Krishna Institute of Technology, Kota, 22-24 Dec 2014

9. Academic Courses Attended:

Course	Place	Sponsoring Agency	Duration
Orientation Course	Jodhpur	UGC	28 days(19-11-01 to 15-12-01)
Refresher	Ajmer	UGC	21 days(9-3-04 to 29-3-04)
	Ajmer	UGC	21 days(5-10-05 to 25-10-05)
	Alwar	UGC	21 days(Jan 94)

<b>Others (Workshop/ Summer School/ Camp etc.)</b>	1. JDB Govt. Girls P. G. College Kota and WRIC, Mumbai	WRIC Mumbai	05 days(17-20 Jan.2011)
	2. Deptt. Of Pure and Applied Chemistry, UOK	UGC	05 days(21 -25 , 2013)
	3. JDB Govt. Girls PG College, Kota	Microsoft	05 days(22 – 26 Oct 2018) ,
	4. JDB Govt. Girls P. G. College Kota and WRIC, Mumbai	WRIC Mumbai	05 days(04-08 Jan.2022)
	5. Govt. College Kota and WRIC, Mumbai	WRIC Mumbai	05 days(22-26 Feb.2022)

<b>Online F.D.P (Faculty Development Programme)</b>	1. H.C.M. R.I.P.A.(Laws related to Empowerment of Women and Children)	HCM RIPA	03 days(17-19 Aug 2020)
	2. H.C.M. R.I.P.A.( RTTP Act)	HCM RIPA	03 days(11-13 Jan 2021)
	3. Commissionerate of College Education and Govt. College Kota	Chem Deptt. GCK	6 days(01-06 Feb 2021)
	4. Teaching Learning Techniques and Research Ethics	JDB, Govt. Girls College Kota	6 days(01-06 Feb 2021)

#### 10. Seminar/ Conference :

<b>Name of Symposium/ Seminar/Conference</b>	<b>International/ National/ Regional</b>	<b>Organized By</b>	<b>Title of Paper presented</b>	<b>Year</b>
International Conference on Emerging Trends in Environmental sustainability, ICETES 2023	International	Agarwal P.G.College, Jaipur	Synthesis and Characterization of New Maleimide Polymers and applications	<b>20-21 January, 2023</b>
National Seminar on Interdisciplinary Applications of Mathematics	National	Govt. College Kota	Applications of Mathematics in Chemical Kinetics	7th Oct 2022
3rd International Conference on Social Science, Management And Technology In Covid Era	International	Indian Academicians and Researchers Association in association with Institute for Scientific Research and Development (ISRD), Montenegro	Chemical Fractionation Of Calcium, Iron, Copper, Cadmium, Zinc And Lead In Soils Near In Vicinity Of Coal Based KSTPS In Kota City, Rajasthan	28th August 2022
International Conference on Multidisciplinary Approach Towards Sustainable Development and Climate Change for a Viable Future (ICMSDC-2022)	International	Raj Rishi Govt. Autonomous College Alwar	Palladium Nanoparticles Synthesis and their Catalytic Application on Oxidation of Arginine in Aqueous Acidic Medium	12th – 14th August 2022

International E-Conference on Frontline Areas in Chemical Sciences	International	Pacific Academy of Higher Education and Research University, Udaipur	Kinetics and Mechanism of Oxidation of Valine by N-Bromosuccinimide in Perchloric Acid Medium.	3 <sup>rd</sup> -4 <sup>th</sup> Oct 2021
International E-Conference on Current Research in Biodiversity, Environment and Plant Resources	International	JDB Govt. Girls College Kota	Pernicious effects of Climate Change	25 <sup>th</sup> -26 <sup>th</sup> Nov 2020
International Conference on "Embracing Change & Transformation - Breakthrough Innovation and Creativity	International	Asia Africa Development Council Commonwealth Society for Innovation & Research	<i>Kinetics of Micellar catalysis on oxidation of benzaldehyde by Quinolinium dichromate in aqueous acidic medium</i>	26 September, 2021
National Conference on Pollution Control Technologies and Sustainable Development	National	Deptt. of Chemical Eng, MNIT Jaipur and NIT, Uttarakhand.	Assessment of Heavy metals in soil profiles of Kota, an Industrial area, Rajasthan, India	3 <sup>rd</sup> -4 <sup>th</sup> Oct 2019
National Seminar on Environment: Problems, Solutions and Prospects,	National	LBS Government College Kotputli, Jaipur	Mechanistic study of Uncatalyzed oxidation of Glycine by N- Bromosuccinimide in perchloric acid medium.	13 <sup>th</sup> -14 <sup>th</sup> Dec 2019
International Conference on Innovation and Strategies in Trans discipline to Face the Integrated Development and Environmental Challenges-ICISTIDEC-2018	International	R. R. Govt. Autonomous College, Alwar, Rajasthan, India	Kinetics and mechanism of Pd(II) catalyzed oxidation of Alanine by Ce(IV) in aqueous acidic medium.	9 <sup>th</sup> -10 <sup>th</sup> March, 2018
National Conference on Biodiversity, Environmental Challenges and Wildlife Conservation	National	Govt.P.G.College, Thanagazi(Alwar), International Society for Life Sciences	Role of Inhibitors in atmospheric catalytic autooxidation of aqueous Sulphur dioxide in acidic medium.	24 <sup>th</sup> -25 <sup>th</sup> Jan 2018

National conference on Advances in Chemical, Environmental and Biological Sciences, Challenges in 21 Century,	National	Deptt. of Chemistry, Govt Meera Girls College, Udaipur	Mn (II) catalyzed oxidation of Arginine by Ce(IV) in aqueous sulphuric acid medium: A Kinetic and Mechanistic study.	10 <sup>th</sup> Sept, 2016
International Conference on Advance Trends in Engineering, Technology and Res	International	Bal Krishna Institute of Technology, Kota	Kinetics and Mechanism of Oxidation of L-valine by Osmium(VIII) in Aqueous Alkaline Medium	22 <sup>nd</sup> -24 <sup>th</sup> Dec 2014,

National Conference on Green Chemistry-Safer Chemistry	National	PG Deptt. Chemistry, RR Autonomous College, Alwar	Adsorptive removal of Fluoride using Activated Charcoal.	23 <sup>rd</sup> -24 <sup>th</sup> Sept, 2011
Sustainable Management and Conservation of Water Resources	National	Department of Civil Engineering , RTU, Kota	Use of Water Conservation techniques to meet water demands in 21 <sup>st</sup> century.	12 <sup>th</sup> -13 <sup>th</sup> March 2010
National Seminar on Conservation of Lakes and Water Resources Management Strategies,	National	College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur	Idol Immersion activities and their management in water bodies.	19 <sup>th</sup> -20 <sup>th</sup> Feb, 2010
Environmental Health Hazards	National	Deptt. of Zoology, JDB Govt .Girls PG College, Kota	Ground Water Quality Assessment with special mention to Fluoride in Rural areas of Jaipur district.	17 <sup>th</sup> -18 <sup>th</sup> Dec 2009
National Seminar on Chemical Aspects of Environmental challenges and their management.	National	Agarwal P. G. College, Jaipur (National), UGC	Fly ashes from thermal power plants as ideal metal adsorbent.	27 <sup>th</sup> – 28 <sup>th</sup> Feb 2007
National Seminar on Recent Advances in the field of Applied Chemistry	National	JDB Govt. Girls PG College, Kota	Kinetics of removal of Adipic acid from aqueous solution by adsorption on fly ash and activated carbon Blends: A comparative study	2 <sup>nd</sup> -3 <sup>rd</sup> Dec 2006

**11. Organizing Sec./Convener of conference/seminar/webinar :**

Conference/Seminar Title	Year
National workshop on Operation and Maintenance of Laboratory Equipment	22 to 26 Feb. 2022
Use of advanced nano material in lung cancer cell line (A549)and for super capacitor applications	25.01.23
Co-convenor , National conference on Recent Advances in Science and Technology, NCRASST-2023, organised by Dept. of Chemistry, Govt. College Kota	Oct. 6-7, 2023

**12. Resource Person:**

In training Programme	
In conferences/Seminars (Chair/Co-Chair/of Session)	
Invited Talk	

**13. Research Publications:**

<b>Title of Paper</b>	<b>Name of Journal with Impact factor</b>	<b>ISSN No. and UGC No. with Year</b>	<b>Citation Index</b>	<b>Impact Factor</b>	<b>Google Index</b>
Mechanistic Study Pd(II) catalysed oxidation of Serine by N-Bromosuccinimide in Perchloric Acid Medium	International Journal of Research and Analytical Reviews(IJRAR)	2348-1269, 43602(14.6.2019)		5.75	
Kinetics and Mechanism of Palladium (II) Catalysed Oxidation of Valine by N-Bromosuccinimide in Perchloric Acid Medium	Int. J. Science and Research Methodology.	2454-2008		3.925	
A Kinetic and mechanistic Study of Palladium(II) Catalysed Oxidation of Arginine by Cerium(IV) in acid medium,	International Journal of Innovative Research in Science, Engineering and Technology	2319-8753	2	7.089	
Oxidation of Lysine by Chromium (VI) in in acid perchlorate medium :A Kinetic study	Int. J. Chem. Sci	0972-768X	3	0.16	
Kinetic and mechanistic study of oxidation of Serine by cerium (IV) in presence of manganese(II)as catalyst in aqueous acid medium	Int. J. Curr. Res. Chem. Pharma. Sci.	2348-5221	5	5.75	
Oxidation of Leucine by Cerium(IV) in Presence of Manganese(II) as a Catalyst in Sulphuric Acid Medium	International Journal of Research in Physical Chemistry	2320-3919			
Kinetics and Mechanism of the Reaction of Valine with Ceric ion in the Presence of Palladium(II) Catalyst in Acid Media	Int. Journal of Innovations in Biological and Chemical Sciences	2047-9093		3.2	
Mn(II) catalysed oxidation of Alanine by Ce(IV) in sulphuric acid medium: A Kinetic and mechanistic study	Int. Journal of Innovations in Biological and Chemical Sciences,	2047-9093		3.2	
Kinetics and Mechanism of Uncatalyzed and Ag (I) Catalyzed Oxidation of Serine by Cerium (IV) in Acid Medium	International Journal of Research in Physical Chemistry	2320-3919			

Kinetics and mechanism of Chromium(VI) Oxidation of Threonine in aqueous perchloric acid medium	International Journal of Innovative Research in Science, Engineering and Technology	2319-8753		7.089	
Kinetics and Mechanism of Uncatalyzed and Ag (I) Catalyzed Oxidation of Hydroxylysine by Cerium (IV) in Acid Medium	J. Phys. Chem. Biophys	2161-0398	11	0.75	
Kinetics and mechanism of osmium(VIII) catalyzed oxidation of Valine by hexacyanoferrate (III) in alkaline medium	Rasayan J. Chemistry	0974-1496	13	0.46	
Kinetics and mechanism of silver(I) catalyzed oxidation of valine by cerium (IV) in acid perchlorate medium	Indian Journal of Chemistry	-	10	0.729	
Mechanistic aspects of oxidation of alanine by Os(VIII) in aqueous alkaline medium	J. Indian Chem. Soc.	0019-4522		0.359	
Kinetics and mechanism of silver(I) catalyzed oxidation of L-leucine by cerium (IV) in acid perchlorate medium	Phys. Chem. An Indian Journal	0974-7524		0.35	
Kinetics and mechanism of uncatalyzed and silver(I) catalyzed oxidation of lysine by cerium (IV) in acid perchlorate medium	Indian Chem. Soc.	0019-4522	10	0.359	
Effect of Isopropyl Alcohol on uncatalyzed and CoO catalysed Autoxidation of Aqueous Sulfur dioxide in Alkaline Heterogenous medium	The Journal of Oriental Research Madras	Aug 2021		7.215	
Kinetics of Micellar catalysis on oxidation of benzaldehyde by Quinolinium dichromate in aqueous acidic medium, Recent Research Trends in Management Science and Technology	Recent Research Trends in Management Science and Technology,	August 2021		1.734	
The Influence of Ethylene Glycol on the Kinetics of Atmospheric Oxidation of Dissolved SO <sub>2</sub> Catalysed by CoO in Alkaline Medium	The Journal of Oriental Research Madras	4 Dec 2021		7.215	



Kinetics of Isoamyl Alcohol inhibited uncatalysed and CoO catalysed oxidation of sulphur(IV) in alkaline heterogenous medium	Kala Sarovar	April-June 2021			
Synthesis, Characterization and Catalytic Application of Palladium Nanoparticles on Oxidation of Aspartic Acid in Acidic Aqueous Medium	The Journal of Oriental Research Madras	15 Feb 2022		7.215	
Chemical Fractionation of Some Heavy Metals in Surface Soil in Vicinity of Coal Based Super Thermal Power Plant in Kota City, India	Journal of Advanced Scientific Research	14 August 2022		12.822	
Palladium (II) Catalysed Oxidation of Aspartic Acid by Quinolinium Dichromate (QDC) in Perchloric Acid Medium: A Kinetic and Mechanistic Approach	Asian Journal of Organic and Medicinal Chemistry	April 2022		3.116	
Chemical Fractionation of Calcium, Iron, Copper, Cadmium, Zinc and Lead in Soils near in Vicinity of Coal Based KSTPS in Kota City, Rajasthan	Asian Journal of Organic and Medicinal Chemistry	April 2022		3.116	
Kinetics of the Uninhibited and Resorcinol Inhibited CoO Catalysed Autoxidation of Sulfur(IV) in Alkaline Heterogeneous Medium	Central Asian Journal of Theoretical and Applied Sciences	Sept. 8,2022		5.576	
Micellar Effect on the Oxidation of Anisaldehyde by Quinolinium Dichromate in Aqueous acidic Media: A Kinetic Study,	Current Physical Chemistry	2023		0.5	

**14. Research Projects:**

<b>Title of the Project</b>	<b>Year</b>	<b>Name of funding agency</b>	<b>Fund available/ utilized</b>	<b>Present status</b>
Kinetics and mechanism of catalytic and oxidation role of Os(VIII) in oxidation of few amino acids	June 10 to March 12	UGC	1.25 lakh	<b>Completed</b>

**15. Research Supervision: Chemical Kinetics**

**Basic Field of specialization:**

**Ph.D.**

<b>Name of Student</b>	<b>Title of thesis</b>	<b>Present status</b>	<b>Date and Year of Award, if so</b>
Shanu Mathur	Mechanistic Study of Uncatalysed and Catalysed oxidation of Amino Acids in Aqueous acid medium	Awarded	25.7.16
Dhanraj	A Kinetic Study of catalytic oxidation of Amino Acids by Cerium(IV) in Aqueous acid Medium	Awarded	2.8.17
Rashmi Gupta	Oxidation of Amino Acids by N-Bromo succinimide(NBS) Using Transition Metal Catalysts in Aqueous Medium.	Pursuing RES/UOK/2016/2817-19	-
Aparna Yadav	Estimation, Chemical Speciation and Bioaccumulation of Hazardous heavy metals in contaminated Soils of Kota region.	Pursuing RES/UOK/2018/9823-25	-
Rakesh Meena	A Kinetic and Mechanistic Study of Oxidation of Amino Acids by Diperoatoargentate(II) DPA in Aqueous Alkaline medium.	Pursuing RES/UOK/2018/10740-42	-
Kamini Meena	A kinetic and Mechanistic Study of Oxidation of a few Aldehydes by Chromium (VI) in Aqueous Micellar Medium	Pursuing	-
Priyanka Meena	A Kinetic and Mechanistic study of Oxidation of Some Amino Acids by Chromium (VI) in Aqueous Medium	Pursuing RES/UOK/2021/883	
Manoj Kumar	Effect of Some Organic Compounds on the Autoxidation of Sulfur Dioxide in Aqueous Heterogenous Medium	Awarded	28.9.2022

M. Phil.

Name of Student	Title of Dissertation	Present status	Date and Year of Award, if so
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**16. Monograph/ Book / Chapter (in Edited Book)/Chapters in study material of Open universities**

Book (Single Author)

Title of Book	ISBN/ ISSN No.	Publisher with Place	Year of Publication
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• Chapter(s) in Book (Edited / multi-author)

Title of Chapter	Authors / Editors	Name of the Book with ISBN/ ISSN No.	Publisher with Place	Year of Publication
1. <i>Palladium Nanoparticles Synthesis and their catalytic Application on Oxidation of Arginine in Aqueous Acidic Medium</i>	Dr Mamta Sharma, Dr Hukam Singh, Dr Upendra Singh	Greener Living, 978-1-989416-12-9	Pustak Bharati Publishers and Distributors, Varanasi,U.P, India	2023
2.				

**13 Extra Curricular Activities: Women Cell activities, Cultural committee**

**14 Collaborations and associations**

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**15. Any Other Relevant Information/Contributions**