### Curriculum Vitae



Name: Ms. Komal Soni Assistant Professor Department of Chemistry Govt. College, Kekri, Ajmer Mob. +91 8952930127 E-mail: <u>komal12250@gmail.com</u>

### **Academic Qualification**

Degree	Institution	Year		Remark	
Ph. D. (Chemistry)	Department of Chemistry,	May, 2018 to		CSIR- JRF and SRF	
	University of Rajasthan,	Current			
	Jaipur (Rajasthan)				
TITLE of thesis	: "Generation and Spectros	copic Charact	erization o	of Some Organic	
	anogermanium(IV), Organ				
under the supervision	n Prof. Asha Jain, Departmen	t of Chemistry,	University	y of Rajasthan, Jaipur,	
	Rajast	han.			
Degree	Institution	Year	Divisio	n Percentage	
M. Sc. (Chemistry)	University of Rajasthan,	2015-2017	Ι	5.70/6.00	
with specialization	Jaipur (Rajasthan)			(85.00%)	
in Organic					
Chemistry					
B. Sc.	University Maharani	2012-2015	Ι	1131/1350	
(Chemistry, Zoology	College, University of			(83.77%)	
and Botany)	Rajasthan, Jaipur				
	(Rajasthan)				
XII	CBSE	2012	Ι	456/500	
				(91.20%)	
Х	CBSE	2010	Ι	09/10	
				(85.50%)	

### **Research interest Area :**

Synthetic Inorganic Chemistry, Applied Organometallic Chemistry and Bioinorganic Chemistry

#### **<u>Refresher/Orientation Course :</u>**

S.No.	Course	Place	Sponsoring Agency	Duration
1.	RUSA 10 <sup>th</sup> Faculty Induction	Online	Human Resource Development	1 month
	Programme		Centre, University of Rajasthan,	
			Jaipur	

# Achievements/Awards :

S.No.	Year	Name of Conference	Paper Title	Poster /Oral	Award
1	2022	National Symposium on "Chemistry for Sustainable Future" organized by Department of Chemistry, University of Rajasthan, Jaipur on 16 February, 2022. (dedicated to Prof. R.C. Mehrotra).	Paper presented on topic "DFT assisted optimized structure, optimized energy and stability of some organotin(IV) complexes derived from two different chelating ligands"	Poster	Best paper Award
2	2021	International Conference on Smart Innovations for Society (ICSIS-2021) 20th- 21 <sup>st</sup> August, 2021 Poornima Institute of Engineering and Technology, Jaipur	Organic Modifiers- Chemically Modified dimethyltindichloride organic-inorganic hybrid product: Design and antimicrobial activity	Oral	Best paper Presentation
3	2020	National Conference on Novel Advancement in Applied Chemical Science (NACS 2020) 27 <sup>th</sup> -28 <sup>th</sup> January, 2020, S. S. Jain Subodh P.G. (Autonomous College), Jaipur, 302004	Generation and spectroscopic characterization of some organic derivatives of organotin(IV) and their antimicrobial activity	Oral	Best oral presentation (III technical session)
4	2019	National Seminar on Role of Science and Technology Rural Development 11 <sup>th</sup> -12 <sup>th</sup> November, 2019, University of Rajasthan, Jaipur	Synthesis and spectroscopic characterization of some antifungal agents of organotin(IV)	Poster	III position
	Year	Award Name	Remark		Class
5	2017	Prof. B. C. Joshi Gold Medal Award	For securing highest marks in Organic Chemistry Electives in Department of Chemistry, University of Rajasthan, Jaipur		M.Sc.
6	2015	III in poster presentation on the theme "Chemistry in Society, Environment and Everyday Life"	Department of Chemistry, University of Rajasthan, Jaipur		M.Sc. I semester
7	2013	II poition in Class	B.Sc. Biology University Maharani College		B.Sc. Part-I
8	2013	I position in Intercollegiate Science Quiz Competition	University Maharani College Chemistry Olympiad		B.Sc. Part III

### **Research Publications :**

S.No.	Title of Paper	Name of Authors	Name of Journal with Impact factor &ISSN No.	Volume and No. with Year
1.	Recent Advances in DFT	K Soni, S Saxena,	Elsevier - Journal of the	99
	Assisted Optimized Energy,	A Jain	Indian Chemical Society	(2022)
	Stability and Distortions of		Online ISSN: 2667-2847	100332
	Optimized Topologies of		Linking ISSN: 0019-4522	
	Certain Biopotent			
	Dimethyltin(IV) Complexes		Impact factor- 0.2	
2.	Deciphering Mechanistic	K Soni, S Saxena,	Wiley- Journal of	37
	Implications of	A Jain	Biochemical and	(2022)
	Antimicrobial and		Molecular Toxicology	e23276
	Antioxidant Potentials of		Online ISSN:1099-0461	
	Certain new Dibutyltin(IV)			
	Formulations as Possible		Impact factor- 3.6	
	Therapeutic Options Based			
	on DFT and Hybrid			
	Materials Paradigm			
3.	Biopotential Insights and	SHARMA,	NISCPR-CSIR - INDIAN	62(2023)
	Structural Chemistry of	KANIKA	JOURNAL OF	331-338
	Some Zirconocene		CHEMISTRY	
	Incorporated Relatively	SONI, KOMAL		
	Sterically Demanding	SAXENA,	ISSN: 2583-1321	
	Heterocyclic $\beta$ -Diketones	, ,	(ONLINE); 0019-5103	
	and Sterically Undemanding	SANJIV	(PRINT)	
	Flexible N-protected $\alpha/\beta$ -	JAIN, ASHA		
	Amino Acids		IMPACT FACTOR- 0.412	27
4.	De Novo Unified Robust	ANITA	WILEY- Applied	37
	Antidiabetic	KUMAWAT,	Organometallic Chemistry.	(2023)
	Pharmacophores based on	KOMAL SONI,	ONLINE ISSN:1099-0739	e7205
	Biopotent Hybrid Material:	SANJIV		
	DFT assisted Design,	SAXENA, ASHA JAIN	IMPACT FACTOR- 3.9	
	Optimized Molecular	JAIN		
	Structure and Understanding Mechanism of Antidiabetic			
	Bioassay			

### **Book Chapter :**

Soni, K., Saxena, S., Jain, A. (2023).

Chapter 55, Organic Modifiers—Chemically Modified Dimethyltindichloride Organic– Inorganic Hybrid Product: Design and Antimicrobial Activity. In: Goyal, D., Kumar, A., Piuri, V., Paprzycki, M. (eds) Proceedings of the Third International Conference on Information Management and Machine Intelligence. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-19-2065-3\_55

# **Conferences/ Seminars :**

S.No.	Name of Conference	Title of Paper	Date
	International Confe	erences/ Seminars/ Symposium	
1.	International Conference on "Frontiers at the Chemistry- Allied Sciences Interface" (FCASI 2023) organized by Department of Chemistry, University of Rajasthan, Jaipur	Paper presented on topic "Substituted Aminophenol N,O-orthometallated and Heterocyclic β-diketone chelated Hexacoordinated Dibutyltin(IV) Complexes, Design, Generation and Spectroscopic Characterization"	April 20- 21, 2023
2.	International Conference on "Green Energy and Sustainable Practices" (GESEP-2023) organised by Centre of Advanced Study, Department of Chemistry, University of Rajasthan, Jaipur	Paper presented on topic "DFT Assisted Rationally Designed Hexacoordinated Dimethyltin(IV) Complex: Optimized Molecular Structure of C <sub>38</sub> H <sub>36</sub> N <sub>4</sub> O <sub>4</sub> Sn, Optimized Energy and Stability"	January 30-31, 2023
3.	108 <sup>th</sup> Indian Science Congress organized by R.T.M. Nagpur University, Nagpur, Maharashtra	Facile Incorporation of Zirconium(IV) Into Aminophenol/ Substituted Aminophenols and Flexible N-phthaloyl amino acids: Synthetic Strategy, Spectroscopic Characterization, DFT Assisted optimized Molecular Structure and Mulliken Charge Distribution Analysis	January 3- 7, 2023
4.	International Conference on "New Trends in Chemical Research" organised by Department of Chemistry, Shaheed Udham Singh Govt. College, Kurukshetra University, Kurukshetra, Haryana, India	Attended via online mode	April 29- 30, 2022.
5.	Third International Conference on Smart Innovations for Society "ICSIS 2021" organized by Poornima Institute of Engineering & Technology, Jaipur, Rajasthan	Paper presented on topic "Organic Modifiers-Chemically Modified Dimethyltindichloride Organic-Inorganic Hybrid Product: Design and Antimicrobial activity". Online mode (Best paper Award)	20-21 August, 2021
6.	International Virtual Conference on Frontiers in Chemical Sciences (IVCFCS-2021) organized by Department of Chemistry, MLSU, Udaipur, Rajasthan	Paper presented on topic "Synthesis, Spectroscopic Characterization and computational studies of an organic derivative of zirconium(IV)".	25 June, 2021

7.	International Conference on Recent	Paper presented on topic "Amino Acid	1-2
	development in Chemical Research	Derivatives and Potential Organic Ligand	February,
	(RDCR-2019) organized by	– Modified R <sub>2</sub> SnCl <sub>2</sub> : Preparation and	2019
	Department of Chemistry, IIS	Spectroscopic Characterization".	
	(deemed to be University), Jaipur		
8.	International Conference on	Paper presented on topic "Facile	21-22
	Frontiers at the Chemistry- Allied	incorporation of Bu <sub>2</sub> Sn(IV) into two	December,
	Sciences Interface (FCASI 2018)	potential organic ligands : Synthetic	2018
	organized by Department of	strategy and structural considerations".	
	Chemistry, University of Rajasthan,		
	Jaipur		

# National Conferences/ Seminars/ Symposium

S.N	Name of Conference	Organise /	Date
0.		Title of Paper	
1.	National Symposium on "Chemistry	Paper presented on topic "DFT assisted	16
	for Sustainable Future" organized by	optimized structure, optimized energy	February,
	Department of Chemistry, University	and stability of some organotin(IV)	2022
	of Rajasthan, Jaipur (dedicated to Prof.	complexes derived from two different	
	R.C. Mehrotra).	chelating ligands". (Best paper Award)	
2.	Webinar on Computational Tools &	Attended via online mode	29th
	Their Applications, Wavefunction Inc.,		August,
	USA in collaboration with Neotel		2021.
	Systems & Services, Chandigarh, India		
3.	DAE Symposium on Current Trends in	Attended via online mode	23-25
	Theoretical Chemistry, CTTC-2020		September
	organized by Chemistry Division,		, 2021
	Bhabha Atomic Research Centre,		
	Mumbai		
4.	National Conference on Novel	Paper presented on topic "Generation and	27-28
	Advancement in Applied Chemical	spectroscopic characterization of some	January,
	Science organized by S.S Jain Subodh	organic derivatives of organotin(IV) and	2020
	P. G. (Autonomous) College, Jaipur	their anti-microbial activity". (Best Oral	
		Presentation Award-III technical Session)	
5.	National Seminar on Role of Science	Paper presented on topic "Synthesis and	11-12
	and Technology Rural Development	spectroscopic characterization of some	November
	organized by Indian Science Congress	antifungal agents of organotin(IV)". (III	, 2019
	Association (ISCA) Jaipur Chapter	position in poster presentation)	

# Certificate courses:

1. Certificate of achievement in MCB63X: Principles of Biochemistry, a course of
study offered by HarvardX, an online learning initiative of Harvard University.
Certificate issued on May 13,2020
2. Certificate of completion of Module on "Plagiarism" of Researcher Academy,
Elsevier on 26 May, 2020
3. Certificate of completion of Module on "A guide to journal citation metrices" of
Researcher Academy, Elsevier on 26 May, 2020
4. Certificate of Course Completion on "Focus on Peer Review, A Nature
Masterclasses online course of Springer Nature on 1 June, 2020
5. Course Certificate on " <b>Drug Development</b> ", an online non-credit course authorized by
University of California, San Diego and offered through Coursera
6. Certificate of achievement in 0.503x: Becoming a More Equitable Educator:
Mindsets and Practices, a course of study offered by MITx, an online learning
initiative of Massachusetts Institute of Technology. Certificate issued on 2 July,2020
7. <b>DELF A1 French Language</b> (2019) from <b>French Embassy</b> securing 80% marks
8. Add on Certificate course in Biotechnology (2014) in University Maharani's
College, University of Rajasthan, Jaipur securing 85% marks.
9. Diploma Course in Web Designing (2013) from Indian Institute of Computer
Science securing 73% marks