# Shri Ratanlal Kanwarlal Patni Government P.G. College Kishangarh

# Faculty Profile

- 1. Name: Dr. Shema Khan
- 2. Designation: Associate Professor
- 3. Department: Chemistry
- 4. Date of First Joining:29.11.2002
- 5. Date of Joining in this College: 01.08.2018
- <u>6.</u> Educational Qualification:



Level	Name of University	Year	Title/ Remark/ Medal
B.Sc.	University Of Rajasthan, Jaipur	1995	Ist Division
M.Sc.	M.D.S.University,Ajmer	1997	Ist Division
Ph.D.	M.D.S.University,Ajmer	2009	Awarded

#### 7. Experience: Teaching / Research

UG	20 years	PG	20 years	Research	N/A
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#### 8. Membership (Academic Bodies/ Research)

- 1) Life Member of Swadeshi Science Movement Of India, New Delhi
- 2) Life Member Of Medicinal and Aromatic Association Of India, Anand, Gujarat
- 3) Annual Member Of AOCS (American Oil Chemists Society), USA
- 4) Member of COC, M.D.S. University, Ajmer (2022-23)

#### 9. Awards / Fellowship Received

Awards / Fellowship	Date / Duration
Teacher Research Fellowshi	1 <sup>st</sup> March 2007 to 27 <sup>th</sup> Feb. 2009

#### Place Nature of the Course Sponsoring Agency No. of Days JAIPUR **ORIENTATION COURSE** UGC Sponsered & organised by 28 ASC, University of Rajasthan, Jaipur JODHPUR **REFRESHER COURSE in** UGC Sponsered & organised by 21 ASC, J.N.V. University, Jodhpur "Chemistry" **REFRESHER COURSE in** UGC Sponsered & organised by JAIPUR 21 "Environment Sciences" ASC, University of Rajasthan, Jaipur **REFRESHER COURSE in** JAIPUR UGC Sponsered & organised by 21 "Computers" ASC, University of Rajasthan, Jaipur DAUSA SHORT TERM COURSE: 15 Organized by Rajasthan Consultancy Faculty Development Organisation Limited, Jaipur, Programme in Sponsored by National Science & "Entrepreneureship" **Technology Entrepreneurship** Development Board (NSTEDB) & **Department Of Science &** Technology, Govt. Of India, New Delhi 03<sup>rd</sup>-7<sup>th</sup>Feb.2018 Organised by MNIT, Jaipur Sponsored Jaipur Faculty Development 5 Days (3 Credits Programme on "ICT Tools by Ministry of Electronics & Information &Technologies for Technology Govt. of India 40 hours **Teaching-Learning Process** Course) &Institutes" Equivalent to 7 Days Jointly Organised by Commissionerate Online 25<sup>th</sup>-to 31<sup>st</sup> Jan. one week State Level Short Term Online Training College Education, Raj. 2021 Course on "Initiatives for and Govt.Raj Rishi College, Alwar 7 Days **Teaching-Learning Excellence** in Chemistry"(Gyan Ganga) 01<sup>st</sup>to 10<sup>th</sup> Online Organised by Department of Ceramic Online Two week **Professional Training** Engineering & Technology, University Mar.2021 Program on "Pedagogy College of Engineering & Technology-Two week **Techniques and Emerging** Bikaner& Sponsored by TEQIP-III(NPIU-Trends" MHRD, Govt.Of India)

#### <u>10.</u> Academic Courses Attended(not less than one week): <u>Orientation / Refresher / Short Term Course / Faculty Development etc.</u>

		Quelline	4 5th + 2 C + 1
Online <u>Two week FDP</u> on	Organised by Electronics & ICT	Online	15 <sup>th</sup> to 26th
"ICT Tools for Teaching,	Academies ,NIT Patna,MNIT, Jpr,PDPM		Mar. 2021
Learning Process	IIITDM Jabalpur,IIT Guwahati,IIT Kanpur,		<u>Two week</u>
&Institute"	and IIT Roorkee		
Online <u>one week (Flexible</u>	Guru Angad Dev Training Learning Centre		25 <sup>th</sup> to 03 <sup>rd</sup>
Mode) Equivalent to one	3.0.1.D.Khaisa College, Othversity Of	Flexible	March 2021
week Face to face FDP in	Delhi,Delhi	Mode(Del	<u>One week</u>
"Enhancing Quality of		1)	
<b>Chemistry Education in</b>			
India".(with 'A' Grade)			
Online <u>Two week FDP</u> on	Jointly Organised by Electronics & ICT	Online	12 <sup>th</sup> to 23 <sup>rd</sup> July
"Digital Tools for writing,	Academies IIT Guwahati, NIT Patna, MNI		2021
Authorising and Reviewing	Jaipur, ,IIT Kanpur ,IIITDM Jabalpur, and		<u>Two week</u>
Manuscripts"	IIT Roorkee		
Online <u>Two week FDP</u>	Teaching Learning Centre, Ramanujan	online	01-15 Feb.2022
Equivalent to Refresher	College, University of Delhi		<u>Two week</u>
Course in <b>"Chemical</b>			
Sciences"			
(with 'B+' Grade)			

## **<u>11.</u>** Seminar/ Conference(where paper Presented):

S.No.	Name of Symposium/ Seminar/ Conference	Internationa I/ National/ Regional	Organized by (With Dates)	Title of Paper presented (Oral and Poster)	Year/ Session
1	"Chemistry Biology Interface: Synergistic New frontiers"	International conference	Dr. B.R. Ambedkar Center for Biomedical Research, University of Delhi, 21 <sup>st</sup> to 26 <sup>th</sup> November 2004.	"Physico–chemical studies and effect of temperature, air, metal and light: A comparative analysis of various oils"	2004-05
2	"Proceedings of the 41 <sup>st</sup> Annual convention of Chemists"	National Conference	Indian Chemical Society" hosted by University of Delhi- 110007, 23 <sup>rd</sup> to 27 <sup>th</sup> December 2004.	"Acoustical studies of Copper (II) soap complexes in non- aqueous media"	2004-05
3	Environmental Degradation and Sustainable Development"	National Conference	P.G. Department of Geography, S.D. Govt. College, Beawar 9 <sup>th</sup> – 11 <sup>th</sup> November, 2005	"Impact of harmful chemicals on internal environment of Human	2005-06

				Beings"	
4	"Proceedings of the 44 <sup>th</sup> Annual convention of chemists"	National Conference	Indian Chemical Society, hosted by Mahatma Gandhi Institute of Applied Science, Jaipur, 23 <sup>rd</sup> to 27 <sup>th</sup> Dec.2007.	"Viscometric investigations of complexes of Copper (II) soaps derived from edible oil in benzene"	2007-08
5	"Green Chemistry"	National Conference	Department of Chemistry, Veer Narmad South Gujarat University, Surat, 6 <sup>th</sup> to 8 <sup>th</sup> February 2009.	"Spectroscopic and biocidal studies of Copper (II) soaps and complexes derived from Non-edible oils"	2008-09
6	64 <sup>th</sup> Annual Convention and Oils, Fats, Fuels and Surfactants (ICOFFS 09),	International Conference	Oil Technologists Association of India (NORTHERN ZONE) held at Crowne Plaza, New Delhi, 9 to 11 Dec. 2009.	"Tradition, Sustainability & Technology Comparative overview of Health aspects of Vegetable Oils"	2009-10
7	"Biodiversity of Medicinal and Aromatic Plants: Collection, Characterization and Utilization"	National Conference	MAPAI, Anand Agricultural University, Anand,Gujarat November 24-25, 2010.	'Value added products synthesized from Neem and Pongamia oils"	2010-11
8	"Recent Advances in Chemical Sciences"	National Symposium	Department of Pure and Applied Chemistry, University of Kota, Kota 7-8 January 2011.	"Spectroscopic and antifungal studies of Cu(II) soaps and complexes derived from non-edible oils"	2010-11
9	"Innovations in oils, fats & allied products towards sustainability & lipids EXPO-2011"	International Conference	Oil Technologists of India (Southern Zone) held at Indian Institute of Chemical Technology, Hyderabad, 18-19th Nov.2011.	"Value added products from Neem and Pongamia oils "	2011-12
10	"Heterocyclic Chemistry"	3 <sup>rd</sup> International Conference	Department Of Chemistry, Univ. of Rajasthan, Jaipur, Dec. 10-13,2011	"Copper- Neem/Pongamia soap- benzothiazole complexes and their anti-fungal activity"	2011-12

11	"Chemical Sciences in New Millenium,	National Conference	Department of Chemistry ,Pacific	"Design and pharmacological	2011-12
	NCCSNM-2012"		College of Basic & Applied Sciences, Pacific University,	evaluation of some hybrid complexes of Azole series"	
			Udaipur, 8 Jan 2012		
12	"Promotion of the Science, Engineering & Technology"	National Conference	CSIR-Physical Laboratory and Indian agricultural Research Institute, New Delhi,25-27	1)Edible oils 2)Pure Desi Ghee	2013-14
13	Green Chemistry - Bridge between Energy & Environment (NCGC Dausa - 2014)	National Conference	Feb.2013 Sponsored by UGC, CRO Bhopal & DST, Rajasthan, Organized by Deptt. of Chem. Pt. N.K.S. Govt. P.G. College, Dausa (Rajasthan) 15th-16th, Dec. 2014.	"Green Concrete"	2014-15
14	"Frontiers at the Chemistry - Allied Sciences Interface (FCASI - 2015)	National Conference	Organized by Center of Advanced Study Deptt. of Chemistry, UOR Jaipur March 13-14, 2015	"Copper soaps and their benzothiazole complexes"	2014-15
15	Urban Growth: Environmental Challenges & Responsibilities with Special Reference to Raj.,	National Conference	43rd R.G.A. National Conference, Ajmer Association with Rajasthan Geog. Association, hosted by - Deptt. of Geog. SPC Govt. College, Ajmer 26-28 Oct, 2015	"Need of Diversity of Crops for Sustainable Development with Special Reference of Edible Oil Seeds".	2015-16
16	Globalization New Dimensions for Social Sciences & Information Technology	National Conference	S.S. Sunderdas Govt. Girls College, Dausa (Raj.), Nov. 27-28, 2015.	"Impact of Globalization & IT on Higher Education.	2015-16
17	Sadaa Fifth International Conference on "Cross Cultural	International Conference	held at L.B.S. P.G. College, Jaipur & Sadaa, 22-24 January, 2016	Impact of Information Technology on Literature & Culture	2015-16

	Comparisons Life & Literature on				
18	52nd Annual Convention of chemists, Indian Chemical Society- 2015	National Conference	Held at the JECRC University, Jaipur, Rajasthan Dec. 28-30, 2015.	"Thermal studies SoapSesamum indicum)", (PHY (PP) - 38) in Physical Chemistry Section.	2015-16
19	8th National Conference on Thermo Physical Properties 14-16 Dec, 2015	National Conference	Organized by Deptt. of Physics MNIT, Jaipur under the auspices of Thermo physical Society of India (TPSI)	Analysis of complexes derived from copper (II) Neem Soap (Azadirecta indica) by Thermal Degradation	2015-16
20	Sustainable Engineering Applications of Material Science and Physics - Chemical Innovations (NCSEAM-2016)	National Conference	Organised by SKIT, Management & Jagatpura, Jaipur 26-27 Feb, 2016	"Heating Effect on Edible Oils and applications".	2015-16
21	Frontiers in Chemical Sciences	National Conference	Pacific Academy of Higher Education and Research University, Udaipur in Association with Indian Chemical Society, Kolkata. 4th October, 2016	Poster Presented on TGA of Copper Soaps	2016-17
22	Frontiers in Chemical Sciences,	National Conference	Pacific Academy of Higher Education and Research University, Udaipur in Association with Indian Chemical Society, Kolkata. 4th October, 2016	Poster Presented on Spectroscopic and microbial analysis	2016-17
23	'Sustainable Chemical & Material Sciences (SCMS-2016)	National Conference	S.S. Jain Subodh P.G. (Autonomous) College, Jaipur. Sponsored by UGC,	Spectroscopic & Physical Studies Antifungal Studies.	2016-17

			DST, DRDO & BRNS, 5th & 6th Aug, 2016		
24	Climate change and sustainable Development	National Seminar (World Environment Day)	Indira Gandhi Centre for Human Ecology, Environmental and Population Studies, University of Rajasthan, Jaipur,5 <sup>th</sup> June,2017	"Control SO2 Emission for climate change & sustainable Development"	2016-17
25	Recent trends and advances in Environmental issues, awareness and health-2017	National Conference	JECRC, University,Jaipur 17 <sup>th</sup> -18 <sup>th</sup> Nov.2017	Poster presented on "Viscometric Behaviour298.15k"	2017-18
26	Forest, Water and Climate Change	National Seminar (Internationa I Day of Forest)	Indira Gandhi Centre for Human Ecology, Environmental and Population Studies, University of Rajasthan, Jaipur,21 <sup>st</sup> March 2018	Paper presented on "Impact of SO2 Emission by Thermal Power Plants on Climate and Human Health"	2017-18
27	Environmental Conservation and Waste Management: Challenges and Alternatives	National Seminar (World Environment Day)	Indira Gandhi Centre for Human Ecology, Environmental and Population Studies, University of Rajasthan, Jaipur,5 <sup>th</sup> June 2018	"Antifungal activities of Env.safe Copper Surfactants derived from Neem & Karanj Oils"	2017-18
28	IISF-2017, "Swasth Bharat" Young scientists Enclave	India International Science Festival 2017	Anna University, NIOT,CSIR-CLRI,CSIR- SERC,IIT Madras, 13-16 <sup>th</sup> Oct.2017	Poster Presented on "Synthesis, Characterization, Degradation of Cu (II) soaps Derived from various oils"	2017-18
29	Instrumentation Techniques for Research in Chemical Sciences	National Workshop	Department Of Chemistry, Kanoria P.G.Mahila Mahavidyalaya, Jaipur ,22-23Dec., 2017	Poster presented on Volumetric and Viscometric studies of copper surfactant derived from Karanj oil in methanol-benzene mixture at 298.15 K	2017-18

30	Recent Advances at interfaces of Physical and Life Sciences,RAIPLS- 2018	National Conference	Department of Chemistry ,University of Rajasthan,Jaipur,6- 7 July 2018	Poster Presented on" Viscometric evaluationin Non- aqueous media"	2018-19
31	Advances in Science and Technology –an Interdisciplinary Approach	National Conference	Department of Chemistry, Sophia Girls College, Ajmer(Autonomous), 15th-16th Oct.2018	Poster Presented on "Volumetric and Viscometric studies of Copper Soap derived from non-edible Neem oil in Methanol- Benzene mixture at 298.15k"	2018-19
32	Workshop on interface of Science and Society	National workshop	Held at National Physical Laboratory, Swadeshi Science Movement of India, Vigyan Bharti, New Delhi,14 <sup>th</sup> Dec.2018	Paper presented on "Mustard oil from cold pressed method"	2018-19
33	Frontiers at the Chemistry-Allied Sciences Interface	International Conference	Jointly organized by Department of Chemistry, UOR, Jaipur, Indian Society of Chemists and Biologists: Raj.Chapter, Chemical Research Society of India: RajasthanChapter	TGA of Oils and their soaps	2018-19
34	Multidisciplinary approaches to environmental Research for human health	International Conference	International society of life sciences ,Department of Zoology, University of Rajasthan, Jaipur 22-24 Dec 2021	ANTIFUNGAL BEHAVIOUR OF SOME COPPER (II) SOAPS AND THEIR NITROGEN & SULPHUR CONTAINING COMPLEXES DERIVED FROM ECOFRIENDLY EDIBLE OILS	2021-22
35	Food Nutrition and Dietetics	International Conference (ONLINE)	"Aver Conferences "	Nutrition and Health relationship of Indigenous Traditional Edible oils with special reference to Seasonal, Mustard Groundwater and coconut oils."	2021-22

36	online "Chemistry	National	Deparment of	Synthesis,	2021-22
	for Sustainable	Symposium	Chemistry UOR, Jaipur	Characterization, and	
	Future"		16.2.2022	Thermo Gravimetric	
				Analysis of	
				Cu (II) Surfactants for	
				Sustainable	
				Environment	

## **<u>12.</u>** Organizing Sec./Convener / Resource Person:

Conference/Seminar/ webina Year/		Level
	Session	(State / National/ International)
Webinar -Organizing Secretary	2020-21	"One Day Webinar on healthy Food-Chemical Aspects"
Webinar-Resource Person	2020-21	"One Day Webinar on Chemistry in Day to Day Life",
		Organised by B.B.D.Government College, Chimanpura,
		Shahpura

### **<u>13.</u>** Research Publications:

S.No	Title of Paper /	Name of Journal	Volume	Citation Index;
	Book	with Impact factor &	and	Impact Factor;
		ISSN / ISBN No.	Page No.	Google
			with Year	Index
1	Chapter "Health aspects of	Book "Recent progress	Volume	ISBN: <u>1-9336990-8-6</u>
	traditionally processed	in Medicinal Plants",	18, (2007),	Record Number
	Indigenous Edible oils"	Natural Products,	PP (429-	2008311577
		Studium Press,L.L.C.,	435)	
		U.S.A.,		
2	Chapter "Biomedical waste	Book"Global	(2012),	ISBN:978-81-910382-1-
	(Management and	Environment-Issues	PP(99-	7
	handling)"	and problems" L.G.	113)	1
		Publishers		
		Distributers,New		
		Delhi		
3	Chapter "Environmental	Book"Global	(2012),	ISBN:978-81-910382-1-
	friendly biocidal activity of	Environment-Issues	PP(119-	7
	Copper surfactants derived	and problems" L.G.	125)	7
	from Non-Edible oils (i.e.	Publishers		
	Neem and Karanj) and their	Distributers,New		
	benzothiazole complexes"	Delhi		

4	"Acoustic studies and other acoustic parameters of Cu (II) soap derived from non- edible Neem oil (Azadirecta indica), in non-aqueous media at 298.15 K."	Acta Acustica united with Acustica	104.2 (2018): 277-283.	28; <b>0.762;</b> <u>https://doi.org/10.3813/</u> <u>AAA.919170</u>
5	"Antifungal activities of copper surfactants derived from neem (Azadirecta Indica) and Karanj (Pongamiapinnata) oils: A pharmaceutical application"	Global Journal of Pharmacy & Pharmaceutical Sciences	3.4 (2017): 82-87.	<pre>23; 3.24; https://ideas.r epec.org/a/adp /jgjpps/v3y2017 i4p82-87</pre>
6	"Viscometric evaluation and micellar properties of Cu (II) Soap derived from neem oil in non-aqueous media."	Current Physical Chemistry, Bentham Science Publications	8.3 (2018): 164-174.	05; https://doi.org/10.2174 /187794680866618110 2151911
7	"Volumetric and viscometric studies of copper surfactant derived from Karanj (Pongamia pinnata) oil in methanol-benzene mixture at 298.15 K."	Journal of Physical Science,	30.2 (2019): 51-68.	
8	"Micellar and viscometric properties of some bioactive copper soaps derived from karanj oil in non-polar solvent."	Bulletin Of Pure and Applied Chemistry	(Vol.30,Iss ue 1)(2020): 1-13	<b>5.294</b> <u>10.5958/2320-</u> <u>320X.2020.00001.1</u>
9	"Micellar behaviour of copper surfactants derived from fresh (Untreated) sesame oil and used (treated at high temperature) sesame oil."	Tenside Surfactants Detergents Munich ,Germany	47.2 (2010): 106-112	06; 0.560; https://doi.org/10.313 9/113.110059
10	"Synthesis, Characterization and Antifungal Activities of Copper (II) Soaps and their Complexes Derived from Azadirecta Indica (Neem) and Pongamia Pinnata	Tenside Surfactants Detergents Munich ,Germany	46.3 (2009): 145-151.	06; 0.560; <u>https://doi.org/10.313</u> <u>9/113.110017</u>

	(Karanj) Oil."			
11	BOOK "Cu Surfactants	LAP LAMBERT	Published	02;
	derived from non-edible oils:	Academic	:	ISBN13 9786202000
	Bio-chemical aspects.	Publishing,Omniscript	15 Aug	017
		um S.R.L.	2017	

#### 14. Research Projects:

Title of the	Year /	Name of fundin	Fund available/	Present status
Project	Session	agency	utilized	
N/A	N/A	N/A	N/A	N/A

#### <u>15.</u> Research Supervision: Research Guide in University Of Rajasthan, Jaipur. <u>Applied for Research Guide in M.D.S.Uninversity,Ajmer</u>

Name of Student	Ph.D. / M.Phil.	Title of thesis	Present status	Date and Year of Award, if so
N/A	N/A	N/A	N/A	N/A

**<u>16.</u>** Any Other Relevant Information/Contributions/Achievements: