URRICULUM VITAE

In brief Dr. Rajni Khajuria

Educational Qualification

- Ph.D. in Organic Chemistry from University of Jammu (2016) on the topic "Synthesis and development of novel heterocyclic compounds as anti-microbial agents".
- M.Phil. in Organic Chemistry with 'O' Grade from University of Jammu (2012) on the topic "A multicomponent synthesis of 3-nitro-4,6-diaryl-5,6-dihydro-2(1*H*)-pyridones under ultrasonic irradiation".
- Master's Degree in Chemistry with Distinction (75.17%), University of Jammu (2010).
- Bachelor's Degree in Botany, Chemistry and Zoology with Distinction (76.78%), University of Jammu (2008).

Awards and Achievements

- **JRF** in a DST sponsored Research project.
- Oualified Joint CSIR-UGC-NET JRF examination in Chemistry in June, 2012.
- 17 Publications in peer-reviewed journals including 13 research papers and 2 review articles in international journals.
- (Total citations = 203; h-index = 7 and i10-index = 7).
- In Organic and Biomolecular Chemistry: 01; Synthesis: 01; RSC Advances: 02; Tetrahedron: 01; Tetrahedron Letters: 02; Synthetic Communications: 03; Journal of Chemical Sciences: 01; Current Microwave Chemistry: 01; Indian Journal of Chemistry Section B: 03; Indian Journal of Heterocyclic Chemistry: 01; Crystallography Reports: 01.
- Article entitled: Active methylenes in the synthesis of pyrrole motif: An imperative structural unit of pharmaceuticals, natural products and optoelectronic materials received a **CERTIFICATE OF APPRECIATION** as a highly cited paper (RANKED IN TOP 10% BY CITATION) published in Royal Society of Chemistry journals. (Total citations = 79).
- Paper: (Tetrahedron Lett., 2013, 54, 5699-5702) has been highlighted in Organic Chemistry Highlights, June 23, 2014 by **Doualas F. Taber**. University of Delaware.
- **Publication with highest impact factor is:** Divergent synthesis of 4, 6-diarylated pyridin-2(1*H*)-ones from chalcones: Novel access to 2, 4, 6-triarylpyridines; (*Org. Biomol. Chem.*, **2015**, *13*, 5944-5954; I.F = 3.876).
- Conferences Details: Oral Presentations: 09; Paper Presentations: 09; Workshops attended: 06, Participations: 07.
- Third prize in a paper presentation at the 'International Conference on Green Chemistry: Catalysis, Energy and Environment' organized by the Department of Chemistry, University of Goa, January 22-24, 2015.
- Best Oral presentation award in the 10th JK Science Congress on 'Science and Technology for Inclusive Development: A way Forward' organized by University of Jammu, March 14-16,2015.
- Best Oral presentation award in 11th National Conference on 'Advances in Chemical Sciences and Thermodynamics' organized by Department of Chemistry, University of Jammu and The Indian Thermodynamics Society Dec 2nd-3rd, 2016.
- Only scholar till date from the department to have got selected to attend prestigious Junior-National Organic Symposium Trust [XII J-NOST] Conference for Research Scholars organized by CSIR- Central Drug Research Institute, Lucknow during November 24th-27th, 2016 and delivering an **Oral Talk** on the paper entitled "Ethyl α-nitroacetate: a versatile building block for the preparation of five-/ six-membered aza-heterocyclic compounds".
- Organizing Secretary of the Two-day National Conference on 'Emerging Trends in Chemical Sciences (ETCS-2019) by Department of Chemistry and Chemical Sciences, Central University of Jammu during March 14th-15th, 2019.

Teaching Experience

- Assistant Professor in the Department of Chemistry, Govt. Degree College for Women Kathua, J&K (2019-20 session, 23-12-2019-Present});
- Contractual Assistant Professor in the Department of Chemistry and Chemical Sciences, Central University of Jammu (2018-2019 session, 10-07-2018-30-05-2019));
- Contractual Assistant Professor in the Department of Chemistry and Chemical Sciences, Central University of Jammu (2017-2018 session, 19-07-2017-30-05-2018});
- Contractual Lecturer in the Department of Chemistry, University of Jammu (2016-2017 session, 19-09-2016-31-05-2017);
- Guest faculty in the Department of Chemistry, Central University of Jammu (2016-2017 session, about one and a half months);
- **M.Sc. Chemistry, University of Jammu** (2014-15 and 2015-16 sessions, total = 24 months);
- M.Sc. Biotechnology and M.Sc. Biochemistry, University of Jammu (2013-14 sessions, 5 months)
- PROJECT GUIDE for two students of Semester VI, Department of Chemistry and Chemical Sciences, Central University

CURRICULUM VITAE

Residential address H. No. 554 – C, Sainik Colony, Jammu – 18001

J&K, India. 11-08-1986

Sex

Female

Qualification

Date of Birth

Personal Information

M.Sc., M.Phil. [Organic Chemistry],

Ph.D. [Organic Chemistry],

CSIR-NET-JRF

E-mail Mobile

khajuria.rajni36@gmail.com;

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Educational Qualification

S.No.	Name of	Name of	Year of	Subjects	Division,
	degree	Institution	passing		% of marks
1)	Ph.D.	University of	2016	Thesis Title	Public Viva-voce
	(Organic	Jammu		"Synthesis and development	examination on
	Chemistry)			of novel heterocyclic	5 th Nov., 2016.
				compounds as anti-microbial	Notification:
				agents"	8 th Nov., 2016.
2)	M.Phil.	University of	2012	Dissertation Title	
	(Organic	Jammu		"A multicomponent synthesis	'O Grade'
	Chemistry)			of 3 -nitro-4,6-diaryl-5,6-	
				dihydro-2(1 <i>H</i>)-pyridones	
				under ultrasonic irradiation"	
3)	Master's	University of	2010	Chemistry	Distinction
	Degree	Jammu			(75.17%)
4)	Bachelor's	GCW, Gandhi	2008	Botany, Chemistry,	Distinction
	Degree	Nagar,		Zoology	(76.78%)
		Jammu.			

Honours

1)	Junior Research	"Synthesis of unnatural $lpha$ -amino acids by transfer	22 nd Feb, 2011-			
	Fellowship	llowship hydrogenation and building blocks for medicinal 30th Sep, 2012				
	in DST Research	chemistry and materials science from α -nitroacetate"				
	Project	vide No. SR/S1/OC-38/2010 dated 27/09/2010				

2) Qualified **Joint CSIR-UGC-NET JRF** examination in Chemistry in 2012

Junior Research Fellowship Senior Research Fellowship October, 2012-September, 2014 October 2014-7th June, 2016.

Awards

1) Third prize Paper entitled 'International Conference on Green {Poster "Greener synthesis of Chemistry: Catalysis, Energy and 4,6-diarylpyridin-2(1*H*)-ones: **Environment**' presentation} Versatile precursors to 2,4,6-Organized Department of by triarylpyridines". Chemistry, University of Goa during

January 22-24, 2015.

2) Best Oral presentation

Paper entitled"Five and six membered nitrogen containing heterocycles"

10th JK Science Congress on 'Science and Technology for Inclusive Development: A way Forward' Organized by University of Jammu during March 14-16, 2015.

3) **Best Oral** presentation

Paper entitled "Unraveling the mysteries of unprecedented synthesis of architecturally challenging oxacycles" 11th National Conference on 'Advances in Chemical Sciences and Thermodynamics'

Organized by Department of Chemistry, University of Jammu in collaboration with The Indian Thermodynamics Society during December 2nd-3rd, 2016.

List of Publications

Total citations = 203; h-index = 7; i10-index = 7

Top h cited research: Active methylenes in the synthesis of pyrrole motif: An imperative structural unit of pharmaceuticals, natural products and optoelectronic materials, **2016**, *6*, 37039-37066 (64 Citations since April 2016)

S. No.	Title of Paper	Authors	Journal	Year	Vol.	Pages	Impact Factor
17)	An efficient synthesis of 4- phenoxy-quinazoline, 2- phenoxy-quinoxaline, 2- phenoxy-pyridine derivatives using aryne chemistry	Mahesh K. Zilla, Sheena Mahajan, Rajni Khajuria , Vivek K. Gupta, Rajnikant, Kamal K. Kapoor and Asif Ali	RSC Advances	2021	11	3477- 3483	3.361
16)	Review Article: Recent developments in the synthesis of pyrido[1,2-a]benz imidazoles	Rajni Khajuria, Sk. Rasheed, Chhavi Khajuria, Kamal K. Kapoor, Parthasarathi Das	Synthesis (Invited Article)	2018	50	2131- 2149	3.157
15)	Review Article: Active methylenes in the synthesis of pyrrole motif: An imperative structural unit of pharmaceuticals, natural products and optoelectronic materials	Rajni Khajuria, Sumita Dham, Kamal K. Kapoor	RSC Advances {Certificate of Appreciation as a highly cited paper (ranked in top 10% by citation) published in Royal Society of Chemistry journals}	2016	6	37039- 37066	3.361
14)	One-pot cascade synthesis of pyrano/furanotetra hydroquinolines through Povarov reaction catalyzed by Fe(NO ₃) ₃ @Al ₂ O ₃	Ramneet Kaur, Rajni Khajuria , Yeshwinder Saini, Kamal K. Kapoor	Indian Journal of Heterocyclic Chemistry {Commemorative issue-dedicated to Prof. S. P. Singh on his 80th birthday}	2018	28	91-102	0.320
13)	Expeditious synthesis of coumarin-pyridone conjugate molecules and their anti-microbial evaluation	Rajni Khajuria, Sheena Mahajan, Ambica, Kamal K. Kapoor	Journal of Chemical Sciences	2017	129	1549- 1557	1.406

12)	Single crystal X-ray study of 6-Phenyl-4-(<i>p</i> -tolyl)pyridin-2(1 <i>H</i>)-one	Rajni Khajuria , Suresh Sharma, Kamal K. Kapoor,	Crystallography Reports	2017	62	1148- 1151	0.735
11)	Synthesis and anti-	Vivek K. Gupta Yeshwinder Saini,	Synthetic	2017	47	1159-	1.796
	microbial evaluation of novel 3-(arylidene amino)- 3a,8a- dihydroxy-1,3,3a,8a- tetrahydroindeno[1,2-d] imidazole-2,8-diones and their 2-thioxo analogues	Rajni Khajuria, Ramneet Kaur, Sanjana Kaul, Tanwi Sharma, Suruchi Gupta, Vivek K. Gupta, Rajni Kant, Kamal K. Kapoor	Communications			1168	
10)	Unprecedented reaction of ninhydrin with ethyl cyanoacetate and diethyl malonate on ultrasonic irradiation	Yeshwinder Saini, Rajni Khajuria, Love Karan Rana, Maninder S. Hundal, Vivek K. Gupta, Rajni Kant, Kamal K. Kapoor	Tetrahedron	2016	72	257- 263	2.457
9)	Iodine-ammonium acetate promoted reaction between 2- aminopyridine and aryl methyl ketones: a novel approach towards the synthesis of 2- arylimidazo[1,2-a] pyridines	Dilpreet Kour, Rajni Khajuria , Kamal K. Kapoor	Tetrahedron Letters	2016	57	4464– 4467	2.415
8)	Reaction of 3-(2- nitrophenyl)-1- arylprop- 2-en-1-ones with triethyl phosphite in microwave revisited: One-pot synthesis of 2- aroylindoles and 2- arylquinolines	Annah Gupta, Rajni Khajuria , Kamal K. Kapoor	Synthetic Communications	2016	46	31-38	1.796
7)	Divergent synthesis of 4, 6-diarylated pyridin- 2(1H)-ones from chalcones: Novel access to 2, 4, 6- triarylpyridines	Rajni Khajuria, Prakash Kannaboina, Kamal K. Kapoor, Annah Gupta, Gaurav Raina, Amanpreet Kaur Jassal, Love Karan Rana, Maninder S. Hundal, Parthasarathi Das	Organic and Biomolecular Chemistry	2015	13	5944- 5954	3.876
6)	Metal-free reductive amination of aldehydes for the synthesis of secondary and tertiary Amines	Ambica, Rajni Khajuria , Yeshwinder Saini, Kamal K. Kapoor	Indian Journal of Chemistry: Section B	2015	54B	1252- 1259	0.592

4)	One-pot, solvent-free cascade synthesis of ethyl 3,5-disubstituted-1H-pyrrole-2-carboxylates under microwave irradiation	Rajni Khajuria, Kamal K. Kapoor Rajni Khajuria,	Current Microwave Chemistry Indian Journal of	2014	53B	110- 118	0.592
	nonahydrate as a mild and efficient catalyst for the synthesis of β -enaminones	Ambica, Yeshwinder Saini, Kamal K. Kapoor	Chemistry: Section B		330	1127	
3)	Alum catalysed synthesis of 12-aryl- 8,9,10,12-tetrahydro benzo[a]xanthen-11-ones under solvent-free conditions	Rajan Kumar Sharma, Rajni Khajuria , Kamal K. Kapoor	Synthetic Communications	2014	44	3538- 3551	1.796
2)	A solvent-free synthesis of ethyl 3,5-diaryl-1 <i>H</i> -pyrrole-2-carboxylates via triethyl phosphite mediated reductive cyclization of ethyl 2-nitro-5-oxo-3,5-diarylpentanoates under microwave irradiation	Rajni Khajuria , Yeshwinder Saini, Kamal K. Kapoor	Tetrahedron Letters { highlighted in Organic Chemistry Highlights, June 23, 2014 by Douglas F. Taber, University of Delaware}	2013	54	5699- 5702	2.415
1)	Synthesis and antimicrobial evaluation of novel lipophilic derivatives of pyrazolylisoxazolines	Shally Chadha, Rajni Khajuria , Satya Paul, Kamal K. Kapoor	Indian Journal of Chemistry: Section B	2013	52B	259- 265	0.592

Conferences/Symposia/Workshops

> Oral Talk

- 31) National Level Seminar on "Science and Technology for the unreached: Notions, Values and Applicability" (NLSST-2018), organized by Govt. Degree College, Samba under the aegis of Indian Science Congress Association (ISCA)-Jammu Chapter, during April 20th-21st, 2018 [Oral Presentation of the paper entitled "Microwave assisted synthesis of novel 3-nitro substituted pyridin-2(1*H*)-ones: Useful precursors to 3-substituted-β-carbolines"].
- 30) 6th International Conference on New Frontiers of Engineering, Science, Management and Humanities (ICNFESMH-2017), organized by Institution of Electronics and Telecommunication Engineers, Chandigarh, Punjab, India during December 9th, 2017
 [Oral Presentation of the paper entitled "Ammonium acetate assisted preparation of Michael addition products: A greener approach"].

- 29) International Multi-Stream Conference on Research & Society, organized by Gujranwala Guru Nanak Institute of Management & Technology, Ludhiana during October 29th, 2017 [Oral Presentation of the paper entitled "Acoustic cavitations as an appealing mode for green synthesis"].
- 28) Two days National Symposium on "Recent Trends in Biotechnology and Drug Discovery", organized by Shri Mata Vaishno Devi University, Katra during March 30th 31st, 2017 [Oral Presentation of the paper entitled "Unprecedented synthesis of architecturally challenging oxocinochromene and cyclooctadichromene and their mechanistic revelation"].
- 27) 12th JK Science Congress on "Science and Technology: Emerging Trends and Innovations", organized by University of Jammu during March 2nd 4th, 2017
 [Oral Presentation of the paper entitled "Expeditious synthesis and anti-bacterial, anti-fungal screening of novel coumarin-pyridin-2(1*H*)-one hybrids"].
- 26) 11th National Conference on "Advances in Chemical Sciences and Thermodynamics", organized by Department of Chemistry, University of Jammu in collaboration with The Indian Thermodynamics Society during December 2nd-3rd, 2016

 [Oral Presentation of the paper entitled ""Unraveling the mysteries of unprecedented synthesis of architecturally challenging oxacycles" {An award winning oral presentation}].
- 25) **XII J-NOST Conference for Research Scholars** organized by CSIR-Central Drug Research Institute, Lucknow during November $24^{\text{th}}-27^{\text{th}}$, 2016 [Oral Presentation of the paper entitled "Ethyl α -nitroacetate: a versatile building block for the preparation of five-/six-membered azaheterocyclic compounds"].
- 4th J&K Women Science Congress (JKWSC) on "Career in Science for Women- Challenges and Opportunities", organized by GCW, Gandhi Nagar, Jammu during September 1st-3rd, 2016 [Oral Presentation of the paper entitled "Ultrasonics: A partner in green chemistry"].
- 23) 10th JK Science Congress on "Science and Technology for Inclusive Development: A way Forward", organized by University of Jammu during March 14th-16th, 2015
 [Oral Presentation of the paper entitled "Five and six membered nitrogen containing heterocycles" {An award winning oral presentation}].

Paper Presentation

- International Conference on "Emerging Trends in Drugs Development and Natural-Products (ETDDNP-2018)" organized by Department of Chemistry, University of Delhi, India during January 12th-14th, 2018 [Poster Presentation of the paper entitled "Serendipitous synthesis of architecturally challenging cyclooctadichromene and benzooxocinochromene from a century old reaction].
- 21) National Conference on "**Skill Enhancement Courses & Employment Generation (SECEG-2017)**" organized By Department of Chemistry, Government Degree College, Kathua (J&K), India during December 19th, 2017 [**Poster Presentation** of the paper entitled "Structure determination of ethyl 3,5-di substituted- 1*H*-pyrrole-2-carboxylates and their DFT studies"].
- 20) Vth National Symposium on Advances in Chemical Sciences, at Guru Nanak Dev University, Amritsar, supported by Royal Society of Chemistry, UK; University Grants Commission and Department of Science and Technology, India during February 2nd-3rd,2016
 [Poster Presentation of the paper entitled "Synthesis of Novel 6-(2-0xo-2*H*-chromen-3-yl)-4-arylpyridin-2(1*H*)-ones and their *in vitro* Anti-Microbial Evaluation"].
- 19) **International Conference on Green Chemistry: Catalysis, Energy and Environment** (ICGC 2015) organized by Department of Chemistry, University of Goa during January 22 nd-24th, 2015 [**Poster Presentation** of the paper entitled "Greener synthesis of 4,6-diarylpyridin-2(1*H*)-ones: Versatile precursors to 2,4,6-triarylpyridines" {*An award winning presentation*}].

- 18) 101st Indian Science Congress on "Innovation in Science and Technology for Inclusive Development" organized by University of Jammu during February 3rd-7th, 2014[Poster Presentation of the paper entitled "Diethylphosphite mediated solvent-free synthesis and mechanistic relevance of pyrrole-2-carboxylates"].
- 17) **3rd Biennial International Conference on New Developments in Drug Discovery from Natural Products and Traditional Medicines** organized by National Institute of Pharmaceutical Education and Research (NIPER), Punjab during November 22nd-24 th, 2012
 [**Poster Presentation** of the paper entitled "Synthesis of 1,4-dihydropyridines and benzodiazepines catalyzed by green and cheap Lewis acid"].
- 8th JK Science Congress 2012, on "Science, Technology & Regional Development: Opportunities & Challenges" organized by University of Kashmir, J&K State Council for S&T and DST, GOI during September 17 th-19 th, 2012 [Poster Presentation of the paper entitled "A study on the synthesis and anti-microbial activity of novel heterocyclic system"].
- UGC Sponsored National Symposium on Interdisciplinary Sciences organized by G.G.M. Science College, Jammu, J&K during March 2nd-3rd, 2012 [Poster Presentation of the paper entitled "Synthesis and biological activity of 2-amino-6-(3,3- dimethylspiro{bicycle[2.2.1]heptan-2,5'-isoxazoline-2}-3'-yl)-4-aryl pyrimidines and 2-amino-6- (5-octyl-2-isoxazolin-3-yl)-4-arylpyrimidines"].
- National Symposium on Chemistry in 21st century organized by Department of Chemistry (UGC Centre for Advanced Studies), Guru Nanak Dev University, Amritsar, during December 23 rd-24 th, 2011 [Poster Presentation of the paper entitled "A study of antimicrobial activity of novel lipophilic derivatives of aminoisoxazolinepyrimidines"].

> Participation in Conferences

- Online National Mini Workshop cum Webinar on E-Content Development organized by Govt. G.G.M. Sc. College on 16th August, 2021; **Participation**.
- 12) International Interdisciplinary Conference on "COVID 19: Challenges, and Impact on Health, Environment, Livelihood and Education" jointly organized by IBRF Kolkata, GDC Bhaderwah, CIU New Delhi and SERI Kolkata during 28-30 May, 2021; Participation.
- One day Webinar on "Emerging Trends in Organic Synthesis", organized by Department of Chemistry, Central University of Jammu on 19th March, 2021; **Participation**.
- 10) One day Acquaintance Program on Accelerator Based Research organised by Department of Physical and Astronomical Sciences, Central University of Jammu during March 26, 2018; Participation.
- 9) 7th Science Communicator's Meet (Rashtriya Vigyan Sancharak Sammelan) organized by University of Jammu during February 4 th-5 th, 2014; **Participation**.
- 8) 7th JK Science Congress (JKSC-11) organized by University of Jammu during October 13th-15th, 2011; **Participation.**
- 7) Chemical Research Society of India, North Zone meeting, 2011 organized by University of Jammu, Jammu during September 22nd-24th, 2011; **Participation**.

> Workshops Attended

- One day workshop on "**Issues and Challenges in Education during Corona-19 Pandemic**" organised by IQAC, Govt. College of Education, Jammu during 26th March, 2021; **Participation**.
- One Day Workshop on World Health Day with the theme "Universal Health Coverage: Everyone, Everywhere" organised by Central University of Jammu during April 9th, 2018; **Participation**.
- 4) Five days International workshop on 'Soft materials and devices (IWSMD-2018)', organized by the Department of Nano Science and Material, Central University of Jammu during March 21st-25th, 2018; Participation.
- 3) Seven days workshop on '**Scale Development and Validation**', organized by the Udhampur Campus, University of Jammu during June 10th-16th, 2017; **Participation**.
- 2) Two days BIRAC workshop on "Bio entrepreneurship, Grant-Writing and IP", organized by CSIR-Indian Institute of Integrative Medicine, Jammu during June 23rd-24th, 2016; Participation.

Two days research workshop on "Writing Research Proposal for Funding", organized by Faculty of Science, University of Jammu in collaboration with J&K State Science Technology & Innovation Council, Department of Science and Technology, Govt. of J&K during May 30th-31st, 2016; Participation.

Teaching Ex	xperience
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> As Assistant Professor in Department of Chemistry, Govt. Degree College for Women Kathua

S. No.	Subject	Course	Semester/session
1)	General Chemistry	General Organic Chemistry Course No. UCHTC101 And Laboratory Course: Chemistry-I Course No. UCHPC102	1st Semester 2021 w.e.f. 17-03-2021-30-04-2021)
2)	General Chemistry	Functional Organic Chemistry Course No. UCHTC201 And Laboratory Course: Chemistry-II Course No. UCHPC202	2nd Semester 2021 w.e.f. 06.05.2021)
3)	Physical and Organic Chemistry	Course No. UCHTC301 And Laboratory Course: Chemistry-III Course No. UCHPC302	3 rd Semester 2021 w.e.f. 23.10.2021- 30.04.2021)
4)	Physical and Inorganic Chemistry	Course No. UCHTC401 And Laboratory Course: Chemistry-II Course No. UCHPC402	4 th Semester 2022 w.e.f. 26.05.2022-Present)

> As Contractual Assistant Professor in Department of Chemistry and Chemical Sciences, Central University of Jammu

S. No.	Subject	Course	Semester/session
3)	Physical Chemistry	ICCHM2C003T	2 nd Semester 2017-2018
			w.e.f. 04.01.2018-30-05-2018)
4)	Inorganic Chemistry	ICCHM2C003T	2 nd Semester 2017-2018
			w.e.f. 04.01.2018-30-05-2018)
5)	General Chemistry	ICCHM2C004L	2 nd Semester 2017-2018
	Practicals		w.e.f. 04.01.2018-30-05-2018)
6)	Physical Chemistry	ICCHM3C001T	3 rd Semester 2017-2018
			w.e.f. 19.07.2017- 03-01-2018
7)	Inorganic Chemistry	ICCHM3C002T	3 rd Semester 2017-2018
			w.e.f. 19.07.2017 - 03-01-2018

8)	Organic Chemistry Practicals	ICCHM3C003L	3 rd Semester 2017-2018 w.e.f. 19.07.2017 - 03-01-2018
			,
9)	Physical Chemistry Practicals	ICCHM3C004L	3 rd Semester 2017-2018 <i>w.e.f.</i> 19.07.2017 - 03-01-2018
10)	Chemistry Practicals	ICCHM1C001L	1 st Semester 2017-2018 w.e.f. 19.07.2017 - 03-01-2018
> As	Contractual Faculty (Lec	cturer) in Department of (Chemistry, University of Jammu
11)	Organic Chemistry	Applications of Spectroscopy in Organic Chemistry Course No. PSCHTC204	2 nd Semester 2017-2018 session <i>w.e.f.</i> 09.01.2017 – 31.05.2017.
12)	Organic Chemistry	Organic Synthesis Course No. PSCHTE408	IV th Semester 2017-2018 session <i>w.e.f.</i> 09.01.2017 – 31.05.2017.
13)	Organic Chemistry Practical Work	Course No. PSCHLC207	2 nd Semester 2017-2018 session <i>w.e.f.</i> 09.01.2017 – 31.05.2017.
14)	Organic Chemistry	Organic Reaction Mechanism-I Course No. PSCHTC103	Ist Semester 2016-2017 session w.e.f. 19.09.2016 – 08.01.2017
15)	Organic Chemistry Practical Work	Course No. PSCHLC107 Course No. PSCHLC307	Ist Semester and III rd Semester 2016-2017, w.e.f. 19.09.2016 – 08.01.2017
	Sc. Integrated Course in culty)	n Chemistry, Central Un	iversity of Jammu (As Guest
16)	Chemistry-I	Atomic Structure Course No. ICY-101	Ist Semester 2016-2017 w.e.f. 03.08.2016-18.09.2016
> M.	Sc. Courses in University	of Jammu	
17)	Chemistry	Applications of spectroscopy Course No. PSCHPC204	II nd Semester 2016-2017 session w.e.f. 07.01.2016-10-04-2016
18)	Chemistry	Course No. PSCHPC204	II nd Semester 2015-2016 session <i>w.e.f.</i> 14.01.2015-13.05.2015
19)	Organic Chemistry	Heterocyclic chemistry I, Course No. 557	IV th Semester 2014-2015 session <i>w.e.f.</i> 09.01.2014 to 25.05.2014
20)	Biochemistry	Bioorganic chemistry, Course No. 409	Ist Semester 2013-2014 session w.e.f. 16.07.2013 to 26.12.2013
21)	Biotechnology	Biomolecules, Course No. 410	Ist Semester 2013-2014 session w.e.f. 16.07.2013 to 26.12.2013

Academic and Research Activities

❖ Participated in the One Week Faculty Development Programme on "ICT Tools for Effective

- **Teaching Learning**" w.e.f. 23-05-2022 to 28-05-2022, Organised by Kamla Nehru Mahavidyalaya, Nagpur, Maharashtra.
- **External Examiner** to conduct Practical Examinations of UG Students for the session 2021-2022 in the **Department of Chemistry, G.G.M. Science College, Jammu** during 17th-18th May, 2022.
- **❖ External Examiner** to conduct Practical Examinations of UG Students for the session 2021-2022 in the **Department of Chemistry**, **P.S.P.S. Govt. PG College for Women**, **Jammu** during 9th-12th May, 2022.
- ❖ Participated in the Virtual International One Week Faculty Development Programme on "Research Methodology" w.e.f. 02-05-2022 to 07-05-2022, Organised by Amar Seva Mandal's Kamla Nehru Mahavidyalaya, Nagpur, Maharashtra.
- Member of Organizing committee of two day seminar on 'SWANTARTA SANGRAM AUR HINDI SHAHITYA', organized by GDC for Women Kathua in collaboration with Rashtriya Bhasha Prachar Samiti, Jammu during 28th-29th March, 2022.
- ❖ Participated in the 4-week Induction/Orientation programme w.e.f 19-11-2021 to 18-12-2021 organised by Teaching Learning Centre, Ramanujan College, University of Delhi.
- **❖ External Examiner** to conduct Practical Examinations of PG Integrated and UG Honors Students for the session 2020-2021 in the **Department of Chemistry, School of Sciences, Cluster University of Jammu** during 5th-8th April, 2021.
- Prepared e-Content of Unit-V for UG (Honors, Semester-V) and Organic Chemistry IV, Cluster University of Jammu.
- ❖ PROJECT GUIDE for two students of Semester VI, Department of Chemistry and Chemical Sciences, Central University of Jammu (Mr. Goutam Sharma of Semester and Mr. Shakti Ranjan Samal) for the award of the degree of B.Sc (Hons)-M.Sc. Chemistry during the period December 2018-May 2019.
- ❖ Organizing Secretary of the Two-day National Conference on 'Emerging Trends in Chemical Sciences (ETCS-2019) organized by Department of Chemistry and Chemical Sciences, Central University of Jammu during 14th and 15th of March, 2019, .
- ❖ One of the Contributors in the preparation of Souvenir of 101st Indian Science Congress organized by University of Jammu during February 3rd-7th, 2014.
- Life time member (Membership No. L22935) of "The Indian Science Congress Association (ISCA)", Kolkata – 700017, India.

Research Experiences and Skills

- ✓ Experienced in developing newer multistep methodologies and coupling reactions for -C-C and -C-X bond formation for the synthesis of biologically active molecules.
- ✓ Experienced in the structural elucidation of organic compounds by using 1D NMR, 2D NMR, IR & Mass spectroscopic techniques.
- ✓ Anti-microbial activity studies.
- ✓ Ability to write scientific reports & manuscripts; and
- ✓ Capable of both collaborative and independent research.

Rajni Khajuria