

CURRICULUM 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.
- Qualified Joint **CSIR-UGC-NET JRF** examination in Chemistry in June, 2012.
- **Granted a German Patent** vide **Patent No. IPC: A61K36/886** on **15.06.2022**, in collaboration with **Mahakaushal University, Jabalpur, India** entitled "**COMPOSITION OF ETHNO-MEDICINAL ANTI-DEPRESSANT ENERGY DRINK**".
- **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 = 83).**
- ✓ **Paper:** (*Tetrahedron Lett.*, 2013, 54, 5699-5702) *has been highlighted in Organic Chemistry Highlights, June 23, 2014 by Douglas 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, 23-10-2019–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 of Jammu** for the award of the degree of B.Sc (Hons)-M.Sc. Chemistry during the period December 2018-May 2019.

CURRICULUM VITAE

Personal Information	
Residential address	H. No. 554 –C, Sainik Colony, Jammu – 180011, J&K, India.
Date of Birth	11-08-1986
Sex	Female
Qualification	M.Sc., M.Phil. [Organic Chemistry], Ph.D. [Organic Chemistry], CSIR-NET-JRF
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Educational Qualification					
S.No.	Name of degree	Name of Institution	Year of passing	Subjects	Division, % of marks
1)	Ph.D. (Organic Chemistry)	University of Jammu	2016	Thesis Title “Synthesis and development of novel heterocyclic compounds as anti-microbial agents”	Public Viva-voce examination on 5 th Nov., 2016. Notification: 8 th Nov., 2016.
2)	M.Phil. (Organic Chemistry)	University of Jammu	2012	Dissertation Title “A multicomponent synthesis of 3 -nitro-4,6-diaryl-5,6-dihydro-2(1 <i>H</i>)-pyridones under ultrasonic irradiation”	‘O Grade’
3)	Master’s Degree	University of Jammu	2010	Chemistry	Distinction (75.17%)
4)	Bachelor’s Degree	GCW, Gandhi Nagar, Jammu.	2008	Botany, Chemistry, Zoology	Distinction (76.78%)

Honours		
1)	Junior Research Fellowship in DST Research Project	“Synthesis of unnatural α -amino acids by transfer hydrogenation and building blocks for medicinal chemistry and materials science from α -nitroacetate” <i>vide</i> 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	October, 2012-September, 2014
	Senior Research Fellowship	October 2014-7 th June, 2016.

Awards		
1)	Third prize {Poster presentation}	Paper entitled “Greener synthesis of 4,6-diarylpyridin-2(1 <i>H</i>)-ones: Versatile precursors to 2,4,6-triarylpyridines”. <i>‘International Conference on Green Chemistry: Catalysis, Energy and Environment’</i> Organized by Department of Chemistry, University of Goa during

January 22-24, 2015.

- 2) **Best Oral presentation** **Paper entitled** **10th JK Science Congress on 'Science and Technology for Inclusive Development: A way Forward'**
 "Five and six membered nitrogen containing heterocycles" Organized by University of Jammu during March 14-16, 2015.
- 3) **Best Oral presentation** **Paper entitled** **11th National Conference on 'Advances in Chemical Sciences and Thermodynamics'**
 "Unraveling the mysteries of unprecedented synthesis of architecturally challenging oxacycles" 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 = 210; h-index = 7; i10-index = 7 <i>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 (83 Citations since April 2016)</i>							
S. No.	Title of Paper	Authors	Journal	Year	Vol.	Pages	Impact Factor
18)	Granted a German Patent <i>vide Patent No. IPC: A61K36/886 on 15.06.2022</i> , in collaboration with Mahakaushal University, Jabalpur, India. Title of the invention is ' Composition of Ethno-medicinal Anti-Depressant Energy Drink '.						
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- <i>a</i>]benzimidazoles	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 { <i>Certificate of Appreciation as a highly cited paper (ranked in top 10% by citation) published in Royal Society of Chemistry journals</i> }	2016	6	37039-37066	3.361
14)	One-pot cascade synth 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	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, Vivek K. Gupta	Crystallography Reports	2017	62	1148-1151	0.735
11)	Synthesis and anti-microbial evaluation of novel 3-(arylidene amino)-3a,8a-dihydroxy-1,3,3a,8a-tetrahydroindeno[1,2- <i>d</i>]imidazole-2,8-diones and their 2-thioxo analogues	Yeshwinder Saini, Rajni Khajuria , Ramneet Kaur, Sanjana Kaul, Tanwi Sharma, Suruchi Gupta, Vivek K. Gupta, Rajni Kant, Kamal K. Kapoor	Synthetic Communications	2017	47	1159-1168	1.796
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- <i>a</i>]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-aryloxyindoles 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(1 <i>H</i>)-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

5)	One-pot, solvent-free cascade synthesis of ethyl 3,5-disubstituted-1H-pyrrole-2-carboxylates under microwave irradiation	Rajni Khajuria , Kamal K. Kapoor	Current Microwave Chemistry	2014	1	110-118	-
4)	Ferric nitrate nonahydrate as a mild and efficient catalyst for the synthesis of β -enaminones	Rajni Khajuria , Ambica, Yeshwinder Saini, Kamal K. Kapoor	Indian Journal of Chemistry: Section B	2014	53B	1122-1127	0.592
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-1H-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 anti-microbial evaluation of novel lipophilic derivatives of pyrazolyloxazolines	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(1H)-ones: Useful precursors to 3-substituted- β -carboline”].
- 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(1H)-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 24th-27th, 2016 [Oral Presentation of the paper entitled “Ethyl α -nitroacetate: a versatile building block for the preparation of five-/six-membered aza-heterocyclic compounds”].
- 24) 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**

- 22) 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- 1H-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-Oxo-2H-chromen-3-yl)-4-arylpyridin-2(1H)-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 22nd-24th, 2015 [Poster Presentation of the paper entitled “Greener synthesis of 4,6-diarylpyridin-2(1H)-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-24th, 2012 [**Poster Presentation** of the paper entitled “Synthesis of 1,4-dihydropyridines and benzodiazepines catalyzed by green and cheap Lewis acid”].
- 16) **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 17th-19th, 2012 [**Poster Presentation** of the paper entitled “A study on the synthesis and anti-microbial activity of novel heterocyclic system”].
- 15) **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{bicyclo[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”].
- 14) **National Symposium on Chemistry in 21st century** organized by Department of Chemistry (UGC Centre for Advanced Studies), Guru Nanak Dev University, Amritsar, during December 23rd-24th, 2011 [**Poster Presentation** of the paper entitled “A study of antimicrobial activity of novel lipophilic derivatives of aminoisoxazolinepyrimidines”].

➤ **Participation in Conferences**

- 13) 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 Bhabarwah, CIU New Delhi and SERI Kolkata during 28-30 May, 2021; **Participation.**
- 11) 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 4th-5th, 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**

- 6) 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.**
- 5) 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.**

- 1) 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 Experience			
➤ 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 <i>w.e.f.</i> 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 <i>w.e.f.</i> 06.05.2021)
3)	Physical and Organic Chemistry	Course No. UCHTC301 And Laboratory Course: Chemistry-III Course No. UCHPC302	3rd Semester 2021 <i>w.e.f.</i> 23.10.2021-30.04.2021)
4)	Physical and Inorganic Chemistry	Course No. UCHTC401 And Laboratory Course: Chemistry-II Course No. UCHPC402	4th Semester 2022 <i>w.e.f.</i> 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	2nd Semester 2017-2018 <i>w.e.f.</i> 04.01.2018-30-05-2018)
4)	Inorganic Chemistry	ICCHM2C003T	2nd Semester 2017-2018 <i>w.e.f.</i> 04.01.2018-30-05-2018)
5)	General Chemistry Practicals	ICCHM2C004L	2nd Semester 2017-2018 <i>w.e.f.</i> 04.01.2018-30-05-2018)
6)	Physical Chemistry	ICCHM3C001T	3rd Semester 2017-2018 <i>w.e.f.</i> 19.07.2017- 03-01-2018
7)	Inorganic Chemistry	ICCHM3C002T	3rd Semester 2017-2018 <i>w.e.f.</i> 19.07.2017 - 03-01-2018

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