

Research Profile of the Department

1. Faculty

Sr. No.	Name of the Faculty	Designation (Regular/Contractual/Resource Person)	Research Area	Email
1	Dr. Rashmi Pundeer	Regular	Heterocyclic Chemistry, Hypervalent Iodine Reagent, Medicinal Chemistry	rashmi.chem@igu.ac.in
2	Dr. Karan Singh	Regular	Green Chemistry, Microwave mediated organic synthesis, Heterocyclic Chemistry, Reagents in organic synthesis	karansingh.chem@igu.ac.in
3	Ms. Karmvati Yadav	Resource Person	–	karmwati.chem@igu.ac.in
4	Ms. Nisha Yadav	Resource Person	–	nisha.chem@igu.ac.in
5	Ms. Minakshi	Resource Person	–	minakshi.chem@igu.ac.in
6	Ms. Laxmi Devi	Resource Person	–	lax.chem@igu.ac.in
7	Ms. Gitanjali	Resource Person	–	geetanjali.chem@igu.ac.in

2. Staff

Sr. No.	Name	Designation	Status(Regular/Contractual/Outsourced)
1	Mr. Amit Kumar	Lab attendant	

2	Mr. Ajeet Dagar	Clerk	
3	Ms. Sumitra Devi	Helper	

3. Research Scholars

Sr. No.	Name	Ph.D. Registration No. & Enrollment Date	Title of thesis	Name of Supervisor/ Co-Supervisor	Status (awarded/ on-going)	Email
1	Harshita Phougat	200010614001, 20.04.2022	Synthesis of some novel 1,3,4-trisubstituted pyrazole derivatives of potential biological interest	Dr. Karan Singh	on-going	harshitaphougat999@gmail.com
2	Sidhant Yadav	200010614002, 07.07.2021	Novel 2,4,5-trisubstituted thiazole derivatives: Synthesis and their prospective applications	Dr. Rashmi Pundeer	on-going	sidhant Yadav417@gmail.com
3	Ekta Yadav	Enroll.No. 210010614001 15.07.2022	-----	Dr. Karan Singh	on-going	ekta.chem.rs@igu.ac.in
4	Kiran	Enroll.No. 220010614001 10.02.2023	-----	Dr. Karan Singh	on-going	kiran.chem.rs@igu.ac.in
5	Priyanka	Enroll.No. 220010614002 10.02.2023	-----	Dr. Rashmi Pundeer	on-going	priyanka.chem.rs@igu.ac.in

4. Research Lab facility/ infrastructure details of the Department.

Sr. No.	Lab/Equipment	Quantity
1	Research Lab	01
2	UV Spectrophotometer	01
3	Electrochemical workstation	01
4	Space design labs fume hood	01
5	Triple distillation unit	01
6	UV Chamber	01
7	REMI- Magnetic stirrer with temperature probe 10MLH	01
8	REMI-Micro centrifuge	01
9	REMI-Magnetic stirrer with glass ceramic hot plate (10 MLH, 1 MLH, 2 MLH)	05

5. Research Papers (with IGU affiliation only)

Sr. No.	Author(s)	Title of Paper	Name of Journal	(SCI/Scopus/UGC Care)	Volume/Page	Year	Web Link of the paper
1	Sushma Singh, Sidhant Yadav, Minakshi Yadav, Rashmi Pundeer.	Green Synthesis of Pyrazoles: Recent Developments in Aqueous Methods	Thieme Open Access SynOpen	Scopus		July 2023	https://drive.google.com/file/d/1Wj7qNcEy3IUya7o-b6Bj5CeKj4H2L74v/view?usp=drive_link https://www.thieme-connect.com/products/ejournals/abstract/10.1055/a-2123-8102
2	Loveena Arora, Rashmi Pundeer and Jitender Kapoor	Reactivity of α,α -Dibromo Derivatives of o/p-Hydroxyacetophenones: An Efficient Synthesis of Some 2-Substituted 4-(4-Hydroxyphenyl)- and 4-(2-Hydroxyphenyl) thiazoles	Indian Journal of Heterocyclic Chemistry	Web of science	Vol. 33 - Number 02 271-276	2023 (Apr-Jun 2023)	https://drive.google.com/file/d/1vuz76MOHUeZSED0eBuxN1kR9JL8W34Dg/view?usp=drive_link

3	Vandana Devi, Harshita Phougat, Jitander Kumar Kapoor, Sunil Kumar, Vijay Kumar and Karan Singh	Pyrazole-Clubbed Piperazinyl Urea Derivatives: Synthesis, Characterization and Antimicrobial Studies toward Generating an Antibiotic/Antifungal Resistance Sensor	ChemistrySelect	Scopus	8(2), e202204419	2023	https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/slct.202204419 https://doi.org/10.1002/slct.202204419
4	Raman Lakhia, Nitin Kumar Verma, Neera Raghav, Rashmi Pundeer	Chalcone and pyrazoline derivatives of dehydroacetic acid as digestive enzyme effectors and In silico studies	Journal of Molecular Structure	Scopus	1291 135884	2023	https://drive.google.com/file/d/1LNEQiLmS6PZHPO7sE473PtigWvWfXSY-/view?usp=drive_link https://doi.org/10.1016/j.molstruc.2023.135884
5	Parmod Kumar, Harshita Phougat, Anil Kumar, Anurakshee Verma, and Karan Singh	Microwave-Assisted OPC-VH Mediated Synthesis of 2-Amino-1,3,4-thiadiazoles	Organic Preparations and Procedures International	Scopus	55:1, 91-98	2023	https://www.tandfonline.com/doi/abs/10.1080/00304948.2022.2117521
6	Sushma Singh, Poonam Devi, Rashmi Pundeer, Vishwas Chaudhri	Application of diacetoxiodobenzene in the desulfurization of arylthioureas.	Indian Journal of Chemistry	Web of science	61, 776-779	2022	10.56042/ijc.v61i7.64647
7	Raman Lakhia, Neera Raghav, Rashmi Pundeer	Dehydroacetic acid hydrazones as potent enzyme inhibitors: design, synthesis and computational studies.	Computational Toxicology	Web of science	24, 1000239-1000248	2022	https://doi.org/10.1016/j.comtox.2022.100239

8	Vishwas Chaudhri, Richa Prakash, Rashmi Pundeer	Advances in the Arena of 1-(4-hydroxy-6-Methyl-2H-Pyran-2-On-3-yl)-3-Arylpropenone: Preparation, Reactivity and Transformations.	Letters in Organic Chemistry	Web of science	19(2), 93-110	2022	Bentham Science (eurekaselect.com) https://doi.org/10.2174/1570178618666210624120204
9	Parmod Kumar, Sumit Sood, Anil Kumar, Anurakshee Verma, Lalit Kumar, Sunil Kumar, Vijay Kumar, Anil Kumar and Karan Singh	1,3,4-Trisubstituted Pyrazoles: Synthesis, Antimicrobial Evaluation and Time Resolved Studies.	Polycyclic Aromatic Compounds	Scopus	43; 2960-2972	2022	https://www.tandfonline.com/doi/abs/10.1080/10406638.2022.2058968?journalCode=gpol20
10	Anil Kumar, Shikha Kashver, Kajal Sharma, Parmod Kumar, Vandana Devi, Anil Kumar, & Karan Singh	Microwave-Assisted Iodotrimethylsilane-Promoted Synthesis of Novel Pyrazolyl Chalcones	Organic Preparations and Procedures International	Scopus	54:6, 525-535	2022	https://www.tandfonline.com/doi/abs/10.1080/00304948.2022.2099199
11	Kriti Akansha, Tanvir Kaur, Ashok Yadav, Divjot Kour, Ashutosh Kumar Rai, Sangram Singh, Shashank Mishra, Lalit Kumar, Kanika Miglani, Karan Singh, Ajar Nath Yadav	Microbe-mediated remediation of dyes: Current status and future challenges	Journal of Applied Biology & Biotechnology	Scopus, Web of Science	Vol. X(XX), pp. 1-23	2022	http://dx.doi.org/10.7324/JAB.B.2023.113491
12	Om Prakash, Kamaljeet Pannu, Richa Prakash, Rashmi Pundeer, Vishwas Chaudhr	Primary alcohols to 2-alkyl/alkoxymethylbenzimidazoles: One-pot conversion using organoiodine(III) reagent	Indian Journal of Heterocyclic Chemistry	Web of science	Vol 32, 135-139	Jun 2022	https://drive.google.com/file/d/1dNrQjxoq5S8dF8-lkj37Av8x52jTo9nn/view?

							usp=drive_link
13	Rashmi Pundeer, Vishwas Chaudhri	Synthesis of N-aminoimidazol-2-thione derivatives using tandem approach.	Indian Journal of Chemistry	Web of science	60B, 983-985	2021	http://nopr.niscpr.res.in/handle/123456789/58180
14	Pooja Ranjan, Richa Prakash, Vishwas Chaudhri, Rashmi Pundeer	Hypervalent Iodine (III)-Mediated Monochlorination of Pyrazolyl Chalcone Analogs.	Indian Journal of Heterocyclic Chemistry,	Web of science	31(2), 223-226	2021	https://connectjournals.com/01951.2021.31.223
15	Kour D, Kaur T, Devi R, Yadav A, Singh M, Joshi D, Singh J, Suyal DC, Kumar A, Rajput VD, Yadav AN, Singh K, Singh J, Sayyed RZ, Arora NK and Saxena AK	Beneficial microbiomes for bioremediation of diverse contaminated environments for environmental sustainability: present status and future challenges.	Environmental Science and Pollution Research	Scopus	28, 24917-24939	2021	link.springer.com/article/10.1007/s11356-021-13252-7
16	Harshita Phougat, Vandana Devi, Sanjay Rai, T Shreedhar Reddy and Karan Singh	Urea derivatives of Piperazine Doped with pyrazole-4-carboxylic acids: Synthesis and Antimicrobial Evaluation.	Journal of Heterocyclic Chemistry	Scopus	58(10), 1992-1999	2021	https://onlinelibrary.wiley.com/doi/abs/10.1002/jhet.4325

6. Research Projects

Sr. No.	Title of the Project	Name of funding Agency	Duration of the Project	Amount	PI/Co-PI	Status (Completed/On-going)
	NIL					

7. Patents

Application No.	Title	Applicant(s)	Inventor(s)	Filing date	Application status	Published/Granted	Validity	Web Link
NIL								

8. Published Books

Sr. No.	Title of the Book/Book Chapter	Publisher Name	ISBN No.
1	Waste Management Strategies, Challenges and Future directions (Author: Rashmi Pundeer)	Nova Science Publishers, Inc.	978-1-68507-394-7
2.	Triazoles: Synthesis and Biological significance (Author:Dr. Rashmi Pundeer, Karmvati Yadav, Sidhant Yadav)	CRC Press, Taylor & Francis Group	Accepted
3.	Handbook of Functionalized Carbon Nanostructures/Controlled Synthesis of Carbon Quantum Dots: Functionalization and Unique Properties(Author:Rashmi Pundeer , Laxmi Devi)	Springer Nature	Accepted

9. Details of research awards and fellowship. NIL

10. Details of the Conferences/Seminars/Workshops and any other research activities organised by the department.

1. Two- Day National Workshop organized by the Department in collaboration with IIT Kharagpur on the topic “Chemiinformatics and Its Application in Research and Pharmaceutical Industry” on 12-13 March 2019.
2. Tattvapraakashika Lecture Series in collaboration with Hindu Girls College, Sonapat and Wiley VCH Germany on the topic “Exploring Recent Trends and Research Opportunities in sciences' ' on 17th Feb,2023.
3. A 13 days lecture workshop on the topic “Recent Advances in Material Science for Sustainable Development in Energy Application” in collaboration with Department of Physics, Kurukshetra University, Kurukshetra for the celebration of National Science day under the liaison of Azadi Ka Amrit Mahotsav, organized from 16th to 28th Feb.,2022

11. Details of the MoU's signed by the department. NIL