



Department of Biotechnology

Faculty of Life Sciences, IGU Meerpur

1. Research Projects

SNo.	PI/Co-PI	Title of the Project	Funding Agency	Duration	Year of Award	Amount in INR	Status
	NA						NA

2. Patents

Application No.	Title	Applicant(s)/ Inventor(s)	Filing date	Application status	Published /Granted	Validity
6304582	Medical Waste Treatment Device	Dr. Renu Jakhar & Dr. Rachna Yadav	20 August 2023	Granted	Published	3 year
2025111012 672	Non enzymatic colorimetric method for direct detection and quantification of nitrate in different matrices	Dr. Ramesh Kumar	14.02.2025	–	Published	–

3. Books/Book Chapters

Sl. No.	Name of the teacher	Title of the book published	Title of the chapters published	Year of publication	ISBN number	Name of the publisher
1.	Dr. Rachna Yadav	Focus on social and preventive pharmacy	Preventive Medicines for Dengue, Lymphatic Filariasis, Pneumonia, Cancer in Focus on Social and Preventive Pharmacy.	2022	978-620-4-97949-6	LAP LAMBERT
2.	Dr. Renu Jakhar	Focus on social and preventive pharmacy	Preventive Medicines for Chikungunya, Acute Respiratory Infections, Malaria,	2022	978-620-4-97949-6	LAP LAMBERT

4. MoUs

Year of signing MoU	Name of the organization with whom MOU/Collaboration being signed	Duration	Purpose of MOU/Collaboration	List the actual activities under each MOU year-wise	Date of the activity conducted
2023	IGU Meerpur Rewari and CSIR-HBT Palmur Himachal Pradesh.	5 Year	Raise the Standards of Research	Link	Link

5. Research Papers

S. No.	Title of Paper	Author(s)	Journal, Volume, Page (Year)	ISSN Number(s)	Journal WebLink	Abstract Link	SCI/SCOPUS/UGC Care
21.	In-vitro Anti-oxidant and Anti-diabetic activities of <i>Trianthema portulacastrum</i> L. leaves	Rachna Yadav	Allelopathy Journal 67, 49-58 (2026)	0971-4693/94	Link	Link	Scopus
20.	Challenges, Opportunities, and the Future of the Haryana Mushroom Industry	Sanjay Yadav	International Journal of Advanced Scientific and Technical Research.6,1-8 (2026)	2249-9954	Link	Link	
19.	Evaluation of Biocontrol Agents and Botanicals Against <i>Fusarium oxysporum</i> Under in vitro Conditions	Sanjay Yadav	International Journal of Science and Research (IJSR), 14,250-253 (2025)	2319-7064	Link	Link	
18.	Emerging Postharvest Technologies to Enhance the Shelf-Life of Fruit and Vegetables in Haryana: An Overview	Sanjay Yadav	Annals of Plant Sciences, 14,7029-7033,(2025)	2287-688X	Link	Link	
17	Integrated Management of <i>Fusarium</i> Damping-Off Using Biocontrol-Enriched FYM and Vermicompost with Botanical Extracts under In Vivo Conditions	Sanjay Yadav	International Journal of Advanced Scientific and Technical Research(2025)	2249-9954	Link	Link	
16.	Molecular Imprinted polymer based biosensor for selective detection of pathogenic microbes	Pooja, Ramesh Kumar	Microchemical Journal (2025)	1095-9149	Link	Link	yes
15.	A novel Fusion-5 Filter based Micro-chip: A highly efficient, On-chip DNA extraction and On-chip PCR amplification for rapid detection.	Ramesh Kumar	Chemical Biology Letters (2024)	2347-9825	Link	Link	Yes
14.	A systematic evaluation of sample preparation and 2-D gel electrophoresis protocol for mosquito proteomic	Renu Jakhar	MethodsX, : 102677 (2024)	2215-0161	Link	Link	Yes

	profiling.						
13.	Comprehensive Medicine Approach Towards Cancer Sufferers and Survivors: A Review	Rachna Yadav, Ramesh Kumar and Renu Jakhar	International Journal of Pharmaceutical and Bio-Medical Science. (2024)	2767-830X	Link	Link	
12.	A Therapeutic Boon to Mankind	Ramesh Kumar					
11.	Removal of Fluoride from the Water Using <i>Epipremnum aureum</i> (Money Plant)	Ramesh Kumar	Water conservation and engineering (2023)	2364-5687	Link	Link	Yes
10.	ZIKV: Epidemiology, infection mechanism and current therapeutics	Renu Jakhar	Frontiers in tropical diseases : 3:1059283 (2023)	2673-7515	Link	Link	
9.	Ebola virus is nature's wake-up call	Ramesh Kumar	Toxicology and Environmental Health Sciences (2023).	1746-0794	Link	Link	Yes
8.	Nasal shedding of vaccine viruses after immunization with a Russian-backbone live attenuated influenza vaccine in India	Ramesh Kumar	(2023)	1750-2659	Link	Link	Yes
7.	A Review:Protein Structure Visualization Tools and ORF Scanning	Rachna Yadav	International Journal of Research Publication and Reviews,4,1761 (2023)		Link	Link	
6.	Antiviral potential of medicinal plants against influenza virus: a systematics review	Ramesh Kumar	Research journal of pharma and Technology (2023)	0974-3618	Link	Link	
5.	An overview of advancement in aptasensors for influenza detection.	Ramesh Kumar	Expert Review of Molecular Diagnostics. (2022)	1473-7159	Link	Link	
4.	Ultrafast trace-level detection of methyl nicotinate biomarker using TiO2/SiNWs nanocomposite-based sensing	Ramesh Kumar	Journal of Materials Science: Materials in	0957-4522	Link	Link	

	platform.		Electronics. (2022)				
3.	Electrostatic graphene oxide-based biosensor for rapid direct detection of E. coli. International Journal of Materials Research.	Ramesh Kumar	International Journal of Materials Research (2022)	2195-8556	Link	Link	
2.	Genetic polymorphism impact superoxide dismutase and glutathione peroxidase activity in charcoal workers.	Kanika Miglani	Molecular Biology reports. Doi/10.1007/s133-022-07779-2 (2022)	1573-4978 (Online)	Link	Link	SCOPUS
1.	Novel sensing platform using silicon nanowires/ reduced graphene oxide to detect pathogenic E. coli (MTCC4430) and its application in water samples. Toxicology and Environmental Health Sciences.	Ramesh Kumar	Toxicology and Environmental Health Sciences. (2022)	2233-7784	Link	Link	