

Faculty Profile

Name	Dr. Manisha Khatri		
Designation	Assistant Professor		
Address	Shaheed Rajguru College of Applied Sciences for Women, University of Delhi, Vasundhara Enclave, Delhi-110096		
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Educational Qualifications			
Degree	Institution	Year	
Ph.D. (Biomedical Science)	Dr. B. R. Ambedkar Center for Biomedical Research, University of Delhi	2012	
M.Sc. (Microbiology)	University of Rajasthan	2005	
Career Profile			
July 2011-till date			
Working as Asst. Professor at Shaheed Rajguru college of Applied Sciences for Women, University of Delhi.			
2007-2008			
Assisted teaching of the Microbiology and Chemistry courses and helped in designing experiments for M.Sc. students.			
2005-2006			
Worked as Asst. Professor at Mahatma Jyoti Rao Phoole University, Jaipur.			
Administrative Assignments			
- Co-ordinator - Science Setu (A Collaboration between THSTI and SRCASW) - Associate Editor – International Journal of Innovation and Multidisciplinary Research (IJIAMR) - Co-convener - Research Committee - Member - IQAC - ECA Co-ordinator - Admissions - Convener - Fine arts society “ELVIRA”			
Areas of Interest / Specialization			
Drug Discovery and Designing Medicinal and Pharmaceutical chemistry Pharmacology			
Subjects Taught			

Human Physiology and Anatomy Human Pathology Pharmacology Medicinal Chemistry Microbiology
Research Guidance
Mentored 3 students of B.Sc.(H) Biomedical Science 4th year (Session 2025-26) for one year research projects entitled • <i>In-Silico</i> Screening of Phytochemicals from <i>Pluchea lanceolata</i> Targeting Rheumatoid Arthritis (RA) • <i>In silico</i> investigation of mechanism and effect of <i>Moringa olifera</i> on menstrual disorders. • Screening of <i>Hedera Helix</i> phytoconstituents targeting pulmonary disorders using <i>in silico</i> tools
Publications Profile
Research Papers Published in Referred/Peer Reviewed Journals 1. Jyoti Kumari, Anushree Ananad, Harsh Kashyap and Manisha Khatri, Molecular recognition of <i>Moringa olifera</i> active compounds in polycystic ovary syndrome (PCOS) and amenorrhea using integrated network pharmacology and molecular docking approach. <i>In Silico Research in Biomedicine</i>, (2026), 2, 100470. 2. Gayathri R Nair, Vanshika Jain, Shambhavi Agnihotri and Manisha Khatri, Comparative insights on conventional and advanced therapeutics for triple negative breast cancer: Challenges and future outlooks. <i>Biomedical and Therapeutics Letters</i>, (2026), 12(2), 1865. 3. Bhumika Munda, Chimila Bhutia, Deepti and Manisha Khatri, Diabetes and Obesity as catalysts in MASH progression: Mechanisms and emerging therapies. <i>Letters in Applied NanoBioScience</i>, (2026), 15(1), 11. 4. Jyoti Kumari, Richa Mondal and Manisha Khatri, New and emerging therapies related to Rheumatoid Arthritis. <i>Biointerface Research in Applied Chemistry</i>, (2026), 16(1), 35. 5. Harsh Kashyap, Jyoti Kumari and Manisha Khatri, Network pharmacology-based investigation of the multitarget mechanisms of <i>Murraya Koenigii</i> (Curry leaves) in non-alcoholic steatohepatitis (NASH). <i>Journal of Complementary and Integrative Medicine</i>, (2025), 22(4), 690-703. 6. Anushree Anand, R. Sai Krupaa, and Manisha Khatri, Varicella Zoster Virus: A re-emerging risk in immunocompromised populations and potential therapies. <i>Chemical Biology Letters</i>, (2025), 12(3), 1275. 7. Harsh Kashyap, Gursimran Sekhon and Manisha Khatri, Screening of phytochemicals from <i>Justicia adhatoda</i> for antitubercular potential using structure base multitargeted molecular docking analysis. <i>Letters in Applied Nanobioscience</i>, (2025), 14(1), 7. 8. Harsh Kashyap, Gursimran Sekhon, Aashi Varshney and Manisha Khatri, <i>In silico</i> screening of potential antidiabetic phytochemicals from <i>Tephrosia purpurea</i>: A polypharmacology approach. <i>Biomedical and Therapeutics Letters</i>, (2024), 11(2), 911

9. Harsh Kashyap, Vanshika Makol and **Manisha Khatri**, Screening of Phytochemicals from *Derris indica* for antimycobacterial potential using molecular docking analysis. *Biosciences Biotechnology Research Asia*, (2023), 20(3), 907-917.
10. Smita Mishra, **Manisha Khatri** and Varsha Mehra, Inhibition of extracellular and intracellular survival of Mycobacterial strains by alkaloids extracted from *Justicia adhatoda* leaves. *European Journal of Integrative Medicine*, (2023), 59, 102241
11. Vanshika Makol, Vardan Wadhera, Hemant Kardam and **Manisha Khatri**, Comparative protein analysis of heat stress responsiveness among different strains of *Escherichia coli*, *International Journal of Innovation and Multidisciplinary Research*, (2022), 2(2), 62-65.
12. Smita Mishra, **Manisha Khatri** and Varsha Mehra, Assessing the antimycobacterial activity of the bioactive fractions of the Indian medicinal plant- *Justicia adhatoda* L. *Chemical Biology Letters*, (2021), 8(2), 67-78.
13. **Manisha Khatri**, Ritika Singh, Samreen Fatima and Neetu Sain, Design, synthesis, ADME prediction and anti-hyperglycemic evaluation of new alkoxyimino-substituted phenyl carboxylic acids as potent alpha-glucosidase inhibitors, *Chemical Biology Letters*, (2020), 7(4), 207-214.
14. **Manisha Khatri**, Payal Mago, Nitazoxanide/Camostat combination for COVID-19: An unexplored potential therapy, *Chemical Biology Letters*, (2020), 7(3), 192-196.
15. Smita Mishra, **Manisha Khatri** and Varsha Mehra, Investigating anti oxidant and anti diabetic activity of leaf extracts of *Justicia adhtoda* and *Murraya koenigii*, *International Research Journal of Biological Sciences*, (2019), 8(5), 1-7.
16. Anandika Suryavanshi, A M Saxena, Payal Mago and **Manisha Khatri**, Phytochemicals: Extraction and Preliminary Investigation of Bioactive Compounds from *Rumex Vesicarius* and *Terminalia Catappa* Plant. *Asian Journal of Engineering and Applied Technology* (2019), 8 (2), 90-93
17. Varsha Mehra, **Manisha Khatri**, Smita Mishra et al, Assessment of Anti-diabetic and Anti-oxidant activity of *Murraya Koenigii* extracts using *in-vitro* assays, *Journal of Biomedical and Therapeutic Sciences*, (2018), 5(1), 1-8.
18. Varsha Mehra, Smita Mishra, Nomita Gupta and **Manisha Khatri**, Diabetes: The next epidemic, *International Journal of Life Sciences*, (2018), 6(2), 665-680.
19. Neha Chaudhary, Varsha Mehra, Payal Mago and **Manisha Khatri**, Antimycobacterial Potential of Indian Spices: A Review, *International Journal of Pharmacognosy and Phytochemical Research*, (2017), 9(8), 1127-1134
20. Manasvi Gupta, Chhavi Sharma, Poonam Meena and **Manisha Khatri**, Investigating the free radical scavenging and acetylcholinesterase inhibition activities of *Elletaria cardamomum*, *Piper nigrum* and *Syzygium aromaticum* *International Journal of Pharmaceutical Sciences and Research*, (2017), 8(7), 3180-3186.
21. Smita Mishra, **Manisha Khatri** and Varsha Mehra, Trials and tribulations in tuberculosis research: Can plant based drug (s) be the solution? *Chemical Biology Letters*, (2017), 4(1), 33-47.
22. Poonam Meena, Vishal Nemaysh, **Manisha Khatri**, Apra Manral, Pratibha Mehta Luthra and Manisha Tiwari, Synthesis, biological evaluation and molecular docking study of novel piperidine and piperazine derivatives as multi-targeted agents to treat Alzheimer's disease,

Bioorganic and Medicinal Chemistry, (2015), 23(5), 1135-48.

23. Monika Mittal, Nomita Gupta, Palak Parashar, Varsha Mehra and **Manisha Khatri**, Phytochemical evaluation and pharmacological activity of *Syzygium aromaticum*: A comprehensive review, *International journal of pharmacy and pharmaceutical sciences*, (2014), 6(8), 67-72.
24. Nomita Gupta, Monika Mittal, Palak Parashar, Varsha Mehra and **Manisha Khatri**, Antibacterial potential of *Elletaria cardamomum*, *Syzygium aromaticum* and *Piper nigrum*, their synergistic effects and phytochemical determination, *Journal of Pharmacy Research*, (2014), 8(8), 1090-1096.
25. Sameena Alam, **Manisha Khatri** and Manisha Tiwari, Assessment of the antioxidant activity of aqueous extract of *Acacia catechu* bark: An *in vitro* and *in vivo* study, *Journal of Pharmacy Research*, (2013), 1(1), 109-114.
26. **Manisha Khatri**, Santosh Kumar Rai, Ranjit Ranbhor, Krishna Kishore and Manisha Tiwari, Synthesis, molecular modeling and toxicological evaluation of new derivatives of aryl piperazine: 5-HT_{1A} receptor ligands *Archives of Pharmacol Research*, (2012), 35, 7, 1143-1152.
27. Sameena Alam, **Manisha Khatri**, and Manisha Tiwari, Cytotoxic effect of methanolic extract and a novel active principle from the bark of *Acacia Catechu*: Studies on cancer cell lines, *Journal of Pharmacy Research*, (2012), 5(8), 4487-4491.
28. **Manisha Khatri**, Santosh Kumar Rai, Sameena Alam, Anjana Vij and Manisha Tiwari, Synthesis and pharmacological evaluation of new arylpiperazines N-{4-[4-(aryl) piperazine-1-yl]-phenyl}-amine derivatives: Putative role of 5-HT_{1A} receptors, *Bioorg. Med. Chem.* (2009), 17, 1890-1899.
29. Smita Mishra, **Manisha Khatri** and Varsha Mehra, "Plant Based Approach: Achilles Heel in Tuberculosis Treatment" *Proceedings of National Conference on Advances in Food Science and Technology (NCAFST-2016)*, (16th -17th March 2016)

Books/Book Chapters Published

1. Published book entitled "Novel Aryl Piperazines as Anxiolytic agents: Synthesis and SAR" LAP LAMBERT Academic Publishing, Germany (**November 12, 2012**). ISBN: 978-3-659-29215-6
2. Published book entitled "Human Physiology: A Practical manual" Elite Publishing House, New Delhi (**August, 2025**) ISBN: 978-81-987081-2-0
3. Published a book chapter entitled "Human Adult I-Cell Leukemia Virus Type 1 (HTLV1)" in the book *Emerging Human Viral Diseases, Volume II: Encephalitic, Gastroenteric, and Immunodeficiency Viral Infections*, Springer Nature, Singapore (**September 12, 2024**) Pages; 725 – 751
4. Published a book chapter entitled "Nanomedicine in Neutraceuticals" in the book *Nanomedicine: Transforming solution for healthcare*. Arcler Education. ISBN: 9781779567635 (**October, 2025**)

Conference Organization/ Presentations

1. Organized two National level conference on "Understanding the Mechanism and Challenges of Complex diseases" in the year 2014 and 2017 in the capacity of Organizing Secretary

- Organized National workshop on “Alternative Methods to Animal Testing” in March 2019 in the capacity of Co-ordinator - Organized three National Level Drug Discovery workshops in the year 2017 and 2018 in the capacity of Co-ordinator. - Departmental co-ordinator for the DBT-Star college grant received by the Biomedical Science department - Resource Person for two-day hands- on training on “ELISA techniques” for M.Sc. Anthropology students as part of a week-long training session undertaken by the college (20th -21st February, 2016) - Co-ordinator and Resource Person of the training program for 10 students of St. Joseph’s College for Women (A) Vishakhapatnam, Andhra Pradesh. From 10th May, 2019 to 20th May, 2019. - Given an oral presentation at The Ramanbhai Foundation 8th International Symposium on Current Trends in Pharmaceutical Sciences: “Advances in New Drug Discovery and Development” held at Gujarat University Convention and Exhibition Centre, Gujarat from 2nd February 2017 to 4th February 2017.
Research Projects (Major Grants/Research Collaboration)
- Co-Principal Investigator of a project sanctioned by Department of Science and Technology in the year 2015 entitled “Isolation and Characterization of <i>Adhatoda vasica</i> constituents for antimycobacterial activity against <i>Mycobacterium smegmatis</i> and <i>Mycobacterium bovis</i> BCG <i>in vitro</i> and <i>ex vivo</i> within human macrophages” - Principal Investigator of a project sanctioned by University of Delhi under its Innovation Project Scheme in the year 2015 entitled “Design, Synthesis and evaluation of anti-diabetic activity of substituted alkyl carboxylic acid derivatives as GPR40 agonists - Principal Investigator of a project sanctioned by University of Delhi under its Innovation Project Scheme in the year 2014 entitled “Antimicrobial and phytochemical studies on some Indian spices against multi drug resistant human pathogens”
Awards and Distinctions
- Awarded with JRF and SRF from Indian Council of Medical Research (ICMR), INDIA. - Qualified national level exams, NET (National eligibility test), SLET (State level eligibility test) and GATE (Graduate aptitude test for engineers). - International Travel Award from ICMR for a presentation in Chicago, Illinois, USA, 2010 - Won first prize in Post graduation (M.Sc. Microbiology) for securing highest marks, 2005.
Association With Professional Bodies
Life Member of Indian Society of Biological Chemists

- Association of Microbiologists
- Indian Science Congress Association
- American Chemical Society