

Dr. Khushhali M Pandey BIO-DATA

1. Name and full correspondence address

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3. Institution

Maulana Azad National Institute of Technology (MANIT), Bhopal

4. Date of Birth

08-12-1975

5. Gender (M/F/T)

F

6. Category Gen/SC/ST/OBC

General

7. Whether differently abled (Yes/No)

No

8. Academic Qualification (Undergraduate Onwards)

Degree	Year	Subject	University/Institution	% of marks
B.Sc.	1997	Botany, Zoology and Chemistry	Mohan Lal Sukhadiya University, Udaipur	71.20%
M.Sc.	1999	Biotechnology	Mohan Lal Sukhadiya University, Udaipur	69.83%
PG Diploma	2002	Yoga and Mental Health	Devi Ahilya Vishwavidyalaya, Indore	69.87%
Ph.D.	2007	Microbiology	Barkatullah University, Bhopal	NA

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Ph.D Thesis Title: Integrated Plant Nutrient Management System on Soybean-Wheat Sequence and Carbon Sequestration in Vertisol in Central India

Guide's Name: Dr. R.K. Tenguria

Institute/University: Barkatullah University, Bhopal

Year of Award: 2007

10. Work experience (in chronological order)

S.No.	Positions held	Name of the Institute	From	To	Pay Scale
1.	Lecturer	Rajeev Gandhi College, Bhopal	Aug 2002	Apr 2003	5000
2.	Lecturer	Rajeev Gandhi College, Bhopal	Aug 2003	Apr 2004	5000
3.	Research Associate	Department of Bioinformatics, MANIT Bhopal	Aug 2007	Oct 2009	-
4.	Research Associate	School of Biotechnology, RGPV Bhopal	Nov 2009	May 2010	-
5.	Assistant Professor	Department of Bioinformatics, MANIT Bhopal	May 2010	2023	PB-3 AGP 8000
6.	Associate Professor	Department of Biological Sciences and Engineering, MANIT Bhopal	2023	Present	AGP 9500

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S.No	Name of Award	Awarding Agency	Year
1.	Hands on Training on Application of PCR and DNA Sequencing	Dolphin Institute of Biomedical and Natural Sciences, Dehradun	-
2.	Fifth All India Summer Research Training Programme on Molecular Techniques	Sengunther Arts and Science College, Tamil Nadu	2007
3.	Training for Virtual Classes	Academy of Administration, Bhopal	-
4.	Training on Application of Basic Tools and Techniques in Molecular Biology	MPCOST, Bhopal	2008
5.	Organizing Secretary and Coordinator, "Genomics Tool for Bioprospecting" Conference	Self Sponsored	2010

12. Publications (List of papers published in SCI Journals, in year wise descending order).

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	Sarit Prabha, Sudeesh Warkare, Khushhali M. Pandey	Sustainable Synthesis and Characterization of AgNPs using Catharanthus roseus Stem with Antibacterial Evaluation against Pathogenic Staphylococcus aureus	Journal of Pure and Applied Microbiology	20	2	2026
2.	Mukherjee A, Das Mahapatra A, Maity A, Pandey KM, Chakraborty S	Design, synthesis, biological evaluation and molecular docking of new acid-functionalized carbazole derivatives as potential antibiotic agents	Journal of Molecular Structure		146391	2026
3.	Ranga A, Malhotra AG, Singh J, Pandey KM	Genomic sequencing from Sanger to next-generation sequencing: Historical context, comparative advances and prospects for next generation phenomics	OMICS: A Journal of Integrative Biology	-	-	2026
4.	Prabha S, Warkare S, Ranga A, Pandey KM	Exploring the protein targets of <i>Cinnamomum zeylanicum</i> 's phytoconstituents against pathogenic <i>Staphylococcus aureus</i> : GC-MS profiling, molecular docking, pharmacophore	Tropical Journal of Natural Product Research	9(10)	-	2025

		modeling, and pathway analysis				
5.	Shrivastava R, Sharma K, Mishra S, Parihar P, Das G, Pandey KM, et al.	Integrative machine learning approaches with genomic data for predicting antitubercular drug resistance: A systematic review and meta-analysis	Journal of Global Antimicrobial Resistance	-	-	2025
6.	Sharma S, Pandey KM	Computational bioprospecting of phytoconstituents as potential inhibitors for peptide deformylase from <i>Streptococcus oralis</i> : An opportunistic pathogen	Archives of Biochemistry and Biophysics	758	110079	2024
7.	Mukherjee A, Pandey KM, Ojha KK, Sahu SK	Identification of possible SARS-CoV-2 main protease inhibitors: In silico molecular docking and dynamic simulation studies	Beni-Suef University Journal of Basic and Applied Sciences	12(1)	69	2023
8.	Prabha S, Chauhan P, Warkare S, Pandey KM	A computational investigation of potential plant-based bioactive compounds against drug-resistant <i>Staphylococcus aureus</i> of multiple target proteins	Journal of Biomolecular Structure & Dynamics	-	1–19	2023
9.	Zeenat L, Prajapati S, Sangeet S, Khan A, Pandey KM	In silico screening of potential phytochemicals against extracellular adherence (EAP) protein of <i>Staphylococcus aureus</i> from Indian medicinal plants	Research Journal of Pharmacy and Technology	16(10)	-	2023

10.	Chandra G, Pandey A, Prabha S, Pandey KM	Microstructure, mechanical, in vitro biodegradation, and antimicrobial behavior of a Mg– Zn–Ca–Sr/ZrO ₂ composite prepared using powder metallurgy	ACS Applied Bio Materials	5(11)	5148– 5155	2022
11.	Sangeet S, Khan A, Prabha S, Pandey KM	Antibacterial property of biologically synthesized iron nanoparticles against <i>Staphylococcus aureus</i>	Advancement in Materials, Manufacturing and Energy Engineering	2	-	2022
12.	Raizada R, Pandey KM	Comparative analysis of codon usage of dengue and chikungunya viruses with human host and vector	Bioscience Biotechnology Research Communications	14(2)	747– 752	2021
13.	Mune A, Pandey A, Pandey KM	Analysis of synonymous codon usage bias of Dengue, Zika and Yellow fever virus and their vector- host adaptation	Research Journal of Biotechnology	14(4)	89–110	2019
14.	Malhotra AG, Singh S, Jha M, Pandey KM	A Parametric Targetability Evaluation Approach for Viteligo Proteome Extracted through Integration of Gene Ontologies and Protein Interaction Topologies	IEEE/ACM Transactions on Computational Biology and Bioinformatics	16(6)	1830– 1842	2019
15.	Singh S, Malhotra AG, Jha M, Pandey KM	Implications of protein conformations to modifying novel inhibitor Oseltamivir for 2009 H1N1 influenza A virus	VirusDisease	29	461– 467	2018

		by simulation and docking studies				
16.	Malhotra AG, Jha M, Singh S, Pandey KM	Construction of a comprehensive protein–protein interaction map for vitiligo disease to identify key regulatory elements: A systemic approach	Interdisciplinary Sciences: Computational Life Sciences	10	500–514	2018
17.	Jha M, Malhotra AG, Singh S, Pandey KM	Gene co-expression network analysis reveals common system-level properties of genes involved in tuberculosis across independent gene expression studies	Network Modeling Analysis in Health Informatics and Bioinformatics	5(24)	1–13	2016
18.	Soni A, Menaria K, Ray P, Jayaram B	Genomes to Hits In Silico - A Country Path Today, A Highway Tomorrow: A Case Study of Chikungunya	Current Pharmaceutical Design	19(26)	4687–4700	2013

13. Detail of patents.

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency/Country	Status
1.	An Amphibious System to Monitor Water Pollution Using Algae Alongwith an Early Contamination Warning	Dr. Khushhali M. Pandey et al.	20232101478 5 A	09 Jun 2023	Patent Office, Govt. of India	Published
2.	Efficient and Sustainable Smart Aquaponic System with Nanotechnology	Dr. Khushhali M. Pandey et al.	20232102888 8 A	09 Jun 2023	Patent Office, Govt. of India	Published

	gy and Automated Control					
3.	Smart Portable Vein Image Visualization and Reconstruction System with Predictive Analysis for Blockage Detection	Dr. Khushhali M. Pandey et al.	202321028890 A	23 Jun 2023	Patent Office, Govt. of India	Published

14. Books/Reports/Chapters/General articles etc.

S.No	Title	Author's Name	Publisher	Year of Publication
1.	A Primer on Bioinformatics	Dr. Khushhali M. Pandey	Indra Publisher	2017
2.	Nano Devices for Contaminant Detection in Nanotechnology Applications in Food: Flavor, Stability, Nutrition and Safety	Sahota S., Singh J., Kumar P., Suresh S., Pandey K.M.	Academic Press	2017

15. Any other Information (maximum 500 words)

Dr. Khushhali M. Pandey is an Associate Professor and HoD in the Department of Biological Sciences and Engineering at MANIT Bhopal with expertise in Bioinformatics, Genomics, Metagenomics, Transcriptomics, Drug Discovery, Antimicrobial Resistance, Computational Biology, and Systems Biology. She has more than 15 years of teaching and research experience and has supervised multiple Ph.D. theses and postgraduate dissertations in biotechnology, bioinformatics, molecular modeling, genomics, and computational drug discovery.

She has successfully completed funded research projects sponsored by MPCST, MPCBT, and MHRD in the areas of vitiligo biomarker identification, chikungunya drug discovery, and computational approaches for viral therapeutics. She has organized several short-term training programs and conferences in bioinformatics and genomics and has developed postgraduate courses including Computational Biology, Bioinformatics and Biostatistics, Cheminformatics and Drug Design, Research Methodology, Computational Phylogenetics, and Bioprocess Engineering.

She is a life member of several professional bodies including the Society of Life Sciences, International Society of Biotechnology, Indian Society for Technical Education, Biomedical Engineering Society of India, International Science Congress Association, and International Association of Engineers. She has also contributed as editor and reviewer for several national and international journals in biotechnology, bioinformatics, and life sciences.

