

Dr. Gauri Phadke Assistant Professor (Ad-hoc) Department of Microbiology

Professional Summary

- Assistant Professor in Microbiology with 13 years (2008 April 2021) of experience teaching Molecular biology, Biochemistry, Genetics and Immunology.
- Research experience includes 7 years of Ph.D. (July 2009-April 2016) and College level research projects till date, mainly in the area of Bio-fertilizers and Bio-remediation.

Education

Sr	Degree	Specializatio	Year of	University	Percentag	Class
		n	completion		е	
1	Doctorate	Botany	2016	University of Mumbai	-	-
2	M. Sc.	Microbiology	2007	Goa University	62	First Class
3	B. Sc.	Microbiology	2005	University of Mumbai	61	First Class
4	HSC	-	2002	MSBSHSE, Pune	72.66	First Class
				Divisional Board		
5.	SSC	-	2000	MSBSHSE, Pune	81.46	Distinction
				Divisional Board		

Teaching Experience

Sr. No	Name of Institutions	University	Post	Service period	Work experien ce (Years)
1.	Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16	Savitribai Phule Pune University, Pune	Assistant Professor	July 2018 to April 2019 July 2019 to April 2020 August 2020 to June 2021	03
2.	D.U.B.S.S. College, Dapoli	University of Mumbai	Assistant Professor	July 2008 to May 2018	10

Research Experience

• Research Assistant, ICAR, Goa, 2007

Dissertation Title – Suppression of *Ralstonia Solanacearum* (Smith) by Antagonistic Bacteria: Possible Mechanisms of Pathogen Inhibition and Plant

Growth Promotion

• PhD Research, University of Mumbai, 2008 – 2016

Dissertation Title - Survey of arbuscular Mycorrhizal fungi and their application as a bio-fertilizer in Mangifera Indica

• Other research works, University of Mumbai, 2008 - 2018

- Assessment of antimicrobial properties of newly synthesized chemicals (drugs)
- Amrut-Pani: bacteriology and field applications
- Bio-remediation of high fluoride levels in ground water using immobilized bacterial cells
- Isolation of common dandruff-causing agent and screening of various herbs for its control
 - <u>Research Project under DBT Star College Scheme</u>
- Teacher category
- Carried out at Modern College, Ganeshkhind)

Project Title – Isolation of Arbuscular mycorrhizal (AM) fungi from xerophytes and study of their applicability for cultivation under water stress conditions

• <u>M.Sc. Dissertation Projects</u> Have guide M.Sc. students for dissertation projects which included **07 hands on** projects and **10 hypothetical projects**.

Research Publications

- 1. International
 - Rhizosphere and endophytic bacteria for the suppression of eggplant wilt caused by *Ralstonia Solanacearum* (2012). Crop Protection; 37: 35-41. [ISSN: 0261-2194]
 - Antibacterial Evaluation of Novel Salen-Metal Complexes (2018). Journal of Applicable Chemistry; 7 (5): 1388-1394. [ISSN: 2278-1862]
- 2. National
 - Comparative study on influence of Arbuscular Mycorrhizal Inoculum and Chemical fertilizer on vegetative growth of Mango seedlings. In Proceedings of the UGC sponsored two days National Seminar on 'Fungi in Biotechnology', organized by SIES College, Mumbai and Mycological Society of India (Mumbai Unit).; 95-103. [ISBN: 978-81-920431-9-7]

Research Papers/ Posters presented in Conferences/ Seminars

- 1. International Conference
 - Paper presented in International Conference organized by Loknete Gopinathji Munde College, Mandangad in collaboration with M. G. E. W. Society's Centre for Humanities & Culture Studies, Kalyan.

Topic – Solvent Free Green Synthesis of Schiff Bases and Studies of their Anti Microbial Activities

2. National conferences

- Paper presented in National Conference organized by Mycological Society of India at Chennai.
 - Topic Survey of Arbuscular Mycorrhizal fungi in Mangifera Indica
- Paper presented in National Conference organized by IBS
 Topic Mycoflora of cellulosic articles of common use: A Survey
- Paper presented in U.G.C. sponsored National Conference on 'Herbal and Traditional Medicines' organized by Dapoli Urban Bank /senior Science College, Dapoli, Ratnagiri on 6th and 7th February 2009.

3. National Seminars

- Paper presented in National Seminar organized by MSI Mumbai unit at Bhavan's college, Mumbai
 - Topic Microflora of commonly used articles and hazards to human health
- Paper presented in National seminar held on 'Recent Development in Chemical and Material Science' by Dapoli Urban Bank Senior Science College, Dapoli, Ratnagiri and National Centre for Nanoscience and Nanotechnology, University of Mumbai, (Maharashtra) on 5th and 6th February 2016. Topic – Influence of soil physio-chemical factors on density of Arbuscular
- Mycorrhizal (AM) fungi.
 Attended National Seminar on 'Fungal Biodiversity and Bioprospecting in the Age of Global Warming' and 56th Annual meeting of the Mycological Society of India (MSI) organized by UGC-SAP Department of Botany, Goa University, Goa on 29th 30th October 2009.

4. State / Regional level research competitions

• Best Poster Competition organized by Abeda Inamdar College and AMI Pune Unit in April 2019.

Academics/Administration/Social values oriented seminars

- Participated in workshop on 'Revised Syllabus on Microbiology for S. Y. B.Sc.' held by K. C. College, Mumbai in association with Board of Studies, Microbiology, University of Mumbai on 13th July 2009.
- Participated in workshop on 'Revised T. Y. B.Sc. University Syllabus in Microbiology' held by Wilson College, Mumbai in association with Board of Studies, Microbiology, University of Mumbai on 29th April 2010.
- Participated in a workshop on 'Credit based Semester and Grading System for F. Y. B.Sc. Microbiology Syllabus' organized by Bhavan's College, Mumbai in association with Board of Studies, Microbiology, University of Mumbai on 24th June 2011
- Participated in U.G.C. sponsored one day workshop on 'NAAC Reaccreditation Peer Team Visit Methodology and Preparation' organized by Internal Quality

Assurance Cell (IQAC) of Dapoli Urban Bank Senior Science College, Dapoli, on 27th Sept 2011.

- Participated in a workshop on 'Credit based Semester and Grading System for S. Y. B.Sc. Microbiology Syllabus' organized by C.H.M. College, Ulhasnagar in association with Board of Studies, Microbiology, University of Mumbai on 18th June 2012.
- Participated in 'T. Y. B.Sc. Syllabus Revision' workshop held at Department of Microbiology, Wilson College in association with Board of Studies, Microbiology, University of Mumbai on 19th June 2016.
- Participated in two days U.G.C. sponsored seminar on 'Preparation of Competitive Examinations' organized by Career and Counseling Cell on 20th and 21st February 2015.
- Attended State level workshop on 'Rashtriya Ucchatar Shiksha Abhiyan (RUSA)' organized by Dapoli Urban Bank Senior Science College, Dapoli and University of Mumbai College Principal's Association on 1^{2th} Dec 2015.
- Participated in two day zonal workshop on 'Sexual harassment of women at workplace (Prevention, Prohibition and Redressal), Act 2013 and related issues', jointly organized by the Women Development Cell, University of Mumbai and G. B. tatha Tatyasaheb Khare Commerce, Parvatibai Gurupad Dhere Arts and Mahesh Janardan Bhosale Science College, Guhagar, Ratnagiri on November 30th and December 1st 2015.
- Attended a workshop on 'Pradhyapak Kshamata Vikas' organized by Rambhau Mhalgi Prabodhini on 26th November 2016.
- State level conference on 'Innovative Teaching Pedagogy' organized by Modern College, Ganeshkhind on 22nd and 23rd February 2019.
- 'E-content Development' Two day Workshop organized under Faculty Professional Development Assistance Programme by Modern College, Ganeshkhind on 26th & 27th April 2019.
- Completed a Faculty Development Programme organized by Progressive Education Society's B.Ed. College, Shivajinagar, from 11th to 13th July 2019.
- International Webinar on "Public Health Microbiology", organized by Tiruppur Kumaran College For Women on 26th May 2020.
- "Pandemics & Astrobiology: Why the interdisciplinary dots must be connected" by Dr. Chaitanya Giri, organised by Dept. of Microbiology, Ramnarain Ruia College, Mumbai on 28th & 29th May 2020

- MANAV: Human Atlas Initiative (by NCCS, Pune and IISER, Pune)
 - Participated in 15 Days workshop for Scientific data curation held at Persistent Systems, 20th -31st May 2019.
 - Worked as Contributor and Reviewer.

Areas of Interest

- Research Interest
 - Molecular Biology
 - Clinical Pathology
 - Bio-Remediation
 - Nano technology
 - Bio Fertilizers

- Teaching Interests
 - Molecular Biology
 - Genetics
 - BiochemistryImmunology
 - Medical Microbiology