

Dr. Vidula Vijay Bindu

Present position

- Assistant Professor

Contact Details

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Work Experience

- Since Teaching: 24 years
- Research/Industrial: 3 years

Personal Profile

- After completing M.Sc. in Microbiology, worked as a Microbiologist in quality control department, Lupin laboratories, Aurangabad for 3 years.
- Joined academics since last 25 years as a lecturer in Microbiology, Industrial Microbiology and Biotechnology at various institutes in Pune and Aurangabad.
- Obtained Ph.D in Microbiology on the topic “Bioprospecting marine microflora for biosurfactant production and evaluation of its antimicrobial potential.” under the guidance of Professor Dr. V.S. Hamde, at BAMU, Aurangabad, in October 2022.
- Cleared SET exam for lecturer in May 2011.
- Completed 2 BCUD (Pune) sanctioned research project as a principal investigator and co-investigator.
- Worked as a BOS member in designing curriculum of UG and PG Microbiology under autonomy as well as NEP 1.0 and NEP 2.0.
- Worked as a paper setter, internal and external examiner at university level.
- Guided around 25 UG and PG students in their dissertation work.
- Conducted choice based concurrent evaluation under autonomy as well as NEP 1.0 and NEP 2.0.

Course(s) Taught

1. Microbiology at UG and PG level
2. Industrial Microbiology at UG level.
3. Vocational biotechnology at UG level.
4. Biotechnology at UG and PG level.

Field of Specialization/Areas of Interests

- General and Industrial Microbiology
- Applied Microbiology
- Waste water treatment

Education

- **Ph.D.- Microbiology:** from 2015 to 2022
Title of the Thesis: “Bioprospecting marine microflora for biosurfactant production and evaluation of its antimicrobial potential.”
Name of University / Institution:
Year of Award: Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
- **Master of Science- Microbiology:** 1992
Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
- **Bachelor of Science- Microbiology:** 1990
Government College of Arts, Science and Commerce, Aurangabad

Fellowship/Awards/ Certifications/Achievements/Recognitions

1. Received Best Poster Award for ‘Isolation of marine microorganisms and screening for biosurfactant producers.’ in *ITCPB* organised by Annasaheb Magar Vidyalaya, Pune in 2016.
2. Received Best Poster Award for ‘Antimicrobial potential of biosurfactant derived from marine bacteria.’ *International conference on new frontiers in environmental and allied sciences.* Organised by Pro. Ramkrishna More college of ASC, Akurdi, Pune. Sponsored by research cell, SPPU, Pune

Member of College Committees/ Professional Bodies and Others

College Level	Professional Bodies	Others
First year B.Sc. admission committee	Life member of Association of Microbiologists of India.	BOS member in designing curriculum of UG and PG Microbiology (Autonomy as well as NEP1.0 and 2.0) Fergusson College
International student cell		
Coordinated the activity of Nihchal Israni foundation and Seva Sahyog foundation scholarship scheme for helping the students from lower income group studying in Fergusson college.		
Coordinator of F. Y. B.Sc. paper setting and checking for both the semester.		

Employment History

- 1) **Organization :** Fergusson College (Autonomous), Pune -4
Role : Assistant professor in Microbiology
Duration : Since July 2011 till date (15 years)

Responsibilities	• Designing and teaching the curriculum of UG and PG • Assessment of internal and external exams (Theory as well as practical) • Guidance to M. Sc. II students in their dissertation work • First year B.Sc. admission committee member • First year B. Sc. Microbiology class coordinator • Member of International student cell
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2) **Organization** : Modern College of Arts, Science and Commerce, Shivaji nagar, Pune.

Role : Lecturer

Duration : 2002-2004(Visiting faculty), June 2006 – June 2010(Full time)

Responsibilities	• Teaching the curriculum of UG and PG Microbiology, Biotechnology and Vocational Biotechnology • First year B.Sc. admission committee member • Guidance to M. Sc. II students in their dissertation work
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3) **Organization** : Appasaheb Jedhe College, Pune.

Role : Lecturer in Microbiology

Duration : October 2005 – May 2006

4) **Organization** : Annasaheb Magar College, Pune

Role : Lecturer in Industrial Microbiology

Duration : July 2000 – December 2000

5) **Organization** : Government College of Arts, Science and Commerce, Aurangabad

Role : Lecturer in Industrial Microbiology

Duration : 1997 – 1999

6) **Organization** : Vasantao Naik College, Aurangabad

Role : Lecturer in Microbiology

Duration : July 1995 to April 1996

7) **Organization** : Lupin Laboratories, Aurangabad

Role : Quality Control Microbiologist

Duration : August 1992 – July 1995

Research Projects

Title of the Project	Name of Funding Agency	Amount (Rs)	Duration	Type	Outcome
1.“Studies on Bioethanol / Biofuel production using alcohol tolerant yeast”.	BCUD (SPPU, Pune)	1,00,000/-	2008-2010	Major	Alcohol tolerant yeast was isolated. Paper and poster presentations in conferences
2.“Studies on improvement of ethanol tolerance of yeast for biofuel production”.	BCUD (SPPU, Pune)	2,70,000/-	2012-2014	Major	Ethanol production from yeast was found to be increased. Paper and
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3. "Combating abiotic stress of plants using biosurfactant producing Plant Growth Promoting Rhizobacteria"	Under seed money sanctioned by Deccan education society's Fergusson College (autonomous), Pune	1,25,000/-	2024-2025	Minor	poster presentations in conferences. Ongoing
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Research Publications in National and International Journals

1. **Bindu V.V.**, Yedewar P.G. and Hamde V.S. Isolation of biosurfactant producing *Pseudomonas aeruginosa* VB MCC 4751 from sea water near Uran beach. *Paripex - Indian Journal of Research* 2022,11(3). pp (90-94). ISSN (Online): 2250 – 1991.
2. **Vidula Bindu¹** and Venkat Hamde². Optimization of Biosurfactant Production from *Pseudomonas aeruginosa* VB MCC 4751 Isolated from Sea Water Near Uran Beach. *IAR J Pharm* 2022, 3(2), pp (1-7). ISSN Online: 2709-9512.
3. Gauravi Kulkarni¹, Anushree Dabak², Shivaji Waghamre³, **Vidula Bindu⁴**. Phage Therapy: A Promising Tool to Mitigate Bacterial Blight Disease in Pomegranate Cultivation. *IJNRD* (2023),8(7),a346-a357. <https://www.ijnrd.org/papers/IJNRD2307046.pdf>.(ISSN: 2456-4184).

Participation in Conferences/Seminars/Symposia/Workshop:

1. Vidula Bindu¹ and Smita Dharmadhikari², Potential application of hydrocarbon degrading marine bacteria in biosurfactant production, International e-conference on "Emerging methodologies in Pharma, Environmental and Life Sciences." **EMETHPELS-2020, Government of Maharashtra, Ismail Yusuf College of Arts, Science and Commerce, Jogeshwari, Mumbai, June 2020**
2. Vidula Bindu¹ and Smita Dharmadhikari², Isolation and screening of biosurfactant producing marine bacteria and characterization of biosurfactant, National conference "**Harnessing Microbial Wealth for Start-ups in Life Sciences, Department of Microbiology, SPPU in association with AMI Pune unit, January 2020.**
3. Vidula Bindu¹ and Smita Dharmadhikari². Antimicrobial potential of biosurfactant derived from marine bacteria, International conference "**New frontiers in environmental and allied sciences**", **Pro. Ramkrishna More college of ASC, Akurdi, Pune. Sponsered by research cell, SPPU, Pune, February 2019.**
4. Vidula Bindu¹ and Smita Dharmadhikari², Biosurfactant: Screening, extraction and checking antimicrobial potential, International conference "**Microbial technology for better tomorrow (ICMTBT – 2018)**", **ISBN:978-93-87665-45-3, Dr. D .Y.Patil Arts ,Commerce and Science college, Pune in association with Dr. D.Y.Patil Vidyapeeth, Pune and Microbiologists society, India, February 2018.**
5. Vidula Bindu¹ and Smita Dharmadhikari² Evaluation of various screening methods to isolate potential biosurfactant producing marine bacteria., **6th International Science Congress ISC (2016) ,International Science Community Association in collaboration with Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune.ISBN:978-93-84659-14-1,December ,2026.**
6. Vidula Bindu¹ and Smita Dharmadhikari² ,Isolation of marine microorganisms and screening for biosurfactant producers, International conference, **ITCPB (2016). ,Annasaheb Magar Vidyalaya, Pune,Sponsored by BCUD, SPPU, Pune. ISBN:978-93-84659-28-8,February 2016.**
7. Meghana Kulkarni ¹, Vidula Bindu¹ Isolation of alcohol producing yeast from *Ficus glomerata* Rox B, National Conference "**Modern analytical techniques in Microbiology organized by department of Microbiology, Fergusson College, Pune. ISBN number is 978-93-5156-263-4, January 2014.**" Meghana Kulkarni ¹, Vidula Bindu¹, Studies on improvement of ethanol tolerance of

yeast for biofuel production, **INNOVATION 2014, Regional research conference for college teachers(Chemistry, Life sciences and Engineering), Organised by BCUD, Pune, April 2014.**

8. Vidula V. Bindu¹, R. L. Deopurkar², Studies on Bioethanol / Biofuel production using alcohol tolerant yeast and to increase the production of ethanol, National conference **“Biodiversity Monitoring and Research: Current Practice and Future needs” organized by department of Zoology, Fergusson College, Pune. ISBN number is ISBN – 978 – 93 – 5087 – 589 – 6, December 2012.**

Events Organized/Coordinated:

Sr. No	Name of the Event	Name of organizing Institute/ College/ University	Nature of contribution	Dates
1	‘Hands on workshop on Microsoft Excel and Bioinformatics’ for students of Microbiology.	Department of Microbiology, Fergusson College Pune	Coordinator	1 st February 2025
2	Mentoring activity for F. Y. B.Sc. and F. Y. M.Sc. Microbiology students in collaboration with Psychology department of Fergusson College under departmental Sookshm Club activities.	Department of Microbiology in collaboration with Psychology department of Fergusson College under departmental Sookshm Club activities.	Coordinator	9 th February 2025
3	Poster presentation competition for Post graduate students on	Association of Microbiologists of India Pune Unit and Department of Microbiology, Fergusson College Pune.	Organizing committee member	26 th February, 2014.
4	DBT sponsored National level conference on “Modern Analytical Techniques in Microbiology” at	Department of Microbiology, Fergusson College Pune	Organizing committee member	17 th and 18 th January, 2014 .
5	National workshop on – “Recent Trends in Applied Statistics ,An Interdisciplinary Approach”	Department of Statistics, Fergusson College, Pune	Organizing committee member	March 2012
6	One day workshop on “Entereprenership- Gateway for Biologists”.	Association of Microbiologists of India Pune Unit and Department of Microbiology, Fergusson College Pune	Organizing committee member	2014
7	Lecture series on Microbial degradation and its applications.	Department of Microbiology, Modem College of Arts, commerce & Science, Shivajinagar, Pune	Organizing committee member	2007
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8	State level workshop on 'Advanced Genetic Engineering and Molecular Biology Techniques.	Department of Microbiology and Biotechnology, Modern College of Arts, commerce & Science, Shivajinagar , Pune.	Organizing committee member	2008
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Additional skills/Activities

- Published book chapter "Coronavirus COVID-19 world disaster" Published in the book, "The Outbreak of COVID-19 Disease and its Impact on Global Health", chapter 17 pg.no 191-203 (Publisher: - Shriyanshi Prakashan, in 2020).
- Completed Training workshop on Student Counselling Psychology dated 18th to 27th March 2024, organized by Fergusson College (Autonomous), Pune.
- Participated in the National Seminar on 'Implementation of Multi and Trans – Disciplinary Education under NEP 2020' from 18th – 20th January 2023 organized by Fergusson College (Autonomous), Pune.
- Successfully completed the UGC HRDC Pre Ph.D. coursework as a part of Ph. D. programme in the subject Microbiology, organized by Dr. BAMU, Aurangabad during January 02 to February 15, 2021 with A+ Grade.
- Conducted hands on training program on "Introduction to Pharmaceutical techniques" under DBT STAR college scheme for Third year B.Sc. students for last 5 years.
- Worked as a member of First year B.Sc. admission committee and international student cell of Fergusson College.
- Coordinated the activity of Nihchal Israni foundation scholarship scheme for helping the students from lower income group studying in Fergusson college.
- Acted as a Judge for Poster and Model Competition in 'Biotech Fest' of Modern College, Shivajinagar, Pune on 27th February 2023 as well as in 2024
- Completed 'Effective and Efficient Online Teaching in the Age of Corona: A Hands-On Workshop on Saturday, 16 May 2020' organized by the Teaching Learning Centre (ICT) at IIT Bombay. Attended the interaction session and successfully completed both pre and post workshop online activities, involving 3 days of video lectures and hands-on work.
- Successfully completed One Week Pedagogical Training for Teachers on "Tools for Online Teaching Learning and Evaluation," from 1st July to 6th July 2020, organized by School of Mathematical Sciences, Swami Ramanand Teerth Marathwada University, Nanded.
- Attended the webinar arranged by Vidya Prathisthan's Arts, Science And Commerce College, Baramati & White Code for educators to introduce and discuss the 'Effective Teaching-Learning & Evaluation Using Learning Management System: Moodle'.on 8th May 2020.
- Participated in 3 days National webinar on "Life sciences 2020-Education and Innovation for future." From 5th – 7th May 2020 organised by Annasaheb Magar College, Pune.
- Attended webinar on 22nd may,2020 on "Strengthening research capabilities remotely: Empowering Indian Research on COVID-19" organised by DBT, Government of India along with Elsevier.
- Participated in the National Webinar on "AYUSH for COVID-19: Boosting Immunity With Home - Based Interventions" conducted on May 20, 2020 organised by department of M.Sc. Bioanalytical sciences,Gurunanak Khalsa College of Arts, Commerce and Science, Matunga, Mumbai.
- Attended 4 days National level workshop on 'Analytical Biology' conducted by Dept of Microbiology, University of Pune.

- Attended two days faculty development programme on "Emerging Frontiers In Sciences" Under Quality Improvement Programme Of University Of Pune at Sinhgad College Of Science , Pune.
- Attended the symposium on “Recent Trends in Life Sciences” conducted by Department of Microbiology – Modern College of Arts, commerce & Science. Ganeshkhind Pune.
- Attended Two Days workshop on “Syllabus of Biotechnology” and “Lecture series in Microbiology and Biotechnology.” conducted by Department of Microbiology, Modern College of Arts, commerce & Science, Shivajinagar , Pune.
- Attended workshop on “Microscopy for Life Sciences” organized by Venture Centre ,NCL,Pune , from 12th to 14th January,2012.
- Attended workshop on “Methodology and Details of Teaching-Learning in M.Sc Microbiology” organized by Department of Microbiology, Abasaheb Garware College, Pune,sponsored by BCUD.