



Dr. SHWETA MADHVANAND KASHID

Assistant Professor, Department of Biotechnology

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OVERVIEW:

Qualifications: Ph.D.(Chemical Biotechnology), MS (Biochemical), BE (Chemical)
Experience: Teaching -12 years, Research – 6 years
Date of Joining STES: 15/08/2015
Skills and Proficiencies: Whole cell Immobilization, Industrial Biotechnology, Bioreactor Design and Hydrodynamics Studies using ASPEN Plus, MFix, Gas Chromatographic separations using GC, Biostatistics Using Excel Tools, Excellent Communication and Presentation Skills

SIGNIFICANT ACHIEVEMENTS:

- Ranked as number 1 Research Proposal for ASPIRE Grant under Research Mentorship Program in Science & Engineering domain of Savitribai Phule Pune University in August 2019
- Silver medal in Badminton Mixed-Doubles in “ Sinhgad Spring Fest-2024 Sports”
- Appreciation for Contribution towards Social cause of Manas Lake desilting and Restoration, Bhugaon, Pune

AREA OF EXPERTISE /RESEARCH INTERESTS:

Biocatalysis, Bioreactor design, Bioprocess development, *In vivo* & *in vitro* product separation, purification and analysis, Project and Process Costing

NUMBER OF STUDENTS GUIDED:

- UG – 45

RESEARCH PUBLICATIONS/ PATENTS/ BOOKS:

Publication Summary:

- Scopus/ SCI-05
- International Journal: 04
- Conference: 07-International, 02-National
- Book Chapters- 2 (Taylor and Francis Series)
- Book Editor: Innovations in Biotechnology Advancing Science & Technology (ISBN- 978-81-974283-8-8)
- Design Patents: Stirrer For Laboratories 420704-001
AI-Enabled Pipette 421120-001

<https://scholar.google.com/citations?user=OpjTUKsAAAAJ&hl=en&oi=ao>

FUNDED RESEARCH PROJECT:

- **Project Title: Improving the productivity of fragrances using biotransformations in fluidised bed reactor** (Oct 2019-March 2023)
ASPIRE (Assistance by SPPU for Project-based Innovative Research)
Grant No.18TEC000681: INR 2.87 Lakhs
Savitribai Phule Pune University, Maharashtra, India.
Outcome: Ph.D. Chemical Biotechnology, Reactor Model Fluidised Bed Reactor, UG Projects 6, 3 Scopus Publications

RESEARCH WORK:

1. Improving the productivity of fragrances using biotransformations in bioreactors.
2. Extraction and purification of Anthocyanin using maharashtrian sources
3. Bio-composites of water hyacinth and their biomedical applications

NOTABLE GUIDED PROJECTS:

- Whole cell immobilization of fragrance *producing strains* on Tulsion and Siran beads for fragrance synthesis. (Sponsored by ASPIRE grant SPPU)
- Hydrodynamic studies and optimization in fluidised bed reactor using biological media (Sponsored by ASPIRE grant SPPU)
- Improving productivity of fragrances using mixed culture biotransformations in bioreactor. (Sponsored by ASPIRE grant SPPU)
- Anthocyanin extraction and purification using maharashtrian fruit source.

RESOURCE PERSON TO INDUSTRY/ACADEMIA:

- Resource Person in One week Online FDP on “Recent Trends in Bioprocess Technology, SCOE, Pune
- Guest Lecture on “Opportunities in Biochemical Engineers” in MIT, Pune
- Involved in syllabus design of Bioprocess related subjects of Biotechnology
- Involved as an External examiner and Expert panel member for Chemical Engineering subjects in VIT Pune
- Reviewer for the Scopus indexed journal
- Chairman of 6 subjects of B. Tech Biotechnology Course at Savitribai Phule Pune University

SUBJECTS TAUGHT:

- Biochemical Engineering
- Bioseparation Engineering
- Bioprocess Modelling and Simulation
- Fluid Flow Unit Operations
- Heat transfer
- Mass Transfer
- Biomaterials
- Computational Techniques & Biostatistics

FDP/STTP/SDP/WORKSHOPS ORGANIZED AS A COORDINATOR:

- FDP on 'Recent Trends in Bioprocess Technology' in Dept. of Biotechnology held during 15-19th Jan,2024
- National Level Conference on Green Technologies for Sustainable Development (NCGTSD-2016), Pune , 11-12 Mar 2016
- Co-ordinating various IPR Workshops under Institute IPR and Entrepreneurship Cell 2022-2024
- Co-ordinated Virtual Labs, IITB Outreach Workshop at SCOE Nodal Centre 2020-2024

CONFERENCES ATTENDED:

- **7-International** (Paper/Poster Presented)
- **2- National** (Paper/Poster Presented)

FDP/STTP/SDP ATTENDED:

- TEQIP/AICTE sponsored FDP -16
- Spoken Tutorial IIT Bombay sponsored FDP -01(Latex)
- Other - 05

RESPONSIBILITIES HANDLED AT STES/SCOE/DEPT:

Institute Level (SCOE)

- SCOE Sponsorship Committee Member Sinhgad Spring Festival 2024
- Member of committee for Criteria 3 during second cycle of NAAC, 2021
- NAAC Criteria 3 Co ordinator

Department Level (Biotech)

- Department Exam Co-ordinator
- NBA criteria 3 and 5 coordinator
- Department Sponsorship head "Sinhgad Spring Festival 2024"
- NAAC criteria 3 coordinator
- Member of Website Committee
- Member of Central Library Committee
- Member of College Annual Magazine 'Srujan', Faculty Head English section (Received 2 awards on 2018 and 2021 for Best College Magazine)
- Member of Virtual labs Committee
- Member of IPR and Entrepreneurship Cell
- Member of Research Committee
- Class Teacher, Lab In charge and Teacher Guardian
- VAP Coordinator
- Project Coordinator for UG students

DECLARATION:

I hereby declare that all the above information furnished by me are true to the best of my knowledge.

Date: 10 / 12/ 2024

Signature

Dr. S. M. Kashid