

ESHITA PARUI

ASSISTANT PROFESSOR

SUMMARY

A self-initiated biotechnology postgraduate with five months experience in academia and six months work experience in R&D, providing outstanding research skills, comprehensive knowledge of regulations and operational dexterity. Demonstrates exceptional problem solving skills by responding quickly and generating effective solutions. Excellent work ethic, motivated to perform well both individually and in team context. Maintains thorough grasp of industry trends and research innovations.

TECHNICAL SKILLS

ELISA	UV-Vis Spectrophotometer	MS Word
SDS-PAGE	Centrifuge	MS Excel
HPLC	pH meter	MS PowerPoint

TEACHING EXPERIENCE

Assistant Professor

Dec 2024 - May 2025

Kirti M. Doongursee College, Dadar, Mumbai

- Developed and delivered course materials for undergraduate courses on genetics, fermentation technology, agri-biotechnology, plant and animal biotechnology and microbiology.
- Conducted engaging lectures and interactive discussions to enhance student learning and participation.
- Designed and graded assessments, such as internal exams, semester exams, assignments, and projects, ensuring fair evaluation of students' understanding.
- Provided one-on-one mentorship and support to students struggling academically, contributing to improved student performance and satisfaction.
- Conducted regular practical and executed practical examination both independently as well as in group.
- Designed and actively contributed in curriculum planning for T.Y.BSc. Biotechnology (NEP2020).
- Utilized digital tools to deliver engaging content, including presentations, videos, and discussion boards, for remote learners.
- Successfully executed guest lectures and student engagement activities, ensuring smooth operations and positive feedback from participants.
- Supervised and guided student-led initiatives, including cultural events, seminar, fostering leadership and collaboration among students.
- Ensured smooth conduct of examinations by supervising semester-end exams and internal assessments.
- Monitored exam halls to maintain discipline, fairness, and compliance with institutional and regulatory guidelines.
- Addressed and resolved any issues, such as technical difficulties or student concerns, during examinations to minimize disruptions.
- Assisted in departmental audit tasks such as compilation of self study report and necessary supporting as per IQAC norms.

INDUSTRY EXPERIENCE

Research & Development Trainee
Saini Bio Solutions, Nerul MIDC, Navi Mumbai

Apr 2024 - Oct 2024

DAIRY TECHNOLOGY:

- Isolation of probiotic cultures from various sources and their characterization.
- Optimization of fermentation parameters at laboratory scale.
- Enumeration of probiotic cultures using total plate count method.
- Fortification studies of final product with essential nutrients as per recommended dietary allowances.
- Formulation and optimization of flavored milk products and its stability studies at laboratory level.
- Sensory evaluation of dairy products based on 9-point hedonic scale.
- Timely progress report generation and PowerPoint presentations, as and when required.

MICROBIAL FERMENTATION:

- Executing upstream as well as downstream operations of fermentation process.
- Managing day-to-day microbiological work including cell culture maintenance and maintenance of glycerol stocks.
- Initiating upstream processes such as media preparation, inoculum development as well as medium optimization based on OFAT design.
- Harvesting and Extraction of fermentation-based products from fermented medium.
- Quantitative analysis by HPLC and UV-Vis Spectrophotometer.
- Familiarized with Agilent 1200 Series HPLC operations and data integration, both gradient and isocratic programs.
- Carrying out fermentation shake flask batches and scaling-up to 5L-bioreactor scale.
- Handling and initiating lab-scale bioreactor batch with complete monitoring of fermentation parameters.
- Analyzing data and independently interpreting experimental results of various projects.

OTHER KEY RESPONSIBILITIES:

- Thorough and concise literature review and Patent search on various products.
- Overseeing the maintenance of laboratory instruments and maintaining daily logs.
- Compiling R&D reports, records to comply with in-house audit specifications.
- Maintenance of Inventory of Lab reagents, glassware and consumables on daily basis.
- Preparing PPTs and brochures as and when required.
- Troubleshooting and resolving any technical challenges promptly and independently.

INTERNSHIP EXPERIENCE

Research Intern
Department of Biochemistry, Haffkine Institute, Parel

Nov 2022 - Mar 2023

- Worked on a project titled, "Standardization of ELISA with respect to Creation of a Novel Diagnostic kit for Snakebites" as a part of Masters' Thesis.
- Optimized assay parameters for indirect and sandwich ELISA intended for development and commercialization of snakebite diagnostic kit.
- Familiarized with biochemical techniques such as PAGE, western blotting, Protein estimation by UV-Vis Spectrophotometer.
- Observership of Mammalian Cell Culture techniques.

ACADEMIC BACKGROUND

M.Sc. Biotechnology

R. D. National College, Bandra | 2021 - 2023

CGPA - 9.29/10.00 Grade - A+ || Percentage - 77.29%

B.Sc. Biotechnology

KBP College, Vashi | 2018 - 2021

CGPA - 9.97/10.00 Grade - A+ || Percentage - 87.52%

WORKSHOPS

Hands-on-training on Protein extraction and Western blotting

KBP College in association with Zoeac Life Sciences LLP | February 2020

Tools in Bioinformatics

Department of Biotechnology, KBP College | December 2020

ACCOMPLISHMENTS

Third Rank (MSc. Biotechnology)

R.D. National College, Bandra

First Rank (FY, SY and TY Biotechnology)

Karmaveer Bhaurao Patil College, Vashi

LANGUAGES SPOKEN

English

Hindi

Marathi

Bengali