

SRIMOYEE BANERJEE

Ph.D (Biotechnology), M.Sc, B.Sc (Microbiology)

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Objective:

A career as a microbiologist where I can meaningfully employ the academic knowledge and laboratory skills acquired and also learn the recent advances in the field and make their meaningful applications.

Work experience (7 years)

<i>Period of work</i>	<i>Designation</i>	<i>Details</i>
1 st December, 2021 to current date	Scientist B	In Patanjali Herbal Research Department under Patanjali Research Foundation Trust, Uttarakhand
9 th July, 2018 to 16 th November, 2021	Assistant Professor	In School of Biotechnology and Bioinformatics at D.Y. Patil Deemed to be University, Navi Mumbai.
26 th Oct, 2017 to 20 th April 2018	Senior Research Fellow (Extended)	Worked on induced systemic resistance in rice plants post PGPB treatment under a CSIR sponsored project at Division of Plant Biology, Bose Institute.
2nd Feb, 2017 to 26 th Oct, 2017	Guest Faculty (Full time)	At Department of Microbiology, Tripura Central University.
28 th Feb, 2014 to 1 st Feb, 2017	Senior Research Fellow	Under a UGC – DAE – CSR sponsored project titled since February 2014 to November 2015 at West Bengal University of Technology) and 12 th November, 2015 to 1 st February, 2017 at Tripura Central University.
1 st , Dec 2012 to 28 th Feb, 2014	Microbiologist	Microbiologist at Biofertilizer division of Super Agro India Pvt. Ltd.

Research Projects:

Development of sustainable heavy metal bioremediation system with microbes isolated from Mumbai mangroves. UGC – DAE. 2019 – 2022.

Achievements:

1. CSIR-NET (Lectureship) qualified.
2. Worked as microbiologist in setting up biofertilizers laboratory, R&D and mass production of various bio products at industry using fermentors.
3. Received stipend for three semesters at the Masters level from West Bengal University of Technology for scoring more than 8.5 SGPA in three semesters.
5. Received Club HP Special Efforts Scholarship from Hindustan petrochemicals limited for ICSE results.

Educational qualifications:

Qualification	School/College/ Department	Board/University	Percentage	Year of passing
PhD in Biotechnology	Biotechnology	West Bengal University of Technology	-	2018
NET Lectureship	LIFE SCIENCE	CSIR-UGC	58.5% (AIR 25)	2016 (JUNE)
M.Sc Microbiology	Department of Biotechnology	West Bengal University of Technology	79.72% (DGPA – 8.77)	2012
B.Sc Microbiology	Department of Microbiology, Asutosh College	Calcutta University	67%	2010
Class 12	St. Thomas Girls School	ISC	86%	2007
Class 10	St. Thomas Girls School	ICSE	83.4%	2005

Publications:

1. “Mangroves as potential agents of Phytoremediation: A review”, Saili Sanjay Mahadik, Sourav Ghosh, **Srimoyee Banerjee***: Research Journal of Chemistry and Environment (2021) In Press
2. “Bacterial consortium based petrochemical wastewater treatment: from strain isolation to industrial effluent treatment”, Tethi Biswas, **Srimoyee Banerjee**, Amrita Saha, Abhishek Bhattacharya, Chaitali Chanda, Lalit Mohan Gantayet, Shaon Ray Chaudhuri; Environmental Advances (2021) <https://doi.org/10.1016/j.envadv.2021.100132>
3. “A review of metal resistance mechanisms by mangrove bacteria”, Debasmita Das, Sourav Ghosh, **Srimoyee Banerjee**; Research Journal of Biotechnology (2021) <https://doi.org/10.25303/1703rjbt209215>
4. “Detection of metals and associated bacteria from Mumbai mangroves and their impact analysis”, **Srimoyee Banerjee***, Sourav Ghosh, Kajal Singh, Madhura Ghodke, Mathummal Sudarshan; Regional Studies in Marine Science (2021) <https://doi.org/10.1016/j.rsma.2021.102007>
5. “Evaluation of plant growth promotion properties and induction of antioxidative defense mechanism by tea rhizobacteria of Darjeeling, India”, Bhattacharyya C, **Srimoyee Banerjee**, Acharya U, Mitra A, Mallick I, Halder A, Halder S, Ghosh A and Ghosh A; Scientific Reports (2020) <https://doi.org/10.1038/s41598-020-72439-z>
6. “Cultivable Bacterial Community Analysis of Dairy Activated Sludge for Value Addition to Dairy Wastewater”, Biswas T, Chatterjee D, Barman S, Chakraborty A, Halder N, **Srimoyee Banerjee** and Chaudhuri S R; Microbiology and Biotechnology Letters (2019), <http://dx.doi.org/10.4014/mb.1901.01014>.
7. “Microbial consortium based conversion of dairy effluent into biofertilizers”, Halder N, Gogoi M, Sharmin J, Gupta M, **Srimoyee Banerjee**, Biswas T, Agarwala B.K., Gantayet L.M.,

- Sudarshan M, Mukherjee I, Roy A and Chaudhuri S.R.; Journal of Hazardous, Toxic and Radioactive waste (2019), ISSN: 2153-5493.
8. "Ramie (*Boehmeria nivea*) Gum: A Natural Feed to Sustain and Stimulate the Growth of Bacteria", **Srimoyee Banerjee**, Gupta M, Roy A, Chakraborty A and Ray Chaudhuri S*; Journal of Bacteriology and Mycology (2018), ISSN : 2471-0172.
 9. "Simultaneous sequestration of nitrate and phosphate from waste water using a tailor made bacterial consortium in biofilm bioreactor", Amrita Saha, Shashi Bhushan, Pallavi Mukherjee, Chaitali Chanda, Moumita Bhaumik, Madhurima Ghosh, Jaweria Sharmin, Poulami Datta, **Srimoyee Banerjee**, Parthasarathi Barat, Ashoke Ranjan Thakur, Lalit Mohan Gantayet, Indranil Mukherjee and Shaon Ray Chaudhuri; Journal of Chemical Technology and Biotechnology (2017), DOI: 10.1002/jctb.5487.
 10. "Microbe-Based Strategy for Plant Nutrient Management", Shaon Ray Chaudhuri, Madhusmita Mishra, Sonakshi De, Biswajit Samal, Amrita Saha, **Srimoyee Banerjee**, Abhinandan Chakraborty, Antara Chakraborty, Sonali Pardhiya, Deepak Gola, Joyeeta Chakraborty, Sourav Ghosh, Kamlesh Jangid, Indranil Mukherjee, Mathummal Sudarshan, Rajib Nath and Ashok Ranjan Thakur in Biological Wastewater Treatment and Resource Recovery, InTech 2017, ISBN 978-953-51-4933-0, DOI: 10.5772/67307.
 11. "Novel microbial system developed from low level radioactive waste treatment plant for environmental sustenance", Shaon Ray Chaudhuri, Jaweria Sharmin, **Srimoyee Banerjee**, U Jayakrishnan, Amrita Saha, Madhusmita Mishra, Madhurima Ghosh, Indranil Mukherjee, Arpita Banerjee, Kamlesh Jangid, Mathummal Sudarshan, Anindita Chakraborty, Sourav Ghosh, Rajib Nath, Maitreyi Banerjee, Shiv Shankar Singh, Ajoy Krishna Saha and Ashoke Ranjan Thakur in Management of Radioactive and Hazardous Wastes, InTech 2016, ISBN 978-953-51-4764-0, DOI: 10.5772/63323.
 12. "*Bacillus* sp MCC2138: a potential candidate for microbial degumming of Ramie", Manjila Gupta, Arindam Roy, **Srimoyee Banerjee**, Raman Kapoor, Basudam Adhikari, Ashoke Ranjan Thakur and Shaon Ray Chaudhuri; International Journal of Fibre and Textile Research (2015), 5 (3):39-43.
 13. "Isolation of nitrate and phosphate removing bacteria from various environmental sites", Shreya DebRoy, Sumana Das, Sourav Ghosh, **Srimoyee Banerjee**, Debasmita Chatterjee, Amrita Bhattacharjee, Indranil Mukherjee and Shaon Ray Chaudhuri; Online Journal of Biological Sciences (2012), 12: 62-71. DOI: 10.38sci.2012.62.71

Research skills and experiences:

- Studied the effect of plant growth promoting bacteria in inducing resistance in rice plants.
- Experience in handling microbial packed bed bioreactors, starting from development, stabilization and optimization at West Bengal University of Technology while pursuing Ph.D.
- Characterisation of microbes using RAST, MUAVE, BRIG, DOT-PLOT.
- Process optimization using Design Expert 9 software while pursuing Ph.D.
- Isolation of useful microbes with specific properties from natural sights at West Bengal University of Technology during masters and their identification while pursuing Ph.D.
- Understanding the effect of beneficial microbes on plants and seed nutritional analysis including elemental content analysis using EDXRF at West Bengal University of Technology during masters and their identification while pursuing Ph.D.
- The work at industry involved maintenance, mass production and quality control of agriculturally important microbes for biofertilizer production at industrial scale along with field trial testing and detailed documentation. It also included operation and trouble

shooting of fermenters of up to 345 litres capacity along with research and development to develop the most appropriate products.

- Isolation of microbes with stringent specifications and understanding their behavior, during M.Sc Microbiology 3rd semester project at west Bengal University of Technology.
- Isolation, identification and quantification of plant hormones from microbial consortium during M.Sc Microbiology 3rd semester project at west Bengal University of Technology.

Scientific activities:

International poster presentations

Second International Conference on Material Science, 2017 held from 16th to 18th February, 2017 at Department of Physics, Tripura University.

2014 International Symposium on Industrial Biotechnology held from 15th to 17th October, 2014 at Beijing, China organized by CAS – TWAS Centre of Excellence in Biotechnology (CoEBio), The World Academy of Science.

Oral presentation

Recent Trends in Biotechnological Research at Tripura University during 20th to 22nd January, 2016, organized by State Biotech Hub, Tripura University, sponsored by Department of Biotechnology.

Memberships:

- Life member of Global Initiative of Academic Networks (GIAN)

Skill based:

- ♦ Fluent in English, Hindi, Bengali.
- ♦ Expertise of MS Office Word, MS Office Powerpoint, MS Office Excel, MS Office Picture manager.
- ♦ Knowledge of using Design Expert, OriGinPro 8 and Minitab software.
- ♦ Knowledge of annotation using Rapid Annotation using Subsystem technology (RAST).

Extracurricular involvements:

1. Participated and won medals in Rowing as a sport at State, National, University and International levels.
2. Gardening and photography as hobby.

Research Gate profile link - https://www.researchgate.net/profile/Srimoyee_Banerjee

Linkedin profile link - <https://www.linkedin.com/in/srimoyee-banerjee-80b1a3114/>

Other Details:

Address: B503, Bhavna Apartments, Jwalapur, Uttarakhand-249407

Date of birth -17th November 1988

Marital status: Married

DECLARATION:

I, SRIMOYEE BANERJEE hereby confirm that the above given details are correct and true to the best of my knowledge.

05.05.2022