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Academic Qualification: M.Sc in Microbiology, Ph.D from University of North Bengal **,** UGC-NET,SET

Subject Specialization: Microbiology

Area of Research Interest: Microbial Biotechnology and Industrial Microbiology

Number of Publications: 10

Publications:

- **S.P. Saha**, D. Mukherjee, S. Ghosh **(2011).** Submerged cultivation of *Aspergillus flavus* xym4 with water hyacinth as substrate for production of a highly active, thermostable xylanase. Annals of Biological Research, 2011, 3 (10): 4884-4892.
- **S. P.Saha**, S.Ghosh **(2014).** Optimization of xylanase production by *Penicillium citrinum* xym2 and application in saccharification of agro-residues. *Biocat. and Agri. Biotechnol.* 3:188-196. http://dx.doi.org/10.1016/j.bcab.2014.03.003
- M.P. Roy, D. Mazumdar, S. Dutta, **S.P. Saha**, S. Ghosh **(2015).** Cloning and expression of phytase appA gene from *Shigella* sp. CD2 in *Pichia pastoris* and Comparison of properties with recombinant enzyme expressed in *E. coli***.** Plos One, 11(1):1-14
- **S. P. Saha*,** D. Mazumdar, M. Goswami **(2018).** Enhancing the thermostability and reusability of endoxylanase obtained from *Bacillus cereus* xym11 by calcium alginate entrapment method. International journal of basic and applied research, 8(11).
- **S. P. Saha** and A. Bhattacharjee (**2018).** Isolation and characterization of bacteriophages with lytic activity isolated from siliguri, west bengal, using *Escherichia coli* as host organism. *Global journal of bio science and biotechnology.* 7(4):638-641.
- D. Mazumdar, **S. P. Saha** and S. Ghosh (**2018**). *Klebsiella pneumoniae* rs26 as a potent PGPR isolated from chickpea (*Cicer arietinum*) rhizosphere.The pharma Innovation Journal. 7(11):56-62.

- I. Bhattacharjee, D. Mazumdar and **S. P. Saha*** (**2019).** Microbial amylases and their potential application in industries: A review. The Pharma Innovation Journal .8(6): 162-170.
- S. Sengupta. M. Deb. R. Nath, **S. P. Saha**, A. Bhattacharjee (**2019).** Optimization of Ethanol Production using Nitrosative Stress Exposed *S.cerevisiae. Cell Biochemistry and Biophysics* *https://doi.org/10.1007/s12013-019-00897-y* .
- D. Mazumdar, **S. P. Saha** & S. Ghosh (**2019)**. Isolation, screening and application of a potent PGPR for enhancing growth of Chickpea as affected by nitrogen level. *International Journal of Vegetable Science. https://doi.org/10.1080/19315260.2019.1632401*.
- **S. P.Saha***, D. Mazumdar **(2019).** Optimization of process parameter for alpha-amylase produced by *Bacillus cereus* amy 3 using one factor at a time (OFAT) and central composite rotatable (CCRD) design based response surface methodology (RSM). *Biocat. and Agri. Biotechnol.* 19:101168. https://doi.org/10.1016/j.bcab.2019.101168
- K. K. Singh, **S. P. Saha,** R. C. Kadiravana, D. Majumdar, V. Rai and S. Ghosh (**2020).** Ammonium metabolism in *Selaginella bryopteris* in response to dehydration-rehydration and characterization of desiccation tolerant, thermostable, cytosolic glutamine synthetase from plant. *Functional Plant Biology. https://doi.org/10.1071/FP20144*.
- P. V. Gavande, A. Basak, S. Sen, K. Lepcha, N. Murmu, V. Rai, D. Mazumdar, **S. P. Saha,** V. Das & S. Ghosh (**2021)**. Functional characterization of thermotolerant microbial consortium for lignocellulolytic enzymes with central role of Firmicutes in rice straw depolymerization.*Scientific Reports.* 11:3032. https://doi.org/10.1038/s41598-021-82163-x.
- D. Mazumdar, **S. P. Saha** & S. Ghosh (**2021)**. RSM based optimization of plant growth promoting rhizobacteria and nitrogen dosage for enhanced growth and yield of mustard (*Brassica campestris* L.). J*ournal of plant nutrition*. https://doi.org/10.1080/01904167.2021.1889585
- G. Kumar, **S. P. Saha,** S. Ghosh and P. K. Mondal (**2021)**. Artificial neural network-based modelling of optimized experimental study of xylanase production by *Penicillium citrinum* xym2. *Journal of Process Mechanical Engineering.* https://10.1177/09544089211064153.

Book Edited:

- S. Roy, P. Mathur, A. P. Chakraborty, **S. P. Saha (**2022). Plant Stress: Challenges and Management in the New Decade. Advances in Science, Technology & Innovation IEREK Interdisciplinary Series for Sustainable Development. Springer. ISSN 2522-8714.

Book Chapter:

- **S. P. Saha*** and D. Mazumdar (2022). Potential of Plant Growth Promoting Rhizobacteria for Enhancement of Plant Growth and Its Role in Improving Soil Health Under Abiotic Stress. Advances in Science, Technology & Innovation IEREK Interdisciplinary Series for Sustainable Development. Springer. ISSN 2522-8714.

Achievement and Awards:

Awarded Gold medal for 1st class 1st in M.Sc. Microbiology, University of North Bengal in 2011, Qualified CSIR NET, WB SET,ICAR NET,GATE

Teaching Experience: 11 years **Research Experience:** 10 years

Life Member of Microbiologist Society of India.