Dr. Arindam Bhattacharjee

M.Sc, Ph.D, NET

Assistant Professor

Department of Microbiology, University of North Bengal

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Academic Qualification: M. Sc in Microbiology, **Ph.D.** from University of Calcutta, NET

Subject Specialization: Microbiology

Achievement and Awards:Qualified CSIR–NET- JRF

Professional Experience:

3 years acted as Head Department of Microbiology, Darjeeling Government College, Darjeeling, WB.

4 years acted as Head, Dept. of Microbiology, University of North Bengal

Life Member and Coordinator North Bengal Unit of Microbiologist Society of India.

Teaching experience: 12 Years

Research experience: 17 years

Area of Research Interest: Stress Biology and Environmental Microbiology

Ph.D. students: 3 Registered Research Scholars and 2 Course work completed scholars

Publications:

- T. S. Sarkar, **A. Bhattacharjee**, U. Majumdar, A. Roy, D. Maiti, A. M. Goswamy, S.K. Ghosh and Sanjay Ghosh (2011) Biochemical characterization of compatible plant-viral interaction: A case study with a Begomovirus-Kenaf host-pathosystem. Plant Signal Behav. 6:501-509.
- **Bhattacharjee**, U. Majumdar, D. Maity, T.S. Sarkar, A.M. Goswami, R. Sahoo, and Sanjay Ghosh (2010) Characterizing the effect of nitrosative stress in *Saccharomyces cerevisiae*. Archives of Biochemistry and Biophysics 496:109-116.
- T.S. Sarkar, U. Majumdar, A. Roy, D. Maiti, A. M. Goswamy, **A. Bhattacharjee**, S.K. Ghosh and Sanjay Ghosh (2010) Production of nitric oxide in host-virus interaction: A case study with a compatible Begomovirus-Kenaf host-pathosystem. Plant Signal Behav. 5:668-676.

- T. Dutta, **A. Bhattacharjee**, U. Majumdar, S. Sinha Ray, R. Sahoo and Sanjay Ghosh (2009) In Vitro renaturation of alkaline family G/11 Xylanase via a folding intermediate: α-Crystallin facilitates fefolding in an ATP-independent manner. Appl Biochem Biotechnol. 162:1238-1248.
- **Bhattacharjee**, U. Majumdar, D. Maity, T.S. Sarkar, A. M. Goswami, R. Sahoo and Sanjay Ghosh (2009) In vivo protein tyrosine nitration in S. cerevisiae: Identification of tyrosine-nitrated proteins in mitochondria. BiochemBiophys Res Commun. 388:612-617.
- R. Sahoo, **A. Bhattacharjee**, U. Majumdar, S. Sinha Ray, T. Dutta, and Sanjay Ghosh (2009) A novel role of catalase in detoxification of peroxynitrite in *S. cerevisiae* yhb1 and sfa1-mutants. Biochem Biophys Res Commun. 385:507-511.
- T. Dutta, R. Sahoo, R. Sengupta, S. Sinha Ray, **A. Bhattacharjee** and Sanjay Ghosh (2008). Novel cellulases from an extremophilic filamentous fungi *Penicillium Citrinum*: Production and characterization. Journal of Industrial Microbiology and Biotechnology 35:275-282.
- S. Sinha Ray, J. Tejero, Z. Wang, T. Dutta, **A. Bhattacharjee**, M. Regulski, T. Tully, Sanjay Ghosh*, and Dennis J.Stuehr*.(2007) The oxygenase domain of *Drosophila melanogaster* nitric oxide synthase: unique kinetic parameters enable a more efficient NO release. Biochemistry 46:11857-11864.
- T. Dutta, R. Sahoo, S.Sinha Ray, **A. Bhattacharjee**, R. Sengupta and Sanjay Ghosh (2007) Probing the active site environment of alkaliphilic family 11 xylanase from *Penicillium Citrinum*: Evidence ofessential histidine residue at the active site. Enzyme and Microbial Technology, 41, 440–446.
- T. Dutta, R. Sengupta, R. Sahoo, S. Sinha Ray, **A. Bhattacharjee** and Sanjay Ghosh (2007). A novel cellulase free alkaliphilic xylanase from alkali tolerant *Penicillium citrinum*: Production, Purification and Characterization. Letters in Applied Microbiology UK 2007 Feb; 44 (2):206-11.
- **Bhattacharjee**, (2011) Role of Nitrosative Stress in Neurodegenerative Disease: A Short Review. Recent Advances in Animal Science Research Sept, 2011 Vol- VI B ISBN 81-88094-02-9
- S. Sengupta, A. Sil, D. Acharya, A. Dutta and **A. Bhattacharjee*** (2018). Characterizing the role of miRNA in cancer with special reference to breast cancer, lung cancer and colorectal cancer. European Journal of Biomedical AND Pharmaceutical sciences, 5(4):267-290.
- **A. Bhattacharjee*,** S. Sengupta, P. Rudra , R. Nath , M. Deb (2019). SAMHD1 and HIV1 infection: a new approach. G.J.B.B., 8 (1) .
- J. Mondal, A. Dutta, K. Das, D. Das, P. Karmakar, S. Sengupta, **A. Bhattacharya**, R. K. Das, M. N. Roy (2019). Probing Subsistence of Host Guest Inclusion Complexes of Oligosaccharides with Allopurinol for Regulatory Release with the Manifestation of Solvation Consequences J. Adv. Chem. Sci. 5(1):621–628.
- Rajbanshi, S. Saha, K. Das, B. K. Barman, S. Sengupta, **A. Bhattacharjee** & M. N. Roy (2018). Study to Probe Subsistence of Host-Guest Inclusion Complexes of α and β-Cyclodextrins with Biologically Potent Drugs for Safety Regulatory Dischargement. Scientific RePortS 8:13031.

- 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
- Rai , **A. Bhattacharjee** (2019). Molecular profiling of microbial community structure and their CAZymes via metagenomics, from Tsomgo lake in the Eastern Himalayas. Arch Microbiol, 203(6):3135-3146

Research grants and consultancy services mobilized by the faculty

S.No.	Title	Fund (in Rs)	Year	Agency
1	Determining the expression level of Adh in S. cerevisiae grown in presence of ethanol and nitrosative stress agent/s	1,50,000	2022	University of North Bengal
1	Effect of ethanol and nitrosative stress on *Saccharomyces cerevisiae*	1,50,000	2021	University of North Bengal
2	Effect of GSNO on *Saccharomyces cerevisiae*	1,50,000	2020	University of North Bengal
3	Effect of nitrosative stress on ethanol production by *Saccharomyces cerevisiae*	1,50,000	2019	University of North Bengal
4	Designing and synthesis of functionalized N-(4-quilone and imidazopyridine) and evaluation of their biocidal properties	43,40,160	2017	DST-SERB (CO-I)
5	Isolation of bacteria from high altitude lakes and identifying their extracellular enzymes	75000	2015	University of North Bengal