CURRICULUM VITAE

DR. SK AFTABUL ALAM

(Assistant Professor) Department of Botany Netaji Mahavidyalaya (affiliated to The University of Burdwan) Arambagh, Hooghly, W.B, India Email: <u>aftabul1992@gmail.com</u>



Educational Qualification

- Ph.D.: (2018 2023) Department of Microbiology, The University of Burdwan, West Bengal, India.
- Master of Science: Botany (2016), Department of Botany, The University of Burdwan, W.B, India, with CGPA 8.71; Rank 3rd.
- Bachelor of Science: Botany (Honours) (2014), Burdwan Raj College, affiliated to The University of Burdwan. 74%; Rank 6th.
- Higher Secondary (10+2) (2010), W.B.C.H.S.E, Burdwan C.M.S High School, Burdwan, WB, India.
- Secondary School Examination (2008), W.B.B.S.E, Jotsadi High School, Burdwan, WB, India.
- Qualified CSIR NET-JRF, held in Dec 2017 (conducted jointly by the CSIR & UGC, New Delhi), Rank- 83.
- Qualified CSIR NET-LS, held in Dec 2016 (conducted jointly by the CSIR & UGC, New Delhi), Rank- LS 37.
- Qualified CSIR NET-LS, held in June 2017 (conducted jointly by the CSIR & UGC, NewDelhi), Rank LS-35.
- Qualified Graduate aptitude test (GATE 2017) conducted by Indian Institute of Technology (IIT), India
- Qualified WBSET-2017.

Teaching Experience

- Assistant Professor: (2019, August- Till date) at the Department of Botany, Netaji Mahavidyalaya, Arambagh, Hooghly (affiliated to The University of Burdwan).
- Guest Lecturer: (2017, April- 2018, June) at the Department of Botany, Burdwan Raj College, Purba Barddhaman, (affiliated to The University of Burdwan).

Specialization

- **Ph.D.** Microbiology
- M.Sc.- Plant Physiology and Biochemistry

Area of Research

- Microbial degradation of xenobiotic compounds
- Microbial biodiversity
- Bacterial Chemotaxis
- Bacterial Genomics
- Computer-Aided Drug Designing

Area of Interest

- Microbial degradation of xenobiotic compounds
- Microbial biodiversity
- Bacterial Chemotaxis
- Bacterial Genomics
- Computer-Aided Drug Designing
- Anti Microbial Peptides
- Homology Modeling

List of publications

- Alam, Sk Aftabul, and Pradipta Saha. "Chemotactic response of p-nitrophenol degrading *Pseudomonas asiatica* strain PNPG3 through phenotypic & genome sequence based in silico studies" *3 Biotech* (2023). (IF 3.1). <u>https://doi.org/10.1007/s13205-023-03809-3</u>
- Alam, Sk Aftabul, and Pradipta Saha. "P-Nitrophenol decolorization and draft genome sequence of *Pseudomonas* sp. strain PNPG3: A preliminary study report". *Journal of Environmental Biology*. (2023). (IF 0.781). <u>http://doi.org/10.22438/jeb/44/4/MRN-5061</u>
- Alam, Sk Aftabul, and Pradipta Saha. "Functional, and phylogenetic analysis of maleylacetate reductase of *Pseudomonas* sp strain PNPG3: An in-silico approach". *Journal of Experimental Biology and Agricultural Sciences* (2022): 1331 1343. (IF 0.46). http://dx.doi.org/10.18006/2022.10(6).1331.1343
- Alam, Sk Aftabul, and Pradipta Saha. "Evidence of *p*-nitrophenol Biodegradation and Study of Genomic Attributes from a Newly Isolated Aquatic Bacterium *Pseudomonas asiatica* Strain PNPG3." *Soil and Sediment Contamination: An International Journal* (2022): 1-18. (IF 2.96). https://doi.org/10.1080/15320383.2022.2159321
- Alam, Sk Aftabul, and Pradipta Saha. "Microbial biodegradation of nitrophenols and their derivatives: A Review". *Journal of Experimental Biology and Agricultural Sciences* (2022): 743-766. (IF 0.46). <u>http://dx.doi.org/10.18006/2022.10(4).743.766</u>
- Alam, Sk Aftabul, and Pradipta Saha. "Biodegradation of *p*-nitrophenol by a member of the genus *Brachybacterium*, isolated from the river Ganges." *3 Biotech* 12.9 (2022): 1-10. (IF 3.1). <u>https://doi.org/10.1007/s13205-022-03263-7</u>

Bacterial 16S rDNA Sequences deposited in NCBI GenBank Database (E-Publications)

- Alam, Sk Aftabul, and Pradipta Saha (2020). PNP degrading aquatic bacterium isolated from River Ganges water sample, collected from West Bengal, India. GenBank vide Accession no. MW350013. *Pseudomonas* sp strain PNPG3 (http://www.ncbi.nlm.nih.gov).
- Alam, Sk Aftabul, and Pradipta Saha (2021). PNP degrading aquatic bacterium isolated from a pond water sample collected from Bardhaman, West Bengal, India. GenBank vide Accession no. MZ505525. *Pseudomonas* sp strain PNPBRP5(2) (http://www.ncbi.nlm.nih.gov).
- 4 Alam, Sk Aftabul, and Pradipta Saha (2020). PNP degrading aquatic bacterium isolated from River Ganges water sample, collected from West Bengal, India. GenBank vide Accession no. MW064125. Brachybacterium sp strain DNPG3 (http://www.ncbi.nlm.nih.gov).
- Alam, Sk Aftabul, and Pradipta Saha (2020). PNP degrading aquatic bacterium isolated from River Ganges water sample, collected from West Bengal, India. GenBank vide Accession no. MW073529. Brachybacterium sp strain DNPG4. (http://www.ncbi.nlm.nih.gov).
- **4** Alam, Sk Aftabul, and Pradipta Saha (2022). Nitroaromatic degrading aquatic bacterium isolated from a pond water sample, collected from Bardhaman, West Bengal, India.

GenBank vide Accession no. **OP459200**. *Brachybacterium* **sp strain DNPBRP2**. (http://www.ncbi.nlm.nih.gov).

- 4 Alam, Sk Aftabul, and Pradipta Saha (2021). PNP degrading aquatic bacterium isolated from River Ganges water sample, collected from West Bengal, India. GenBank vide Accession no.- MZ505526. *Klebsiella* sp. strain DNPG7. (http://www.ncbi.nlm.nih.gov).
- Alam, Sk Aftabul, and Pradipta Saha (2021). PNP degrading aquatic bacterium isolated from a pond water sample, collected from Bardhaman, West Bengal, India. GenBank vide . Accession no.- OK149110. *Microbacterium* sp. strain R6. (<u>http://www.ncbi.nlm.nih.gov</u>).
- Alam, Sk Aftabul, and Pradipta Saha (2022). *Pseudomonas* sp strain 3PNP 16S ribosomal RNA gene, partial sequence. GenBank vide Accession no.- OP740490. *Pseudomonas* sp. strain 3PNP. (http://www.ncbi.nlm.nih.gov).

Whole genome shotgun Sequence deposited in NCBI GenBank Database (E-Publications)

Alam, Sk Aftabul, and Pradipta Saha (2022). Draft Genome of *Pseudomonas* sp strain PNPG3. GenBank vide Accession no.- NZ_JALLKV000000000. *Pseudomonas* sp. PNPG3. (http://www.ncbi.nlm.nih.gov).

Seminars/Symposia participant

- Sk Aftabul Alam (2024). "Annotation of the chemotaxis gene clusters in *Pseudomonas* asiatica strain PNPG3" at 31st West Bengal Science and Technology Congress, (February 28-29, 2024); Science City, Kolkata; sponsored by Department of Science and Technology and Biotechnology, Govt. of West Bengal.
- Sk Aftabul Alam (2024). "Annotation of the chemotaxis gene clusters in *Pseudomonas* asiatica strain PNPG3" at 6th regional science and Technology Congress (Region Three), (January 9-10, 2024); Durgapur, West Bengal; sponsored by Department of Science and Technology and Biotechnology, Govt. of West Bengal.
- Sk Aftabul Alam and Pradipta Saha (2020). "Isolation, Characterization and Chemotaxis of p-nitrophenol degrading bacteria from waterbody of West Bengal". Present and Future strategies to combat emerging and re-emerging contagious disease, organized by the Department of Microbiology, The University of Burdwan. August 16-18, 2020.
- Sk Aftabul Alam and Pradipta Saha (2019). "Isolation and characterization of a nitroaromatic compound degrading bacterial strain isolated from a waterbody of Burdwan: A Preliminary Report", at 4th regional science and Technology Congress (Western Region), (December 9-10, 2019); The University of Burdwan; sponsored by Department of Science and Technology and Biotechnology, Govt. of West Bengal.

Research Activities

- **Ph.D. Thesis title:** Exploration of *p*-nitrophenol degrading aquatic bacteria from selected water bodies of West Bengal.
- Microbial population study, Microbial genomics study.
- Genomic DNA extraction.
- Study of biodegradation of xenobiotics, and chemotaxis.
- Agarose gel electrophoresis and PCR amplification.
- Chromatographic separation techniques.
- Spectroscopies, Microscopies.
- Bioinformatics-based genome and proteome analysis.
- Bioinformatics tool knowledge- PyRx, Discovery Studio 2021 client, UCSF chimera, MEGA11.

Refreshers and Orientation Courses

- Third Faculty Induction Programme,- (16.11.2022-15.12.2022) organized by The University of Burdwan, W.B, India.
- Refreshers Course in Trends in Life Sciences Industry, (25.9.2021-8.10.2021), organized by The University of Burdwan, W.B, India.
- Four Week Faculty Induction Programme for 'Faculty in University/College/ Institutes of Higher Education', (10.09.2020- 09.10.2020) organised by Ramanujan College, affiliated to University of Delhi.

Achievements

- "Outstanding paper presentation" award at 6th regional science and Technology Congress (Region Three), (January 9-10, 2024); Durgapur, West Bengal; sponsored by Department of Science and Technology and Biotechnology, Govt. of West Bengal.
- Awarded Junior Research Fellowship by CSIR (2018, July 2019, August). (File no. 09/025(0263)/2019)

Workshop attended

- "An Academics Toolkit: 40+ AI tools for Teaching and Research" organised by Assumption College, Kottayam, Kerala, India-686001, at August 19-26, 2023.
- "Training Program on Competency Development in High-end Research Equipments in Biotechnology", organized by Indian Institute of Technology, Kharagpur, 721302, West Bengal, at April 25th to 1st May 2023.
- One-week online Faculty Development Programme on Educational Video Creation (E-Content Development) organized by Rashtrapita Mahatma Gandhi Arts, Commerce and Science College, saoli Dist- Chandrapur (M.S), June 12-18, 2020.
- "Science Leadership workshop" organized by Central University of Punjab, Bhatinda, India from June 22-28, 2020.
- "HPLC MASS TECHNOLOGY" organized by HPLC Mass Faculty, Department of Applied Chemistry, KITS. July 1-4, 2020.

Contact details

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- Email: <u>aftabul1992@gmail.com</u>

I hereby declare that the above-mentioned information's are correct to the best of my knowledge and belief.

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DR. SK AFTABUL ALAM