

## CURRICULUM VITAE

Pradipta Saha, Assistant Professor  
Department of Microbiology  
The University of Burdwan  
Golapbag, Burdwan-713104

[psaha@microbio.buruniv.ac.in](mailto:psaha@microbio.buruniv.ac.in)

Phone (mob.): +91-09433911957



### Personal Profile:

Date of Birth: 24<sup>th</sup> April 1975.  
Nationality: Indian.  
Gender & Caste: Male & General.  
Marital Status: Married.  
Present designation: Assistant Professor of Microbiology. Since, 2006, in Burdwan University.  
Present Address: Department of Microbiology  
The University of Burdwan  
Golapbag, Burdwan-713104  
West Bengal. India.  
Permanent Address: AJ-243, Sector 2.  
Salt Lake City. Kolkata-700091.  
Phone (res.): +91-033-23591581  
Mobile Phone: 09433911957

Educational Qualification	Subject (result)	Year of passing	Institution/ College/ School	Board/University
Ph.D.	Microbiology	2007	Institute of Microbial Technology, Chandigarh	Jawaharlal Nehru University, New Delhi, India
M.Sc.	Botany (Microbiology as special paper) (1 <sup>st</sup> Class)	2000	University College of Science & Technology. Ballygaunge Circular Road. Kolkata	University of Calcutta, Kolkata
B.Sc. (Honours)	Botany (Honours), Chemistry & Zoology (1 <sup>st</sup> Class)	1998	Presidency College, Kolkata	University of Calcutta, Kolkata
AISSCE (Class XII)	English, Maths, Physics, Chemistry, Biology (74 %)	1994	KV Salt lake No. 1. Kolkata	CBSE
AISSE (Class X)	English, Hindi, Maths, Social Studies, Science (69.4 %)	1991	KVOFDC, Dum-Dum	CBSE

### Awards and Distinctions:

1. SERB Young scientist through project No. (SERB/SR/FT/LS-1009)
2. Awarded Ph. D. in 2007.
3. Awarded JRF by CSIR in 2001 & SRF by CSIR, India in 2003.
4. Qualified CSIR NET, held in Dec 2000 (conducted jointly by the CSIR & UGC, New Delhi).
5. Qualified Graduate aptitude test (GATE 2000).
6. Awarded National Scholar on the basis of result of B.Sc. Botany (Honours) Part II in 1998.

## Research Experience:

1999-2000: *M. Sc degree Dissertation* on isolation of Actinobacteria from the earthworm gut and to study their potential to produce antimicrobial substance(s) at The Department of Botany, University college of Science technology, University of Calcutta, Kolkata, India.

2001-2006: *Ph. D Degree Dissertation* on project entitled “Bacterial diversity of water of a warm spring located in Assam” at Institute of Microbial Technology, Chandigarh, India. I discovered four new bacterial genera (*Aquimonas*, *Emticicia*, *Fontibacillus* & *Paenisporosarcina*) & eleven bacterial spp. (*Aquimonas voraii*, *Paenibacillus assamensis*, *Flavobacterium indicum*, *Aeromonas sharmana*, *Ornithinimicrobium kibbenrense*, *Emticicia oligotrophica*, *Rhodococcus kroppenstedtii*, *Kitasatospora sampliensis*, *Paenisporosarcina quisquiliarum*, *Paenisporosarcina macmurdoensis*, *Fontibacillus aquaticus*) using polyphasic taxonomic approach.

I also worked out the bacterial diversity of warm spring water sample by culture independent approach through construction of Environmental 16S rDNA library in *E. coli* host followed by study of heterogeneity in sequence inserts by employing ARDRA primarily and then by sequencing, followed by their bioinformatics molecular phylogenetic analyses.

I also worked on of newly discovered oligotrophic bacteria, *Emticicia oligotrophica*, to understand molecular basis of oligotrophy by employing peptide mass fingerprinting technique.

**2006- till date:** **Currently, Major research themes of my laboratory are:**

Ph. D. Students in my laboratory are working on several aspects. These are as follows:

- A. Degradation of Organophosphate pesticides & their toxic intermediates by bacteria.
- B. Heavy metal tolerant bacteria and their PGPR potential from agro ecosystems.
- C. Genome study, genomics, Comparative genomics of enzymes & genes & enzyme promiscuity.
- D. Biodegradation of natural biopolymers and their valorization.
- E. Microbial Bioprospecting from unexplored habitats & niches.

## Teaching Experience:

**Nov., 2006- Till date:** Teaching M. Sc. Students of Microbiology in the University of Burdwan, Burdwan. I am teaching basic and general microbiology, molecular biology & recombinant DNA technology and also practical skills & techniques of Microbiology and Molecular biology.

## Major Research Project:

Topic	Capacity	Project No./Agency	Sanctioned fund
Degradation of Organophosphate (OP) pesticides by bacteria and the study of effect of OP pesticides on insect (pest) gut micro-flora by culture dependent & culture- independent approaches	As PI	SR/FT/LS-109/2010 SERB, New Delhi	22.6 Lakhs from 2012 to 2015
Exploring arctic microorganisms for the production of industrial enzymes	As CoPI (Along with Dr. S. K. Mukhopadhyay, Co-PI, microbiology Dept., BU; Prof. P. Roy, PI & S. Chatterjee, CO-PI, Biotech. Dept., BU.)	DST, New Delhi	~ 24 Lakhs (2011 to 2014)

### Recent Research Collaborations:

Sr. No.	Name & address of collaborator	Remarks
1	Dr. S. Krishnamurthi, Scientist NIO, Goa. Current Position: MTCC, IMTECH, Chandigarh	
2	Dr. W. Ghosh, Assistant Professor Dept. of Microbiology Bose Institute, Kolkata	
3	Dr. David Whiteworth, Senior Lecturer, Dept. of Biochemistry, Aberystwyth University, Wales, UK	Through Newton Bhabha Short Term Ph.D. Placement Programme (F. No. BT/IN/UK/DBT-BC/2015-16) of my Ph. D scholar Mrs. Kriti Sengupta (INSPIRE fellow, IF2004)
4	Dr. N. Maniackam, Scientist IITRC, Lucknow	Through recently initiated Project proposal (in frame work stage).
5 & 6	Dr. Robin Chandra Boro, Assistant Professor & Dr. B. Bhattacharya of Assam Agricultural University Jorhat, Assam	

### Research Indexes (as on 12. 10. 16):

Criteria	Google Scholar citation	Criteria	Research Gate
Total citation	408	Score	25.88
Citation since, 2011	334	Citations	315
Hi indexed	12	Reads	2575
i10 index	13	Profile viewers	1167

### List of Publications:

#### A. Publications in Journals: National, 2; International, 28. All peer reviewed journals

1. Santanu Pailan, Kriti Sengupta, Urmimala Ganguly, **Pradipta Saha** (2016). Evidence of biodegradation of Chlorpyrifos by a newly isolated heavy metal tolerant bacterium *Acinetobacter* sp. strain MemCl4. Environmental Earth Sciences 75:1019. DOI 10.1007/s12665-016-5834-8 May 2016 **IF 1.6**
2. Debdoot Gupta, Samiddha Banerjee, Santanu Pailan & **Pradipta Saha** (2016). In silico Identification and characterization of a hypothetical protein of *Mycobacterium tuberculosis* EAI5 as a potential virulent factor. Bioinformatics 12(3): 182-191. May 2016 **IF 0.5**

3. Rikta Dhali, Arpita Dey, Amar Nath Chattopadhyay, **Pradipta Saha**, Subhra Kanti Mukhopadhyay , Pranab Roy, Sabyasachi Chatterjee (2016). Isolation, characterization and study of amylase activity of micro-organisms from arctic soil sample. Accounts of Biotechnology Research 3(1): 0005-0015. **Peer reviewed international journal without IF**
4. Santanu Pailan and **Pradipta Saha** (2015). Chemotaxis and degradation of organophosphate compound by a novel moderately thermo-halo tolerant *Pseudomonas* sp. strain BUR11: evidence for possible existence of two pathways for degradation. . PeerJ 3:e1378; DOI 10.7717/peerj.1378. November, 2015 **IF 2.13**
5. Santanu Pailan, Debdoot Gupta, Snehal Apte, Srinivasan Krishnamurthi, **Pradipta Saha** (2015). Degradation of organophosphate insecticide by a novel *Bacillus aryabhatai* strain SanPS1, isolated from soil of agricultural field in Burdwan, West Bengal, India. International Biodeterioration and Degradation 103: 191-195. **IF 2.4**
6. Kriti Sengupta, Tushar Kanti Maiti, **Pradipta Saha** (2015). Degradation of 4-nitrophenol in presence of heavy metals by a halotolerant *Bacillus* sp. strain BUPNP2, having plant growth promoting traits Symbiosis 65(3): 157- 163. **IF 1.4**
7. Dey A, Chattopadhyay A, Mukhopadhyay SK, **Saha P**, Chatterjee S, et al. (2014) Production, Partial Purification and Characterization of an Extracellular Psychrotrophic Lipase from Pseudomonas Sp. ADT3. J Bioremed Biodeg 5: 242. doi:10.4172/2155-6199.1000242. **Peer reviewed international journal.**
8. Amar Nath Chattopadhyay, Arpita Dey, Pranab Roy, Sabyasachi Chatterjee, **Pradipta Saha**, Subhra Kanti Mukhopadhyay (2014). Cold Active Extracellular Hydrolytic Enzyme Producing Culturable Heterotrophic Bacteria from NY-ÅLESUND, Arctic. International Journal of Advanced Biotechnology and Research (IJBR). 01/2014; 5(3):271-278. **Peer reviewed international journal without any IF.**
9. Sengupta Kriti and **Saha Pradipta** (2014). Identification of a newly isolated P-nitrophenol Degrading strain characterized as Rhodococcus sp. BUPNP1. Journal of Environmental Research and Development 8(3), 431-436. **Peer reviewed international journal.**
10. Arpita Dey, Amarnath Chattopadhyay, **Pradipta Saha**, Subhrakanti Mukhopadhyay, Tushar Kanti Maiti, Sabyasachi Chatterjee, Pranab Roy (2014). An Approach to the Identification and Characterization of a Psychrotrophic Lipase Producing Pseudomonas sp ADT3 from Arctic Region. Advances in Bioscience and Biotechnology 5(4), 322-332. **Peer reviewed international journal without any IF**
11. Amar Nath Chattopadhyay, Puja Singh, Arpita Dey, Pranab Roy, Sabyasachi Chatterjee, **Pradipta Saha**, Subhra Kanti Mukhopadhyay (2013). Study of a psychrotolerant amylolytic *Paenibacillus* sp. isolated from Arctic region. Journal of Microbiology and Biotechnology Res., 2013, 3 (4):24-31. **Peer reviewed international journal**

12. S Sadhu, **P Saha**, SK Sen, S Mayilraj, TK Maiti (2013). Production, purification and characterization of a novel thermotolerant endoglucanase (CMCase) from *Bacillus* strain isolated from cow dung. Springer Plus 2 (1), 1-10. **Peer reviewed international journal.**
13. PK Ghosh, **P Saha**, S Mayilraj, TK Maiti (2013). Role of IAA metabolizing enzymes on production of IAA in root, nodule of *Cajanus cajan* and its PGP *Rhizobium* sp. Biocatalysis and Agricultural Biotechnology 2 (3), 234-239. **Peer reviewed international journal.**
14. P Ghosh, S Ghosh, **P Saha**, S Mayilraj, TK Maiti (2012). The Ascorbic Acid Production in Root, Root Nodule and in Culture by *Rhizobium* sp isolated from the Legume *Cajanus cajan* (L.) Millspaugh. Journal of Pure and Applied Microbiology 6 (1), 241-248. **March, 2012. IF 0.073; National.**
15. S. Sadhu, **P Saha**, S. Mayilraj, TK Maiti (2012). Characterization of a *Bosea* sp. Strain sf5 (MTCC 10045) isolated from compost soil capable of producing cellulase. The Journal of Microbiology, Biotechnology and Food Sciences 2 (2), 576-591. **IF 0.3.**
16. S Ghosh, P Ghosh, **P Saha**, TK Maiti (2011). The extracellular polysaccharide produced by *Rhizobium* sp. isolated from the root nodules of *Phaseolus mungo*. Symbiosis 53 (2), 75-81. **IF 1.4.**
17. S Pandey, **P Saha**, S Biswas, TK Maiti (2011). Characterization of two metal resistant *Bacillus* strains isolated from slag disposal site at Burnpur, India. Journal of Environmental Biology 32 (6). **IF 0.68; National.**
18. S Chatterjee, D Gupta, P Roy, NC Chatterjee, **P Saha**, S Dutta (2011). Study of a lead tolerant yeast strain BUSCY1 (MTCC9315). African Journal of Microbiology Research 5 (30), 5362-5372. **IF0.5.**
19. S Sadhu, **P Saha**, S Mayilraj, TK Maiti (2011). Lactose-enhanced cellulase production by *Microbacterium* sp. isolated from fecal matter of zebra (*Equus zebra*). Current microbiology 62 (3), 1050-1055. March, 2011. **IF 1.36**
20. S Pandey, **P Saha**, PK Barai, TK Maiti (2010). Characterization of a Cd<sup>2+</sup>-resistant strain of *Ochrobactrum* sp. isolated from slag disposal site of an iron and steel factory. Current microbiology 61 (2), 106-111. **IF 1.36.**
21. **P Saha**, S Krishnamurthi, A Bhattacharya, R Sharma, T Chakrabarti (2010). *Fontibacillus aquaticus* gen. nov., sp. nov., isolated from a warm spring. International journal of systematic and evolutionary microbiology 60 (2), 422-428. **IF 2.34**
22. S Krishnamurthi, A Bhattacharya, S Mayilraj, **P Saha**, P Schumann, T Chakrabarti (2009). Description of *Paenisporosarcina quisquiliarum* gen. nov., sp. nov., and reclassification of *Sporosarcina macmurdoensis* Reddy et al. 2003 as *Paenisporosarcina macmurdoensis* comb. nov. International journal of systematic and evolutionary microbiology 59(6), 1364-1370. **IF 2.4**
23. Mayilraj, S., Krishnamurthi, S., **Saha, P.** & Saini, H. S. (2006). *Kitasatospora sampliensis* sp. Nov., a novel actinobacterium isolated from soil of a sugar-cane fielding India. *Int J Syst Evol Microbiol* **56**, 519-522. **IF 2.4**

24. Mayilraj, S., Krishnamurthi, S., **Saha, P.** & Saini, H. S. (2006). *Rhodococcus kroppenstedtii* sp. Nov., a novel actinobacterium isolated from a cold desert of the Himalayas, India. *Int J Syst Evol Microbiol* **56**, 979-982. **IF 2.4**
25. **Saha, P.** & Chakrabarti, T. (2006). *Emticicia oligotrophica* gen nov., sp. nov., a new member of the family 'Flexibacteraceae', phylum Bacteroidetes. *Int J Syst Evol Microbiol* **56**, 991-995. **IF 2.4**
26. Mayilraj, S., **Saha, P.**, Suresh, K. & Saini, H. S. (2006). *Ornithinimicrobium kibbenrense* sp. nov., isolated from the Indian Himalayas. *Int J Syst Evol Microbiol* **56**, 1657-1661. **IF 2.4**
27. **Saha, P.** & Chakrabarti, T. (2006). *Aeromonas sharmana* sp. nov., isolated from a warm spring. *Int J Syst Evol Microbiol* **56**, 1905-1909. **IF 2.4**
28. **Saha, P.** & Chakrabarti, T. (2006). *Flavobacterium indicum* sp. nov., isolated from warm spring water in Assam, India. *Int J Syst Evol Microbiol* **56**, 2617-2621. **IF 2.4**
29. **Saha, P.**, Mondal, A. K., Krishnamurthi, S., Mayilraj, Bhattacharya, A. & Chakrabarti, T. (2005). *Paenibacillus assamensis* sp. nov., a novel bacterium isolated from a warm spring in Assam, India. *Int J Syst Evol Microbiol* **55**, 2577-2581. **IF 2.4**
30. **Saha, P.**, Krishnamurthi, S., Mayilraj, S., Prasad, G. S., Bora, T. C. & Chakrabarti, T. (2005). *Aquimonas voraii* gen nov., sp. nov., a novel gammaproteobacterium isolated from a warm spring of Assam, India. *Int J Syst Evol Microbiol* **55**, 1491-1495. **IF 2.4**

## **B. Database deposits etc.**

GenBank Accession number for 16S rRNA gene sequences:

- A. From isolated pure bacterial cultures: More than 70.
- B. From Environmental rDNA library of Gorompani warm spring, Assam: Nearly 50

## **Miscellaneous Information:**

1. Currently, (from April last, 2016 onwards) serving as TIC, Dept. of Microbiology, BU. (previously served as TIC from 2012-2014).
2. Member of Association of Microbiologists of India.
3. Member of Purchase committee, PGBS & BRS in PG Dept. of Microbiology, BU.
4. Member of UGBS in Microbiology & Biotechnology, BU.
5. Invited as guest faculty to teach PG students of Vidyasagar University from 2008 to 2011.