

: FACULTY DETAILED RESEARCH DATA:

Name of the Faculty: Dr Priyajit Banerjee

Designation: Assistant Professor

Department: Biotechnology

School: School of Life Sciences

Research Area: Drug Discovery and Protein Engineering

Details of research portfolio of faculty:

A. Researcher's ID details:

Google Scholar ID: <https://scholar.google.com/citations?user=Rl2uLgUAAAAJ&hl=en&oi=ao>

Orchid ID: <https://orcid.org/0000-0002-3416-6805>

Scopus ID: 57192870101

Vidwan ID: 528295

B. Publication details:

1. Conference proceedings/ Conference paper:

Sl. No.	Name of the Conference	Title of the paper	Month & Year of Publication	Author(s) Name	National/ International	doi number (if any)	ISSN/ISBN no.

2. Publications in SCI/Scopus indexed Journals:

Sl. No	Name of the Journal (mention SCI/scopus)	Title of the paper	Month & Year of Publication	Author(s) Name (Highlight the corresponding and 1 st author in every article)	Doi number	Issue No. & Volume No.	Page no.	ISSN of the journal
1	Science Advances (SCI and	The antiactivator FleN uses an allosteric mechanism to regulate σ 54-dependent expression	2021, Oct	Chanchal Banerjee P , Raghav S, Goswami HN, Jain D	10.1126/sciadv.abj1792	7(43)	eabj1792	2375-2548

	Scopus)	of flagellar genes in <i>Pseudomonas aeruginosa</i> .						
2	Mol Aspects Med (SCI and Scopus)	Molecular and Structural facets of c-di-GMP signalling associated with biofilm formation in <i>Pseudomonas aeruginosa</i>	2021, Oct	Banerjee P , Sahoo PK, Sheenu, Adhikary A, Ruhall R, Jain D	10.1016/j.mam.2021.101001	81:101001	Article 101001	0098-2997
3	EBioMedicine (SCI and Scopus)	Ancestral Variations of the PCDHG Gene Cluster Predispose to Dyslexia in a Multiplex Family.	2018, Feb	Naskar T , Faruq M, Banerjee P, Khan M, Midha R, Kumari R, Devasenapathy S, Prajapati B, Sengupta S, Jain D, Mukerji M, Singh NC, Sinha S .	10.1016/j.ebiom.2017.12.031	28	168-179	2352-3964
4	Science of The Total Environment (SCI and Scopus)	Behavioral toxicity, histopathological alterations and oxidative stress in <i>Tubifex tubifex</i> exposed to aromatic carboxylic acids-acetic acid and benzoic acid: A comparative time-dependent toxicity assessment.	June, 2023	Sharma, P. , Garai, P., Banerjee, P., Saha, S., Chukwuka, AV., Chatterjee, S., Saha, NC., Faggio, C.	https://doi.org/10.1016/j.scitotenv.2023.162739	876	162739	0048-9697
5	Structure (SCI and Scopus)	ATP-Induced Structural Remodeling in the Antiactivator FleN Enables Formation of the Functional Dimeric Form	2017, Feb	Chanchal , Banerjee P, Jain D .	10.1016/j.str.2016.11.022	25(2)	243-252	ISSN: 1878-4186 (online); 0969-2126 (print).
6	ACS Chem Biol. (SCI and Scopus)	Sensor I Regulated ATPase Activity of FleQ Is Essential for Motility to Biofilm Transition in <i>Pseudomonas aeruginosa</i> .	Jul, 2019	Banerjee P , Chanchal, Jain D .	10.1021/acschembio.9b00255	14(7)	1515-1527	1554-8929
7	Mol Plant Pathol. (SCI and Scopus)	Effector mining from the <i>Erysiphe pisi</i> haustorial transcriptome identifies novel candidates involved in pea powdery mildew pathogenesis.	2019, Nov	Sharma G , Aminedi R, Saxena D, Gupta A, Banerjee P, Jain D, Chandran D .	10.1111/mpi.12862	20(11)	1506-1522	1364-3703
8	Int J Environ Res	Nitrate-Induced Toxicity and	August 2022	Garai P , Banerjee P , Sharma P,	https://doi.org/10.10	16 (63)	63	2008-2304

	(SCI and Scopus)	Potential Attenuation of Behavioural and Stress Biomarkers in <i>Tubifex tubifex</i>		Mondal P, Saha NC & Faggio C	07/s41742-022-00443-4			
9	Neurotox Res. (SCI and Scopus)	Contributions and Limitations of Mitochondria-Targeted and Non-Targeted Antioxidants in the Treatment of Parkinsonism: an Updated Review	2022, Jun	Banerjee, P. , Saha, I., Sarkar, D., Maity AK.	10.1007/s12640-022-00501-x.	40(3)	847-873	1476-3524
10	Environ Sci Pollut Res Int (SCI and Scopus)	Mechanistic insights to lactic and formic acid toxicity on benthic oligochaete worm <i>Tubifex tubifex</i>	2022 Dec	Garai, P. , Banerjee, P. , Sharma, P., Chatterjee A, Bhattacharya R, Saha NC	10.1007/s11356-022-21361-0.	29(58)	87319-87333	0944-1344
11	Chemistry and Ecology (SCI and Scopus)	Integrated multi-biomarker responses in Mozambique tilapia, <i>Oreochromis mossambicus</i> under acute and chronic Diazinon® exposures	2023, Feb	Saha, S. , Saha, NC., Chatterjee. A., Banerjee, P., Garai, P., Sharma, P., Patnaik, L., Nayak, S., Dhara, K., Chukwuka, AV., Faggio C.	https://doi.org/10.1080/02757575.2023.2178649	29(3)	264	1029-0370
12	Water Air Soil Pollution (SCI and Scopus)	A critical review on the effect of nitrate pollution in aquatic invertebrates and fish.	2023, May	Banerjee P. , Garai P., Saha N.C. , Saha S., Sharma P., Maiti A.K.	https://doi.org/10.1007/s11270-023-06260-5	234	233	1573-2932
13	Bulletin of Environmental Contamination and Toxicology (SCI and Scopus)	Triazophos-induced Respiratory and Behavioral Effects and Development of Adverse Outcome Pathway (AOP) for short-term Exposed Freshwater Snail, <i>Bellamya Bengalensis</i>	2023 May	Saha S. , Banerjee P., Saha N.C., Chukwuka A.V.	10.1007/s00128-023-03734-4.	110(5)	94	0007-4861
14	Sci. and Cult	Formic acid induced acute toxicity and its sublethal effects on growth, behavioral pattern and oxidative stress parameters of the freshwater snail <i>Bellamya bengalensis</i>	2023, April	Garai P. , Sharma P, Banerjee P, Chatterjee A., Saha NC.	10.36094/sc.v89.2023.Formic_Acid_Toxicity_on_Bellamya_Bengalensis.Garai.84	89 (3–4)	84-93	0036-8156
15	Toxics (SCI and Scopus)	Deltamethrin-Induced Respiratory and Behavioral Effects and Adverse	2022, Nov	Chukwuka A.V. , Saha S., Mukherjee D., Banerjee P.,	10.3390/toxics10110701	10(11)	701	2305-6304

		Outcome Pathways (AOP) in Short-Term Exposed <i>Mozambique Tilapia, Oreochromis mossambicus</i> .		Dhara K., Saha N.C.				
16	Frontiers in Immunology (SCI and Scopus)	In silico analysis of single nucleotide polymorphism (rs34377097) of TBXA2R gene and pollen induced bronchial asthma susceptibility in West Bengal population, India.	2023, Mar	Ganai, I. ; Saha, I.; Banerjee, P.; Laha, A.; Sultana, S.; Sultana, N.; Biswas, H.; Moitra, S.; Podder, S.	10.3389/fimmu.2023.1089514	14	1089514	1664-3224
17	Chemistry and Ecology (SCI and Scopus)	Acute and sub-acute toxic effects of cadmium to freshwater tropical oligochaete Tubifex tubifex with special reference to oxidative stress and behavioural biomarkers,	2023, May	Majumdar N., Saha NC., Banerjee P., Bhattacharya T., Saha S.	https://doi.org/10.1080/02757575.2023.2263439	39 (8)	868-880	1029-0370
18	World Allergy Organ J. (SCI and Scopus)	Polymorphism in ADAM33 gene associated with asthmatics in West Bengal, India - An investigation by in-silico analysis.	2023, Nov	Sultana S, Banerjee P, Ganai I, Laha A, Sultana N, Biswas H, Saha NC, Moitra S, Podder S.	10.1016/j.waojou.2023.100834	16(11)	100834.	1939-4551
19	Environmental Toxicology and Pharmacology (SCI and Scopus)	Haematological, biochemical, enzymological changes and mitochondrial dysfunction of liver in freshwater climbing perch <i>Anabas testudineus</i> during their acute and chronic exposure to sodium fluoride.	March 2024	Saha NC, Banerjee P, Chatterjee A, Bhattacharya R, Saha S, Pastorino P.	https://doi.org/10.1016/j.etap.2023.104360	106	104360	1382-6689
20	Clin Toxicol.	Effect of Heavy Metals on Fishes: Toxicity and Bioaccumulation.	Jun, 2021	Garai P., Banerjee P., Mondal P., Saha N.C.	10.35248/2161-0495.21.s18.001	S18:001	001	2161-0495
21	Life Sciences (SCI and Scopus)	10-(6-Plastoquinonyl) decyltriphenylphosphonium imparts anti-colitogenic protection through	July 2024	Ghosh S, Spoorthi BC, Banerjee P, Saha I, Dua TK, Sahu R, Maiti AK.	10.1016/j.lfs.2024.122700	348	122700	0024-3205

		recovery of mitochondrial dysfunction in ulcerated murine colon: Implications in ulcerative colitis.						
22	Biochim Biophys Acta Mol Basis Dis (SCI and Scopus)	CD36 inhibition corrects lipid-FetuinA mediated insulin secretory defects by preventing intracellular lipid accumulation and inflammation in the pancreatic beta cells	2025 Feb	Mandal S , Nag S, Mukherjee O, Das N, Banerjee P, Majumdar T, Mukhopadhyay S, Maedler K, Kundu R.	10.1016/j.bbadis.2024.167580	1871(2)	167580	0925-4439
23	Biotechnol Appl Biochem (SCI and Scopus)	Probiotic and Synbiotic Isolates From Whey Water and Fermented Rice Water Exert Compelling Wound-Healing Efficacy in a Diabetic Mouse Model	2025 Jun	Choudhury S , Saha I, Bandyopadhyay B, Banerjee P.	10.1002/ab.70013	PMID: 40534196	40534196	1470-8744

3. Book chapter:

Sl. No.	Title of the book	Publishers	Author(s) Name (Highlight the corresponding and 1 st author in every article)	Year	ISBN No.	doi no. (if applicable)
1	The Living Laboratory	AkiNik Publications	Anindita Nandy, Palash Kumar Pal, Priya Roy, Nimai Chandra Saha and Priyajit Banerjee	2025	978-93-6135-634-6	https://doi.org/10.22271/ed.book.3211
2	Book title Life at the Molecular Level an Understanding of Biology	Bright Sky Publications	Dipti Das, Tanisha Bhowmick, Tiyaasha Saha, Priyajit Banerjee, Bidisha Ghosh, Subhasis Sarkar and Suranjana Sarkar	2025	978-93-6233-647-7	https://doi.org/10.62906/bs.book.332
3	The Living Laboratory	AkiNik Publications	Aritra Chatterjee, Sumita Mal, Priyajit Banerjee, Bidisha Ghosh, Subhasis Sarkar and Suranjana Sarkar	2025	978-93-6135-634-6	https://doi.org/10.22271/ed.book.3211

4. Text/Reference book published from reputed national/international publishers:

Sl. No.	Title of the Text/Reference book	Publishers	Author(s) Name (Highlight the corresponding and 1 st author in every article)	Year	ISBN No.	doi no. (if applicable)

5. Project granted:

Sl. No	Sponsoring Agency	Name of the project	Duration		Amount in Lakhs	PI/ CO-PI
			Starting Month & Year	Ending month & Year		
1	DST – SERB	Reveling mechanism of infection and structure assisted drug discovery to fish pathogenic oomycete Saprolegnia parasitica	Jan, 2022	Jan, 2024	20.25 Lc	PI
2	ICSSR	Post-Covid Era and the Zero Generation: Vulnerability, Resilience and Adaptive Capacity in Ageing Communities of selected Urban Spaces	Sep, 2024	Sep, 2025 (Ongoing)	10 Lc	Co- PI

		of North-East India				
3	SVU Seed Grant	Development of Probiotic and Melatonin-Based Therapeutic Strategy Against Chronic Environmental Toxicant Syndrome (CETS) Using Zebrafish as a Model Organism	June, 2025	(Ongoing)	2.5 Lc	PI

6. Consultancy Project Grant:

Sl No.	Project title	Funding Agency	Duration	Completed (yes/no)	Sanctioned amount (in Rs.)	PI and CO-PI (if any)
1	Investigating the Synergistic Antifungal Effects of Bioavailable Curcumin and Berberine to Combat Drug-Resistant <i>Candida albicans</i>	Polyfeenolix Research Laboratory (OPC) Pvt. Ltd. (Industrial R&D Grant)	Year	Yes	All Consumable and Contingency spent	PI

7. Patent/IPR granted:

Sl. No.	Name of the patent	Name of the applicant	Name of the inventor	Date of File	Date of Publication	Whether Granted (yes/no); If yes, Date of Grant	Application No.
1	Moss Cage Air Purification System for Air Conditioner	Swami Vivekananda University	1. Priyajit Banerjee 2. Aditya Das 3. Ananyo Mazumdar 4. Tiya Manna 5. Saurabh Adhikari	12/03/2025	28/03/2025	No	202531022082A

8.