



UNIVERSITY OF CALCUTTA
Department of Environmental Science

FACULTY ACADEMIC PROFILE



1. **Full name of the faculty member:** Dr. Punarbasu Chaudhuri
2. **Designation:** Assistant Professor
3. **Specialisation :** Environmental biology and pollution management
4. **Contact information :**
Dept. of Environmental Science, University of Calcutta
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6. **Academic qualifications:**

College/ university from which the degree was obtained	Abbreviation of the degree
Vidyasagar College, University of Calcutta	B.Sc
Univerisy of Kalyani, India	M.Sc
University of Kalyani, India	Ph.D
University of Sydney, Australia	Post Doctoral

7. **Positions held/ holding:**

- Lecturer in Dept. of Environmental Sc., University of Calcutta (2003-08)
- Asst. Professor (Stage 2) in Dept of Environmental Sc., University of Calcutta (2008-13)
- Asst. Professor (Stage 3) in Dept of Environmental Sc., University of Calcutta (2013- till)
- Head/Incharge in Dept of Environmental Sc., University of Calcutta (2016-2018)

8. **Research interests:**

- Mangrove Ecology & Bioprospecting
- Air pollution and Climate change
- Green Chemistry
- Geochemistry
- Geoinformatics
- Arctic and Antarctic environment

9. **Research guidance :**

Number of researchers awarded M.Phil/ Ph.D degrees : M.Phil-1, Ph.D-4

Number of researchers pursuing M.Phil/ Ph.D : Ph.D- 3

Number of Post Graduation Dissertation: 16

10. **Research Projects undertaken:**

SI	Title of Project	Funding Agency	Amount	Duration	Status
1.	Evaluation of anti fungal properties of mangrove plants of Sundarban.	UGC, New Delhi	2 lakhs	2010- 12	Completed
2.	Ecological Studies in Durgapur and Bankura Region	SGS India Ltd.	0.7 Lakhs	2010-11	Completed
3.	Framing Environmental Management Policy for backward areas of Sundarban using Geo-information Technology (Co-Investigator)	DSA Phase I program on Environment Management of UGC	2.5 lakhs	2011-16	Completed
4.	Preparation of People's Biodiversity Register of Kolkata (Co-Investigator)	Society for Environment and Development and State Biodiversity Board	1.25 lakhs	2011-12	Completed
5.	Health of the stone quarry workers of Birbhum District, West Bengal (Co-investigator)	Indian Statistical Institute	2.5 Lakhs	2011-14	Completed
6.	Studies on migration of mangroves in Hooghly estuary and its potentiality assessment as climate change indicator	DST, Government of India	20 lakhs	2013-16	Completed
7.	Health Impact of house hold level air pollution	The Energy and Resource Institute (TERI)	1.6 lakhs	2014-15	Completed

Sl	Title of Project	Funding Agency	Amount	Duration	Status
8.	Effect of Climate change on Mobilization of Trace Elements from Acid Sulfate Soils in Coastal Mangrove Habitats of Sundarban	UGC-DAE, Govt of India	7.6 lakhs	2014-17	Completed
9.	Studies on ¹⁰ Be inventory in Sundarban Mangrove Ecosystem	Inter-University Accelerator Centre, New Delhi	Travel and experimental support	2015-19	Completed
10.	Green synthesis of iron nanoparticles from manglicolous fungi of Indian Sundarban and their application in sequestration of heavy metals from contaminated water	DBT, Govt of India	56 lakhs	2016-18	Completed
11.	Bio-prospecting of PGPRs isolated from stress environment and their application in the sustainable agriculture	UGC UPE Phase II, University of Calcutta	6 lakhs	2017-19	Ongoing
12.	Study to understand the pollination ecology as well as the applicability of placing apiary boxes in the forested areas of the Sundarbans (Co-investigator)	WWF, India	30 lakhs	2017-20	Ongoing
13.	Capacity building to enhance apiculture productivity through Melissopalynological training using Foldscope.	DBT, GoI	8 lakhs	2018-19	Ongoing
14.	Spatiotemporal Assessment of air quality and its health effect using geoinformatics: A case study form Kolkata	DST, GoWB	18.78 lakhs	2018-20	Ongoing
15.	Studies on conjugation of PET/SPECT radioisotopes with environmentally benign nature resourced chemical reagents	UGC-DAE, Govt of India	7.6 lakhs	2019-21	Ongoing

Sl	Title of Project	Funding Agency	Amount	Duration	Status
16.	Environmental Impact of Anthropogenic Activities on Wetland Bio-Diversity of Rudrasagar lake, the Ramsar Site of Tripura	DBT, GoI	70 lakhs	2019-21	Sanctioned
17.	Impact of air pollution on human health and epigenetics: A GIS based study in Critically Polluted areas in and around Kolkata	Ministry of Environment, Forest and Climate Change, Govt. of India	41.7 lakhs		In process

11. Selected list of publications:

a) *Journals*:

- Ghosh, S., Bakshi, M., Mitra, S., Mahanty, S., Ram, S. S., Banerjee, S., & **Chaudhuri, P.** (2019). Elemental geochemistry in acid sulphate soils—A case study from reclaimed islands of Indian Sundarban. *Marine pollution bulletin*, 138, 501-510. (ISSN no- 0025-326X) [**Impact Factor 3.782**]
- Gupta, M., Mondal, S., Chakraborty, H. & **Chaudhuri, P.** (2019) Nature of spatial heterogeneity of the coastal, marine ecoregions along the eastern coast of India, *Journal of Earth System Science*, (ISSN: 2347-4327) [**Impact Factor 1.01**]
- Chaudhuri, A., Basu, C., Bhattacharyya, S., & **Chaudhuri, P.** (2019). Development of health risk rating scale for indoor airborne fungal exposure. *Archives of Environmental & Occupational Health*, 1-9. (ISSN: 1933-8244) [**Impact Factor 1.483**]
- Das, D., Das, R., Gaine, T., Mahanty, S., & **Chaudhuri, P.** (2019). Documentation of pollen grains of commonly found mangroves of indian sundarban using foldscope. 6, 886-892. (ISSN-2349-5162)
- Mahanty, S., Bakshi, M., Ghosh, S., Chatterjee, S., Bhattacharyya, S., Das, P., Das, S. and **Chaudhuri, P.** 2019. Green Synthesis of Iron Oxide Nanoparticles Mediated by Filamentous Fungi Isolated from Sundarban Mangrove Ecosystem, India. *BioNanoScience*, pp.1-15. (ISSN: 2191-1649) [**Impact Factor 1.2**]
- Gaine, T., Sarkar, A., Mahanty, S., Sinha, I., Bhattacharya, S., Gupta Bhattacharya. S., & **Chaudhuri, P.** (2019) Effect of Air quality on Respiratory health of Roadside exposed people: a micro-level study from Kolkata, India, *Indian Journal of Aerobiology*, *Indian Journal of Aerobiology* Vol. 31(1&2), 33-40 (ISSN No. 0971-1546)
- Banerjee, A., Biswas, J. K., Pant, D., Sarkar, B., **Chaudhuri, P.**, Rai, M., & Meers, E. (2019). Enteric bacteria from the earthworm (*Metaphire posthuma*) promote plant growth and remediate toxic trace elements. *Journal of environmental management*, 250, 109530. [**Impact Factor 3.3**]

8. Sarkar, S., Mukherjee, A., Parvin, R., Das, S., Roy, U., Ghosh, S., **Chaudhuri, P.**, Roychowdhury, T., Mukherjee, J., Bhattacharya, S. and Gachhui, R., 2019. Removal of Pb (II), As (III), and Cr (VI) by nitrogen-starved *Papiliotrema laurentii* strain RY1. *Journal of basic microbiology*. ISSN:1521-4028 [**Impact Factor**1.76]
9. Das, P., Mahanty, S., Ganguli, A., Das, P., & Chaudhuri, P. (2019). Role of Manglicolous fungi isolated from Indian Sunderban mangrove forest for the treatment of metal containing solution: Batch and optimization using response surface methodology. *Environmental Technology & Innovation*, 13, 166-178. ISSN : 2352-1864 [**Impact Factor** 2.8]
10. Jindal, A., Juneja, S., Bakshi, M., **Chaudhuri, P.**, & Bhattacharya, J. (2019). Mesoporous zinc silicate bio-composite: Preparation, characterization and in vitro evaluation. *Microporous and Mesoporous Materials*, 277, 124-131. ISSN: 1387-1811 [**Impact Factor** 4.182]
11. Naskar, N., Lahiri, S., & **Chaudhuri, P.** (2019). Quantitative estimation of total potassium and 40 K in surface soil samples of Indian Sundarbans. *Journal of Radioanalytical and Nuclear Chemistry*, 1-7. ISSN: 1588-2780 [**Impact Factor** 1.186]
12. Naskar, N., Lahiri, S., & **Chaudhuri, P.** (2019) Estimation of radiological indices in Indian Sundarbans – a mangrove habitat, *Journal of Radioanalytical and Nuclear Chemistry*. (JRNC-D-19-00335R1) ISSN: 0236-5731 [**Impact Factor** 1.181]
13. Pathak, S., Ghosh, A., Roy, S., **Chaudhuri, P.**, (2018) Access to the safe drinking water: a case study at east Kolkata wetland, in *Indian Journal of Landscape systems and ecological studies*, 41 (1) ISSN: 0971-4170
14. Bakshi, M., Ghosh, S., Ram, S. S., Sudarshan, M., Chakraborty, A., Biswas, J. K., & **Chaudhuri, P.** (2018). Sediment quality, elemental bioaccumulation and antimicrobial properties of mangroves of Indian Sundarban. *Environmental geochemistry and health*, 1-22. ISSN: 0269-4042 [**Impact Factor** 3.252]
15. Bakshi, M., Ghosh, S., Chakraborty, D., Hazra, S., & **Chaudhuri, P.** (2018). Assessment of potentially toxic metal (PTM) pollution in mangrove habitats using biochemical markers: A case study on *Avicennia officinalis* L. in and around Sundarban, India. *Marine Pollution Bulletin*, 133, 157-172. ISSN: 0025-326X) [**Impact Factor** 3.767]
16. Majumdar, A., Barla, A., Upadhyay, M. K., Ghosh, D., **Chaudhuri, P.**, Srivastava, S., & Bose, S. (2018). Vermiremediation of metal (loid) s via *Eichornia crassipes* phytomass extraction: A sustainable technique for plant amelioration. *Journal of environmental management*, 220, 118-125. ISSN: 0301-4797) [**Impact Factor** 4.865]
17. Ghosh, S., Bakshi, M., Kumar, A., Ramanathan, A. L., Biswas, J. K., Bhattacharyya, S., **Chaudhuri, P.** & Rinklebe, J. (2018). Assessing the potential ecological risk of Co, Cr, Cu, Fe and Zn in the sediments of Hooghly–Matla estuarine system, India. *Environmental geochemistry and health*, 1-18. ISSN: 0269-4042 (Print) 1573-2983 [**Impact Factor** 2.994]
18. Chakraborty, V., Sengupta, S., Chaudhuri, P., & Das, P. (2018). Assessment on removal efficiency of chromium by the isolated manglicolous fungi from Indian Sundarban mangrove

- forest: Removal and optimization using response surface methodology. *Environmental Technology & Innovation*, 10, 335-344. ISSN: 2352-1864) [**Impact Factor 1.190**]
19. Naskar, N., Lahiri, S., & **Chaudhuri, P.** (2018). Anomalies in quantitative measurement of ⁴⁰K in natural samples. *Journal of Radioanalytical and Nuclear Chemistry*, 1-7. ISSN: 1588-2780 [**Impact Factor 1.181**]
 20. Naskar, N., Lahiri, S., Chaudhuri, P., & Srivastava, A. (2017). Measurement of naturally occurring radioactive materials, ²³⁸U and ²³²Th-part 3: is efficiency calibration necessary for quantitative measurement of ultra-low level NORM?. *Journal of Radioanalytical and Nuclear Chemistry*, 314(1), 507-511. (ISSN no- 0236-5731) [**Impact Factor 1.181**]
 21. Biswas, J. K., Mondal, M., Rinklebe, J., Sarkar, S. K., **Chaudhuri, P.**, Rai, M., ... & Rizwan, M. (2017). Multi-metal resistance and plant growth promotion potential of a wastewater bacterium *Pseudomonas aeruginosa* and its synergistic benefits. *Environmental Geochemistry and Health*, 1-11. [**Impact Factor 2.994**]
 22. Bakshi, M., Ram, S. S., Ghosh, S., Chakraborty, A., Sudarshan, M., & **Chaudhuri, P.** (2017). Micro-spatial variation of elemental distribution in estuarine sediment and their accumulation in mangroves of Indian Sundarban. *Environmental monitoring and assessment*, 189(5), 221. (ISSN no- 0167-6369) [**Impact Factor 1.804**]
 23. Naskar, N., Lahiri, S., **Chaudhuri, P.**, & Srivastava, A. (2017). Measurement of naturally occurring radioactive material, ²³⁸U and ²³²Th: part 2—optimization of counting time. *Journal of Radioanalytical and Nuclear Chemistry*, (DOI-10.1007/s10967-017-5205-2). (ISSN no- 0236-5731) [**Impact Factor 1.181**]
 24. **Chaudhuri, P.**, Naskar, N., & Lahiri, S. Measurement of background radioactivity in surface soil of Indian Sundarban. *Journal of Radioanalytical and Nuclear Chemistry*, 1-6. (DOI-10.1007/s10967-016-5158-x) (ISSN no-0236-5731) [**Impact Factor 1.181**]
 25. Dhame, S., Kumar, A., Ramanathan, A. L., **Chaudhuri, P.** (2016). Elemental composition, distribution and control of biogenic silica in the anthropogenically disturbed and pristine zone inter-tidal sediments of Indian Sundarbans mangrove-estuarine complex. *Marine Pollution Bulletin*, 111(1), 68-85. (ISSN no- 0025-326X) [**Impact Factor: 3.767**]
 26. Naskar, N., Lahiri, S., **Chaudhuri, P.**, & Srivastava, A. (2016). Measurement of naturally occurring radioactive materials, ²³⁸U and ²³²Th: anomalies in photopeak selection. *Journal of Radioanalytical and Nuclear Chemistry*, 310(3), 1381-1396. (ISSN no-0236-5731) [**Impact Factor 1.181**]
 27. Naskar, N., Lahiri, S., **Chaudhuri, P.** (2016) HF-free microwave assisted dissolution of soil samples for quantitative assessment of potassium, *Journal of Indian Chemical Society* , 93(7), 799-803.(ISSN: 1735-207X) [**Impact Factor- 1.087**]
 28. **Chaudhuri, P.**, Bhattacharyya, S., Samal, A.C. (2016) Living Root Bridge: A potential no cost eco-technology for mitigating rural communication problems, *International Journal of Experimental Research and Review*, 5:33-35. (ISSN no- 2455-4855) [**Impact Factor 1.13**]

29. Ghosh,S., Ram, S. S., Bakshi, M., Chakraborty, A., Sudarshan, M., **Chaudhuri, P.** (2016) Vertical and horizontal variation of elemental contamination in sediments of Hooghly estuary, India, *Marine Pollution Bulletin*, 109(1), 539-549. (ISSN no-0025-326X) [**Impact Factor- 3.767**]
30. Mukherjee, D., Bhattacharyya, S., **Chaudhuri, P.** (2016) Fumigation of *Eucalyptus* oil for controlling strong room fungi at Jorasanko Museum (Tagore's residence), India: A study for sustainable conservation, *International Journal Of Conservation Science*, 7(2), 431-442.[SNIP 0.815] (ISSN no- 2067-533X)[**SNIP 0.677**]
31. Bhattacharyya, S., Mukherjee, D., **Chaudhuri, P.** (2016) Biodeterioration risk index of exhibit present in museum galleries of tropical climate, *Museum Management and Curatorship*, 31(3), 268-282. (ISSN no- 0964-7775)
32. Lahiri, S., Naskar, N. & **Chaudhuri, P.**(2015) The Italian navigator and Oklo, *Science and Technology Journal*, 3(1), 21-25 (ISSN no- 2321-3388)
33. Gaine, T., **Chaudhuri, P.** and Gupta Bhattacharya, S.(2015) Impact of Airborne bio-particulates in community health of a forest fringe village of Indian Sundarbans, *Journal of Palynology*, 51, 41-48 (ISSN no- 0022-3379)
34. Bakshi, M., Ghosh, S., & **Chaudhuri, P.** (2015). Green Synthesis, Characterization and Antimicrobial Potential of Silver Nanoparticles Using Three Mangrove Plants from Indian Sundarban. *BioNanoScience*, 5(3), 162-170. (ISSN no- 2191-1630)
35. Bhattacharyya S., Basu S., **Chaudhuri P.**, Santra S. C. (2015) Bioaccumulation of Mercury and Assessment of Suitable Biomarker in Vegetables Collected from East Calcutta Garbage Farming Area (*Dhapa*),India, *International Journal of Current Research in Biosciences and Plant Biology*, 2(5): 148-54, (ISSN: 2349-8072) [NAAS 2.99]
36. Ghosh, S., **Chaudhuri, P.**, Jeelani, S., & Bhattacharyya, S. (2015). Impact of carbaryl insecticides on metamorphosis of *Papilio demoleus* (L.) larvae in laboratory condition. *International Journal of Research in Biosciences*, 4(2), 44-50. (ISSN no- 2319-2844)
37. Ghosh, S., Bakshi, M., Bhattacharyya, S., Nath, B. & **Chaudhuri, P.**, (2015). A Review of Threats and Vulnerabilities to Mangrove Habitats: With Special Emphasis on East Coast of India. *Journal of Earth Science & Climatic Change*, 6(4), 270-279. (ISSN no- 2157-7617) [**Impact Factor- 1.66**]
38. Ram, S. S., Majumder, S., **Chaudhuri, P.**, Chanda, S., Santra, S. C., Chakraborty, A., et al. (2015). A review on air pollution monitoring and management using plants with special reference to foliar dust adsorption and physiological stress responses. *Critical Reviews in Environmental Science and Technology*. 45(23), 2489-2522. (ISSN 1547-6537) [**Impact Factor: 7.683**]
39. Bhattacharyya, S., Mukherjee, D., Sarkar, P., Ghosh,S., Samaddar, B., **Chaudhuri, P.** (2015) Assessment of viable fungi in indoor air: a case study from Tagore's residence at Jorasanko, India. *International Letters of Natural Sciences* 6(2015), 43-50 [IC Value for 2013: 5.93] (ISSN no- 2300-9675)

40. Birch, G., Nath, B., & **Chaudhuri, P.** (2015). Effectiveness of remediation of metal-contaminated mangrove sediments (Sydney estuary, Australia). *Environmental Science and Pollution Research*, 22(8), 6185-6197 (ISSN no-1614-7499) [**Impact Factor- 2.800**]
41. Bhattacharyya S., **Chaudhuri P.**(2014) Eco-tourism in Sundarbans to combat climate vulnerability in coastal habitats, *Artha Beekshan*, 23(2), 146-162 (ISSN 0972-1185)
42. Nath, B., **Chaudhuri, P.**, & Birch, G. (2014). Assessment of biotic response to heavy metal contamination in *Avicennia marina* mangrove ecosystems in Sydney Estuary, Australia. *Ecotoxicology and Environmental Safety*, 107, 284-290. (ISSN no-0147-6513) [**Impact Factor- 3.974**]
43. Bhattacharya, S., **Chaudhuri, P.**, Mandal, A. K., Majumder, S., Basu, P. (2014) Reappearance of *Anopheles sunaicus* at Sundarban coastal area, West Bengal, India. *Journal of Applied Bioscience* 40(1): 58-59. (ISSN no-0975-864x) [NAAS Score -3.68]
44. **Chaudhuri, P.**, Nath, B., & Birch, G. (2014). Accumulation of trace metals in grey mangrove *Avicennia marina* fine nutritive roots: The role of rhizosphere processes. *Marine Pollution Bulletin*, 79(1-2), 284-292. (ISSN no-0025-326X) [**Impact Factor- 3.767**]
45. Nandy, V., Bakshi, M., Ghosh, S., Sharma, H., RayBasu, B., & **Chaudhuri, P.** (2014). Potentiality assessment of fish scale biodegradation using mangrove fungi isolated from Indian Sundarban. *International Letters of Natural Sciences*, 9(2014), 68-76. [IC Value for 2013: 5.93] (ISSN no-2300-9675)
46. Nath, B., Birch, G., & **Chaudhuri, P.** (2014). Assessment of sediment quality in *Avicennia marina*-dominated embayments of Sydney Estuary: The potential use of pneumatophores (aerial roots) as a bio-indicator of trace metal contamination. *Science of the Total Environment*, 472, 1010-1022. (ISSN no-: 0048-9697) [**Impact Factor- 4.984**]
47. Ram, S. S., Kumar, R. V., **Chaudhuri, P.**, Chanda, S., Santra, S. C., Sudarshan, M., Chakraborty, A. (2014) Physico-chemical characterization of street dust and re-suspended dust on plant canopies: An approach for finger printing the urban environment. *Ecological Indicators* 36, 334-338. (ISSN no-1470160X) [**Impact Factor-4.391**]
48. Ram, S. S., Majumder, S., **Chaudhuri, P.**, Chanda, S., Santra, S. C., Maiti, P. K., et al. (2014). Plant canopies: Bio-monitor and trap for re-suspended dust particulates contaminated with heavy metals. *Mitigation and Adaptation Strategies for Global Change*, 19(5), 499-508. (ISSN no-1381-2386) [**Impact Factor-2.585**]
49. Ram, S. S., Kumar, R. V., **Chaudhuri, P.**, Chanda, S., Santra, S. C., Deary, M., Sudarshan, M., Chakraborty, A. (2014) Nuclear Microscopy for Air-Pollutant Characterization and Its Advantages over Traditional Techniques. *Journal of Applied Spectroscopy* 81(1): 145-150. (ISSN no-1573-8647) [**Impact Factor-0.611**]
50. Bhattacharyya S., Basu S., **Chaudhuri P.**, Santra S. C. (2014), Isolation and transformation of plasmid DNA of *Streptococcus* sp. (MTCC No. 9724) and assessment of mercuric reductase activity for mercury (II) detoxification, *Research & Reviews in BioSciences*, 9(3),98-103 (ISSN no- 0974-7532) [**Impact Factor-1.44**]

51. Bakshi, M., & **Chaudhuri, P.** (2014). Antimicrobial potential of leaf extracts of ten mangrove species from Indian Sundarban. *International Journal of Pharma and Bio Sciences*, 5(1), P294-P304. (ISSN no-0975-6299) [**Impact Factor- 7.291**]
52. Nandy, A., Talapatra, S. N., Bhattacharjee, P., **Chaudhuri, P.**, & Mukhopadhyay, A. (2014). Assessment of morphological damages of leaves of selected plant species due to vehicular air pollution, Kolkata, India. *International Letters of Natural Sciences*, 4, 76-91. [IC Value for 2013: 5.93] (ISSN no-2300-9675)
53. Bhattacharyya, S., Basu, S., **Chaudhuri, P.**, Santra, S. C. (2013) Assessment of Mercury Detoxification Potentiality of Isolated *Streptococcus* sp. MTCC 9724 under Different Environmental Conditions. *Environment and Ecology Research* 1(2): 62 - 72. (ISSN: 2331-6268)
54. Nath, B., Birch, G., **Chaudhuri, P.**, (2013) Trace metal biogeochemistry in mangrove ecosystems: A comparative assessment of acidified (by acid sulfate soils) and non-acidified sites. *Science of the Total Environment* 463–464: 667-674. (ISSN no-0048-9697) [**Impact Factor-4.984**]
55. Ram, S. S., Majumder, S., Kumar, R. V., **Chaudhuri, P.**, Chanda, S., Santra, S. C., Maiti, P. K., Mukhopadhyay, U. K., Sudarshan, M., Chakraborty, A., (2013) Effects of Re-suspended Roadside Dusts and Its Elemental Constituents on the Phylloplane Microflora. *Asian Journal of Water, Environment and Pollution* 10(3): 63-69 [SJR Value-0.12] (ISSN no-1875-8568)
56. Ram, S. S., Majumdar, S., **Chaudhuri, P.**, Chanda, S., Santra, S. C., Maiti, P. K., Sudarshan M, Chakraborty A.. (2012). SEMEDS: An important tool for air pollution bio-monitoring. *Micron*. 43(2-3):490-3 (ISSN no-0968-4328) [**Impact Factor-2.013**]
57. Bhattacharyya, S., **Chaudhuri, P.**, Santra, S. C.,(2011) Low carbon economy- A cleaner option for sustainability, *Everyman's Science*, XLVI(3), 172-179 (ISSN 0531-495 X)
58. Ram, S. S., Majumdar, S., **Chaudhuri, P.**, Chanda, S., Santra, S. C., Chakraborty A.. M. Sudarshan. (2010), Characterization of dust particulates deposited on plant leaf surface using EDXRF: An approach for pollution monitoring, *International Journal of Environmental Sciences*,1(2):233-238. [IC Value: 4.69] (ISSN no-0976 - 4534) [**Impact Factor-3.242**]
59. **Chaudhuri, P.**, Guha, S., (2010) Potentiality of mangrove plant extracts for biocontrol of a pathogenic fungi *Fusarium oxysporium*, *Science and Culture*. 76 (7-8), 271-274. [NAAS Score -3.9] (ISSN no- 0036-8156)
60. **Chaudhuri, P.** and Bhattacharya S. (2010) Budgeting Carbon for Healthy Environment, *Environment Watch*, Winter 2010, 5-8. (ISSN no-)
61. Bhattacharyya S., **Chaudhuri, P.**, Dutta, S., Santra, S. C. (2010), Assessment of Total Mercury Level in Fish Collected from East Calcutta Wetlands and Titagarh Sewage Fed Aquaculture in West Bengal, India, *Bulletin of Environmental Contamination and Toxicology*, 84:618–622 (ISSN no-1432-0800) [**Impact Factor-1.480**]

b) **Books/ book chapters :**

Book

1. **Chaudhuri, P.**, Santra, S.C. (2013) *Mangrove Fungi : Indian Perspectives*, Publisher: Bishen Singh Mahendra Pal Singh, Dehra Dun, India , pp. 375. ISBN- 978-81-211-0769-3
2. Sen, S., **Chaudhuri, P.**, Goswami, B., Satpati, L.N. (2017) *Combating Environmental Hazards and Disasters: Issues and Approaches*, University of Calcutta, ISBN 978-93-5268-753-4

Training Manual

1. Dutta, S., Md. Rahman, H., **Chaudhuri, P.**, *et al.* (2018) *Future Perspective of Environmental Biotechnology*, CPCB sponsored Training program, The Energy and Resources Institute, New Delhi.

Book Chapters

1. **Chaudhuri, P.**, Chaudhuri, S., & Ghosh, R. (2019). The Role of Mangroves in Coastal and Estuarine Sedimentary Accretion in Southeast Asia. In *Sedimentation Engineering* (Ed. A. Amini). Intech Open. (ISBN: 978-1-78923-003-1) pp. 1-23
2. Biswas, J.K., **Chaudhuri, P** (2018) State-of-the-art of living technologies for wastewater treatment: Ecotech approaches banking on Nature's library, In *Sustainable management of aquatic resources* (Part II) (Eds. B.K.Mahapatra, N.C.Roy and N.C.Pramanik), Narendra Publishing House, New Delhi, (ISBN 978-93-87590-11-3) pp.637-656
3. Bakshi,M., S. Mahanty,S., **Chaudhuri, P.** (2017)Fungi mediated biosynthesis of nanoparticles and application in metal sequestration, In *Handbook of Metal-Microbe Interactions and Bioremediation* (Eds. S. Das and H.R. Dash), CRC Press, Taylor & Francis Group, NY, (ISBN 9781498762427) pp. 423-434
4. Chaudhuri, P., **Chaudhuri, P.**(2016) Application of Nanobiotechnology for Environmental Sustainability, In *Recent Biotechnological Applications In India* (Eds. S.C.Santra and A.Mallick), ENVIS Centre on Environmental Biotechnology, Department of Environmental Science, University of Kalyai, 156-173 (ISBN: 978 9i 5254 907 8) pp. 156-173
5. Ghosh S, Bakshi M, **Chaudhuri P.** (2016) Migration of Mangroves as an indicator of climate change in *Hooghly Estuary .in Climate and Society-A Contemporary Perspective* (Eds. A. Haldar and L.N. Satpati) published by Dept. of Geography, University of Calcutta, Kolkata, India. (ISBN : 978-81-923448-0-5) pp. 9-20
6. **Chaudhuri, P.**(2015) Mangrove ecosystems: present threats and potential sustainable uses, In *Resource Use, Development and Environment: Interfaces and Implications* (Ed. R.S. Sing) YS Books International, New Delhi, p. 299-326 (ISBN 93-83793-16-3) pp. 299-326
7. Bhattacharyya, S., Chaudhuri P., **Chaudhuri P.**,(2014) Bioremediation: Potential Area of Arsenic Removal, In *Arsenic in groundwater: complexities and challenges ahead in West*

Bengal (ed A. Das), Shilpa Nagari Prakashani, Berhampur, Murshidabad, p. 176-187 (ISBN NO: 978-81-924432-07) pp.176-187

8. Sengupta, C, **Chaudhuri, P.**, (2013) Utilization of organic compost: a tool for mitigating soil salinity In *Soil Microbiology and Biotechnology* (Ed. M. Miransari), Studium Press LLC, U.S.A. ISBN : 1-62699-014-X, pp. 143-198
9. **Chaudhuri, P.**, Bakshi, M, (2013) Application of Geoinformatics in evaluating the effect of climate change on coastal forest, In *Ecosystems and Climate Change* (Eds. T. Mishra and S. Banerjee) Aavishkar Publishers, Jaypur (ISBN: 9788179104255) pp.139-155
10. **Chaudhuri P.**, (2012) Effect of Climate Change on Mangrove Ecosystems, In *Current Perspectives of Global Climate Change* (Eds. A. Mukhopadhyay and S. Ghosh), UGC Academic Staff College. University of Calcutta, pp. 107-126
11. Bhattacharyya, S., **Chaudhuri, P.** & Mukhopadhyay, A. (2012) Hydraulic Structures and Water Management in Early India, In *Aspects of Indian History and Culture* (Eds. S. Ray Bandyopadhyay, R. Chaudhuri & M. Chakraborty), Kaveri Books, New Delhi, (ISBN-1: 978-81-7479-134-4) pp. 61-67
12. **Chaudhuri, P.**, Santra, S.C. (2011), Characterization and oil recovery from oil refinery sludge, In *Studies on Pollution Mitigation* (Ed. S.P.Gautam), Central Pollution Control Board, New Delhi, (ISBN 978-81920040-1-3), pp. 777-775
13. Bose, S., Rai, V., Bhattacharya S., **Chaudhuri, P.**, Bhattacharyya, A.K., Doherty, D. (2010) Phytoremediation: A Promising Technology of Bioremediation for the Removal of Heavy Metal and Organic Pollutants from the Soil in *Handbook of Phytoremediation* (Ed I. A. Golubev), Nova Scientific Publishers, USA. (ISBN-13: 978-1617287534), pp.263-296

d) *Other publications* :

1. **Chaudhuri, P.** and Bhattacharya S. Budgeting Carbon for Healthy Environment, *Environment Watch*, Winter 2010, 5-8.
2. **Chaudhuri, P.** (2010), Our Vulnerable Earth, *Journal of National Social Services*, Vol.1(1), pp 12-24 (ISSN no-)
3. *Environmental Awareness Booklet- Paribes O amra'* (in Bengali), for School level Environment Education Program (Coordinated by Dr. S.Roy) on behalf of Indian Institute for Nature and Environment Study [financed by Dept. of Environment, Govt. of W.B.]
4. *Technical Report* on "Threat to the bird life due to anthropogenic activities" at Bilballi, N 24 Pgs on behalf of Indian Institute for Nature and Environment Study,
5. *Technical Report* on "Biodiversity Status Survey" at Bilballi, N 24 Pgs on behalf of Indian Institute for Nature and Environment Study,
6. *Technical Report* on "Bio-diversity conservation festival" at Samsernagar, Sundarban on behalf of Indian Institute for Nature and Environment Study.

12. **Membership of Learned Societies:**

- Indian Science Congress Association
- Indian Institute for Nature and Environment Study

13. **Invited lectures delivered** (selected only):

1. 'Say no to plastic' at Birla Industrial Technological Museum, Kolkata 2019
2. 'Effect of Climate change on Sunderban' at All India Women's Conference, 2019
3. 'Respect Existence or Expect Extinction' at Raja Peary College, 2019
4. 'Cutting Edge Technology for Sustainable Waste water Treatment' at TERI, New Delhi, 2018
5. 'Mystique Mangroves -A Saga from Indian Sunderban' Shastri Memorial Lecture at University of Manitoba, Canada, 2018
6. Role of Sacred Trees in Conservation of Urban Biodiversity' at Bethune college, 2018
7. 'Delta at Risk' invited lecture at State Science Congress, 2017
8. 'Mangrove Biodiversity of Indian Sunderban' at Gurunanak Institute of Technology, 2017
9. 'Connecting People to Nature' at Agri- Horticultural Society of Kolkata, 2017
10. How are you Sundarban?' at State level seminar on Biodiversity, West Bengal Biodiversity Board, 2016
11. 'Mangroves of Sundarban with special reference to medicinal and other uses' at A.P.C College, 2016
12. 'Environment friendly lifestyle' at State level workshop for teaches under West Bengal District Scheme Project, 2016
13. 'Vulnerable Heritage: A saga of Sundarban' at Summer School on Indian History, Cultural Heritage and Value Education , UGC-Human Resource Development Centre, University of Calcutta , 2015
14. 'Water Management for Combating Drought and Desertification' at National Environmental Awareness Campaign, 2015
15. 'Water and Environment: Perspectives for Sustainability' at 110th Orientation Program for college and university teachers, UGC-Human Resource Development Centre, University of Calcutta , 2015

16. 'Diversity and Conservation of Mangroves: Initiatives from Indian Suudarban' at 102nd session of Indian Science Congress (Environmental Science Section), 2015
17. 'Migration of Mangroves as an Indicator of Climate Change in Hooghly Estuary' at National Seminar on Climate, Society and Sustainability, Department of Geography, CU, 2014
18. 'Water pollution and Diseases' in Management Development Programme, of Ministry of Micro, Small and Medium Enterprises, GoI, 2013
19. 'Biodiversity Conservation: Local Initiatives' at Environmental Awareness programme of Centre for Ecological Movements, 2013
20. 'Wise Use of Wetlands' at Life Science Teachers' Training Program, JBNSTS, 2013
21. 'Teaching Beyond the Classroom: Scope of Interdisciplinary Studies' at 92nd Orientation Programs for College and University Teachers, UGC-Academic Staff College, CU
22. 'Water related Health Hazards' in Management Development Programs of Ministry of Micro, Small and Medium Enterprises, GoI, 2012
23. 'Present threats to the biodiversity of Sundarban Mangrove due to climate change and anthropogenic activities' at National Conference on Wetland Conservation and Sustainable Development, Gujarat Institute of Desert Ecology, 2012
24. 'Combating Climate change by adopting Sustainable Lifestyle' at National Seminar on Climate Change and its Impact on Common People, A.M. College, Purulia, 2012
25. 'Anthropogenic processes and vulnerability of Mangroves of Sundarban' at National Conference on Mangrove Wetlands and near shore marine ecosystems - from sustainability issues to management & restoration, Jawaharlal Nehru University, New Delhi, 2012.
26. 'Exploring the Diversity of Life' at DST-INSPIRE Camp on Basic Sciences, Pravat Kumar College, 2011
27. 'Biodiversity Conservation: some case studies' in National Environmental Awareness Campaign, 2011
28. 'Waste water utilization at East Kolkata wetland' in Advance Teaches Training Program, Jagadis Bose National Science Talent Search, 2011
29. 'Glimpses on Mangrove Forests of Sundarban' at Refresher course on Environmental Science, UGC-Academic Staff College, CU, 2011
30. 'Global Climate Change and Vulnerability of Sundarban Mangrove' at National Conference on Global Climate Change: Facts and Fictions, Sripat Sing College, 2011

31. 'Climate Change Issues and Vulnerability of Mangroves of the Sundarban Delta' at National Seminar on Global Warming and Climate Change : Save the One Earth, Netaji Subhas Open University, 2011
32. 'Livelihood support by indigenous sewage-fed fisheries: Role of environmental factors in fish production at Mudialy nature park, Kolkata' at BENAQUA, Department of Fisheries, Govt. of W.B., 2010
33. 'Reckoning the effect of environmental factors on the distribution and diversity of rhizosphere microfungi in mangrove habitat of Indian Sundarban' at International Conference On Frontiers In Biological Sciences, National Institute of Technology, Rourkela, 2010,
34. 'Vertical Plantation' at National Environmental Awareness Campaign, 2010
35. 'Avifauna of Chintamani Kar Bird Sanctuary' at DST-INSPIRE internship Science Camp entitled "Science Beyond School", 2010
36. 'Motivating Childrens in Science Education' at 18th National Children's Science Congress, 2010
37. 'Effect of Climate change on Sundarban Mangrove' at Humboldt Kolleg on Global Warming, 2009.
38. 'Environment: An Introduction' at Teachers' Training Program, Jagadis Bose National Science Talent Search, 2009
39. 'Vulnerability of the Mangrove Forests of Sundarban' at National Conference on Biodiversity: Threats and Conservation, Serampore College, 2009
40. 'Sundarban Mangrove ' at CET Programme on 'Environmental Awareness', Ramkrishna Mission Sikhanamandira, 2009
41. 'Flora and Fauna of Sundarban' in Popular Science Lecture Seris, Goethe Institut, Max Mueller Bhavan, 2009
42. 'Science Motivation' at School level workshop for guiding students and teachers about Initiative for Research & innovation in Science, 2009
43. 'Environment, Development & Population' Avabai Wadia memorial Oration, Family Planning Association of India, 2008
44. 'Role of Youth in Environmental Protection' at International Youth day, World Vision, India, 2008

15. Awards and Achievements :

- Member 39th Indian Expedition to Antarctica, Ministry of Earth Science, Govt of India
- Recipient of **Shastri Indo-Canadian Fellowship** (2018) to participate BaySys **Sub-Arctic expedition** in the CCGS Amundsen to study the impact of climate change on polar environment.
- Recipient of Science Academies' (IASc-INSA-NASI) **Summer Research Fellowship** (2014) at School of Environmental Sciences, Jawaharlal Nehru University.
- Appointed as **Australian Award Ambassador** in India by Govt of Australia, 2014.
- Recipient of **DST SERB Fast Track Young Investigator Fund**, 2013
- Recipient of *Endeavour Award* 2012 of Government of Australia for Post doctoral research
- **Certification of Appreciation** for contribution to the judging process at "Initiative for Research and Innovation In Science" organized by Department of Science and Technology, Intel Education and Confederation of Indian Industry (2008).
- Qualified **National Eligibility Test** (NET) for Lectureship / Assistant Professorship in Environmental Science conducted by Agricultural Scientist Recruitment Board of **Indian Council of Agricultural Research** (2002).
- Qualified **National Eligibility Test** (NET) for Junior Research Fellowship (JRF) & Lectureship in Environmental Sc. conducted by University Grants Commission (2001).
- **Junior Research Fellowship** awarded by University Grants Commission for Doctoral level research work (Aug.2001-Oct. 2003).
- **Certificate of Merit** for securing 1st Class 1st position in Post Graduate Examination from University of Kalyani (2000).
- **National Scholarship** Ministry of Human Resource Development, Govt. of India for good performance in undergraduate studies (1998).
- **Vidyasagar College Centenary Scholarship** from Vidyasagar College for securing highest marks from the college in undergraduate examination (1998).
- **Abanindra Guha Life Science Endowment** from Vidyasagar College for securing highest marks among all life science subjects from the college in undergraduate examination (1998).

16. Other notable activities :

Actively involved in environmental conservation activism, nature photography and adventure sports



Signature of the faculty member