

Dr. MOITREYEE BANERJEE CHAKRABARTY

Contact: 9434687391, 8335916206

Qualification: MSc, PhD

Designation: Assistant Professor

Teaching Experience (in years): UG: 11 PG: 05

Research Experience (in years): 09

Date of Joining Present Institution: 23.04.2016

Institutions/Companies Previously Served:



Name of Institution/Company	Designation	Tenure	
		From (DD-MM-YYYY)	To (DD-MM-YYYY)
Jhargram Raj College	Assistant Professor	09.11.2015	22.04.2016

Examinations cleared: SLET in 2003

Specialization/Research Interest: Cytogenetics and Molecular Biology/Ecological Modelling, Statistical Modelling, Wildlife Biology, Biodiversity

Awards & Recognitions

1. Outstanding paper award in 26th West Bengal State Science and Technology Congress for presenting paper titled 'Prediction of environmental factors affecting water quality of Bakreswar Reservoir using time series ARIMA model', 2019
2. Best oral presentation in 3rd Regional Science and Technology Congress (Western Zone) for presenting paper titled 'Prediction of environmental factors of Bakreswar Reservoir using time series ARIMA model', 2018

Courses taught

	M.Sc	B.Sc (Honours)
Semester-I	MSCCONBC 104: Ecological Principles	ENVS (AECC)
	MSCCONBC 105: Practical	
Semester-II	MSCCONBC 202: Biological Rarity Phenomenon	
	MSCCONBC 205: Practical	
Semester-III	MSCCONBC 302: Wildlife Management	
	MSCCONBC 303: Quantification Techniques I	
	MSCCONBC 303: Quantification Techniques II	
	MSCCONBMJE 302: Wetland Conservation I	
	MSCCONBMJE 306: Wetland Conservation II	
Semester-IV	MSCCONBC 401: Bioinformatics and Computer Application	
	MSCCONBC 403: Dissertation	
	MSCCONBMJE 402: Wetland Conservation III	
	MSCCONBMJE 406: Wetland Conservation IV	

Online Mode of Teaching

Separate Whatsapp study group and group Gmail for second and fourth semester to share Pdf materials. Google classroom is used for sharing documents and taking online internal exams and assignments. MCQ exams are taken through Google forms and quiz platform. Team link platform and conference calls are used for sharing lectures and discussions on the provided materials as well as clearing of doubts.

Publications

Journals:

1. Joyita Mukherjee, **Moitreyee Banerjee**, Arnab Banerjee, Phani Bhusan Ghosh, Santanu Ray (2014), Impact of environmental factors on the carbon dynamics at Hooghly estuarine region. *Journal of Ecosystems*, 2014, 1-10, <http://dx.doi.org/10.1155/2014/607528>.
2. **Moitreyee Banerjee*** (2014), Diversity and composition of beetles (Order: Coleoptera) of Durgapur, West Bengal, India. *Pshyche: Journal of Entomology*, 2014, 1-6. <http://dx.doi.org/10.1155/2014/792746>
3. **Moitreyee Banerjee*** (2014), Diversity of Ants: A small case study from Coochbehar Municipal Area. *Octa Journal of Environmental Research*, 2(4), 385-390.
4. Sohini Das Biswas, Babli Garai, **Moitreyee Banerjee*** (2014), Genotoxic effects of Tobacco on Buccal Epithelium: Cell Nuclear Anomalies as Biomarker. *Asia Pacific Journal of Medical Toxicology*, 3, 157-162. <https://dx.doi.org/10.22038/apjmt.2014.3843>
5. **Moitreyee Banerjee**, Joyita Mukherjee, Arnab Banerjee, Madhumita Roy, Goutam Bandopadhyay, Santanu Ray (2015). Impact of environmental factors for maintaining water quality of Bakreswar reservoir, India. *Computational Ecology and Software*, 5(3), 239-253. <https://doi.org/10.1007/s12595-016-0165-z>
6. Joyita Mukherjee, Debaldeb Jana, **Moitreyee Banerjee**, Phani Bhusan Ghosh, Santanu Ray (2015), Utilization of Carbon in NPZ Model of Hooghly Estuarine System, India. *Journal of Earth Science and Climate Change*, 6(7), 292. <https://doi.org/10.4172/2157-7617.1000292>
7. Suvamoy Changder, Sagar Adhurya, Utpal Singha Roy, **Moitreyee Banerjee*** (2015), A report on midwinter bird diversity from Mangalajodi Wetland, Orissa. *Zoo's Print*, 12, 3-7.
8. **Moitreyee Banerjee**, Joyita Mukherjee, Santanu Ray (2016), A Review on Reservoir System and its Ecology in Indian Perspective. *Proceedings of Zoological Society*, 70, 5-20. <https://doi.org/10.1007/s12595-016-0165-z>

9. Sagar Adhurya, **Moitreyee Banerjee**, Achintya Kumar Pal, Utpal Singha Roy (2016), Early Winter Avifaunal Diversity of Buxa Tiger Reserve and Rasikbeel Wetland Complex of northern part of West Bengal, India. *Our Nature*, 14(1), 39-46. <https://doi.org/10.3126/on.v14i1.16439>
10. Arnab Banerjee, **Moitreyee Banerjee**, Nabyendy Rakshit, Joyita Mukherjee, Santanu Ray (2016), Trophic relationships and ecosystem functioning of Bakreswar Reservoir, India. *Ecological Informatics*, 36, 50-60. <https://doi.org/10.1016/j.ecoinf.2016.09.006>
11. Nabyendy Rakshit, Arnab Banerjee, Joyita Mukherjee, **Moitreyee Chakrabarty**, Stuart R. Borrett, Santanu Ray (2017), Comparative study of food webs from two different time periods of Hooghly Matla estuarine system, India through network analysis. *Ecological Modelling*, 356, 25-37. <https://doi.org/10.1016/j.ecolmodel.2017.04.003>
12. **Moitreyee Chakrabarty**, Arnab Banerjee, Joyita Mukherjee, Nabyendy Rakshit, Santanu Ray (2017), Spatial pattern analysis of zooplankton community of Bakreswar reservoir, India. *Energy, Ecology and Environment*, 2, 198-206. <https://doi.org/10.1007/s40974-017-0057-8>
13. Arnab Banerjee, **Moitreyee Chakrabarty**, Nabyendy Rakshit, Joyita Mukherjee, Santanu Ray (2017), Indicators and assessment of ecosystem health of Bakreswar Reservoir, India: An approach through network analysis. *Ecological Indicators*, 80: 163-173. <https://doi.org/10.1016/j.ecolind.2017.05.021>
14. Joyita Mukherjee, Samya Karan, **Moitreyee Chakrabarty**, Arnab Banerjee, Nabyendy Rakshit, Santanu Ray (2019), An approach towards quantification of ecosystem trophic status and health through ecological network analysis applied in Hooghly-Matla estuarine system, India. *Ecological Indicators*, 100, 55-68. <https://doi.org/10.1016/j.ecolind.2018.08.025>
15. Arnab Banerjee, **Moitreyee Chakrabarty**, Nabyendy Rakshit, Amiya Ranjan Bhowmick, Santanu Ray (2019), Environmental Factors as indicators of dissolved oxygen concentration and zooplankton abundance: Deep learning versus traditional regression approach. *Ecological Indicators*, 100, 99-117. <https://doi.org/10.1016/j.ecolind.2018.09.051>

Guidance of Ph.D Scholars

1. Sanchari Sarkar (*Applied for course work: 2020, Kazi Nazrul University*) Assessment of the Environmental Stress on selective plant species due to pollution in Durgapur Industrial Belt, **Ph.D Guide: Dr. Moitreyee Banerjee Chakrabarty**

Sponsored Research projects

1. **Dr Moitreyee Banerjee Chakrabarty** (PI), "Assessment of the environmental Stress and Biochemical effects on selective plant species and algal population due to pollution in Durgapur Industrial Belt", DSTBT, Government of West Bengal, Sanctioned: Rs. 15,50,000/- ; Tenure: 2019-2022.

2. **Dr Moitreyee Banerjee Chakrabarty** (Co-PI), “Approach towards conservation of birds in West Bengal through creating intelligent bird identification system”, DSTBT, Government of West Bengal, Sanctioned: Rs. 6,90,000/-; Tenure: 2019-2021
In collaboration with Department of Computer Science and Engineering, National Institute of Technology, Durgapur; Dr Suvamoy Changder (PI)

Guidance of M.Sc. Projects

1. Kajori Mondal (2019-2020, Durgapur Government College), Assessment of air pollution tolerance index of herbs and shrubs near local water bodies of Durgapur Industrial Belt, **(Guide: Dr. Moitreyee Chakrabarty)**
2. Sharmila Soren (2019-2020, Durgapur Government College), Assessment of water pollution from selected water bodies of Durgapur Industrial Belt, **(Guide: Dr. Moitreyee Chakrabarty)**
3. Monika Ghanty (2018-20219, Durgapur Government College), A case study on activity pattern of diurnal birds of grassland habitat with special reference to behaviour of Cattle Egret, **(Guide: Dr. Moitreyee Chakrabarty)**
4. Meghna Mondal (2018-20219, Durgapur Government College), Study of water birds’ diversity with special emphasis on avifaunal behaviour of Red Crested Pochard at Neel Nirjon, Birbhum, West Bengal, **(Guide: Dr. Moitreyee Chakrabarty)**
5. Sanchari Sarkar (2017-20218, Durgapur Government College), Study of nesting and parental care of Jungle Babbler (*Turdoides striata*) with special reference to time budget, **(Guide: Dr. Moitreyee Chakrabarty)**
6. Ankita Chakrabarty (2017-20218, Durgapur Government College), Livelihood study based on some wetlands of Purba Medinipur, West Bengal, India, **(Guide: Dr. Moitreyee Chakrabarty)**
7. Priyanka Chatterjee (2017-20218, Durgapur Government College), The feeding behaviour of ants in Mohishila Colony region, Asansol, West Bengal, India, **(Guide: Dr. Moitreyee Chakrabarty)**

Invited Lectures

1. Invited Lecture on “*Water Conservation: Need of the hour*” (**Dr. Moitreyee Banerjee Chakrabarty**), in a state level seminar on “Environmental Awareness” held on 26.09.2019 organized by IQAC, Banwarilal Bhalotia College in association with Department of Environment, Govt. of West Bengal.

Paper Presentation in seminar/conference/symposium/workshop/discussion meeting

1. Oral Presentation on “*Prediction of environmental factors of Bakreswar Reservoir, India using ARIMA model (Dr. Moitreyee Chakrabarty)*” in the 3rd Regional Science and Technology Congress (Western Region) held on Dec 20-21, 2018 jointly organized by Sidho-Kanho Birsa University and DSTBT, Govt. of West Bengal. [*Selected as the best oral presentation and nominated to 26th West Bengal State Science and Technology Congress*]
2. Oral Presentation on “*Prediction of environmental factors affecting water quality of Bakreswar Reservoir, India using ARIMA model (Dr. Moitreyee Chakrabarty)*” in the 26th West Bengal State Science and Technology Congress held on Feb 28- Mar 01, 2019 organized by DSTBT, Govt. of West Bengal. [*Selected for the outstanding paper award*]
3. Oral Presentation on “*A report on findings of Orchids in Sutan Forest of Ranibadh range of Bankura*”

- (South) Forest Division (Dr. Moitreyee Chakrabarty)" in the International Conference on Recent Developments in Non-linear Dynamics and its Applications (CRDNDA-18) held on Mar 12-14, 2019 organized by Department of Physics, Durgapur Government College.
4. Oral Presentation on "Assessing Spatio-temporal variations in Butterfly-Plant association in the semi-urban landscape of Chittaranjan, Paschim Bardhaman (Dr. Moitreyee Chakrabarty)" in the 7th India Biodiversity Meet held on Nov 19-21, 2019 organized by Agricultural and Ecological Research Unit, Indian Statistical Institute, Kolkata.

Participation in faculty development programmes

1. 111th Orientation Program from 04/09/2018 to 01/10/2018 (Dr. Moitreyee Chakrabarty) organized by UGC-HRDC, The University of Burdwan
2. Refresher Course on "Recent Advancements in Biological Sciences" from 16/08/2019 to 29/08/2019 (Dr. Moitreyee Chakrabarty) organized by UGC-HRDC, The University of Burdwan

Organization of events (Durgapur Government College)

1. Students interactive program on "Visual Aids in Biodiversity Conservation" to celebrate International Wetlands Day organized by Department of Conservation Biology, Botany and Zoology, Durgapur Government College, on Feb 12, 2020 (Dr. Moitreyee Chakrabarty, Organizing Secretary and Head, Department of Conservation Biology)
2. One day webinar to commemorate International Day of Biological Diversity on "Necessity of Biodiversity Conservation: Relevance to Modern World" on May 27, 2020 (Dr. Moitreyee Chakrabarty, Organizing Secretary and Head, Department of Conservation Biology)
3. National Level e-poster completion to commemorate World Environment Day on "March towards better future with a clean environment" on Jun 05-12, 2020 (Dr. Moitreyee Chakrabarty, Convener and Head, Department of Conservation Biology)
4. Two day national seminar on "Contemporary Era of Science: Biological and Chemical Interface" jointly organized by Department of Chemistry, Conservation Biology, Botany and Zoology, Durgapur Government College, on Mar 26-27, 2019 (Dr. Moitreyee Chakrabarty, Joint Treasurer and Head, Department of Conservation Biology)
5. One day national seminar on "Modern Era of Science: Lab to Land" jointly organized by Department of Conservation Biology and Zoology, Durgapur Government College, on Dec 05, 2019 (Dr. Moitreyee Chakrabarty, Joint Organizing Secretary and Head, Department of Conservation Biology)
6. One day seminar on "Conservation efforts of Fishing Cat, West Bengal" jointly organized by Department of Conservation Biology, Durgapur Government College and Department of Zoology, University of Calcutta, on Nov 28, 2018 (Dr. Moitreyee Chakrabarty, Organizing Secretary and Head, Department of Conservation Biology)
7. One day students' seminar on "Nooks and perils of Conservation Biology" jointly organized by Department of Conservation Biology and Zoology, Durgapur Government College and Department of Zoology, University of Calcutta, on Oct 10, 2018 (Dr. Moitreyee Chakrabarty, Joint Convener and Head, Department of Conservation Biology)
8. One day seminar on "Bird survey and Wildlife Photography" organized by Department of Conservation Biology, Durgapur Government College along with Know Your Campus Sub-committee, Durgapur Government College, on Feb 15, 2017 (Dr. Moitreyee Chakrabarty, Joint Convener, Know Your Campus sub-committee and Head, Department of Conservation Biology)
9. Two day workshop on "Practical manual of STELLA" organized by Department of Conservation Biology, Durgapur Government College, on Jan 02-03, 2019 (Dr. Moitreyee

- Chakrabarty, Organizing Secretary and Head, Department of Conservation Biology)**
10. Invited talk on “Present status and Conservation measures of threatened animals” organized by Department of Conservation Biology, Durgapur Government College, on Sep 26, 2018 (**Dr. Moitreyee Chakrabarty, Organizing Secretary and Head, Department of Conservation Biology**) Speaker: Arkajyoti Mukherjee, Senior Research Fellow, Government College of Engineering and Leather Technology, Kolkata
 11. Invited talk on “Wetlands: Biological Supermarket” organized by Department of Conservation Biology, Durgapur Government College, on Nov 11, 2017 (**Dr. Moitreyee Chakrabarty, Organizing Secretary and Head, Department of Conservation Biology**) Speaker: Dr Sudin Pal, D S Kothari Fellow, Department of Chemical Engineering, Jadavpur University
 12. Special lecture series organized by Department of Conservation Biology, Durgapur Government College (**Dr. Moitreyee Chakrabarty, Organizing Secretary and Head, Department of Conservation Biology**)
Speakers
 - a) Mr Milan Mondal, Divisional Forest Officer, Durgapur on “Wildlife and Biodiversity” on Aug 29, 2017
 - b) Dr Saikat Sarkar, Department of Zoology, Jhargram Raj College on “Snake Awareness” on Sep 06, 2017
 - c) Rounaq Ghosh, Research Biologist, BNHS, Assam on “Basics of Wetland” on Sep 06, 2017
 - d) Prof Raj Narayan Saha, Department of Chemistry, National Institute of Technology, Durgapur on “Wastewater Management” on Sep 13, 2017

Participation in committees of Durgapur Government College since 2017

1. Environmental studies committee (Co-ordinator-2017-2018, 2018-19, 2019-20)
2. Central Instrument Facility cell (Member-2017-2018, Joint Convener 2018-19)
3. Know Your Campus sub-committee (, Jt Convener-2017-2018)
4. Committee for Differently-abled Students “Bandhab” (Jt Convener-2017-2018, 2018-2019)
5. Grievance Redressal Cell (Member-2017-2018, 2018-19)
6. Sexual harassment and Gender Sensitization Cell (, Member-2017-2018, 2018-19)
7. Cultural Sub-committee (, Jt Convener-2017-2018, Member 2018-19, 2019-20)
8. Students election sub-committee (, Member-2019-20)
9. Routine sub-committee (, Member-2017-2018, 2018-19)
10. Examination sub-committee BA/BSc/BCom Semester I (, Jt Convener-2017-2018)
11. Examination sub-committee BA/BSc/BCom Semester III (, Member-2018-2019)
12. Examination sub-committee BA/BSc/BCom Semester II (, Member-2017-2018)
13. Examination sub-committee BA/BSc/BCom Part I Backlog (, Member-2017-2018)
14. Examination sub-committee BA/BSc/BCom Part III Backlog (, Convener-2018-2019)
15. Examination sub-committee BA/BSc/BCom Semester I Backlog (, Convener-2018-2019)
16. Examination sub-committee MSW (, Convener-2018-2019)