

AYAN MONDAL

Contacts:

Residential

Village- Bamchandipur, P.O. - Joteram
District- Burdwan, PIN-713104,
WB, India.

Office

General Deegre Government College, Mohanpur
Srirampur, Sialsai,
Mohanpur, Paschim Medinipur,
PIN – 721436
WB, India

E mail- mondalayan.zoo@gmail.com

Mob. - +91-9434153956

D. O. B : 15 th August of 1992 (15/08/1992).



Profile Link

 [Google Scholar](#)

 [Research gate](#)

 [Vidwan](#)

 [Twitter](#)

Educational qualification:

Ph.D in Environmental Science, University of Burdwan	2022
M. Sc in Zoology, University of Burdwan, (76.75%)	2015
B.Sc in Zoology (Hons), Burdwan Raj Collage, B.U. (55.5%)	2013
Higher Secondary, Joteram Vidyapith (WBCHSE) (74.4%)	2010
Secondary, Joteram Vidyapith (WBBSE) (91.25%)	2008

Seminar, Workshop, Invited Talks, Science Fair:

International level:

1. "International Webinar on Physics and Beyond-2020", organized by the Department of Physics, Bankura University, on 6-8 July, 2020.

AYAN MONDAL

2. Two day international webinar on “Yoga- The Holistic approach to Physiological and Psychological Homeostasis” Date: 17-18 October, 2020 organized by Department of Physiology, GGDC, Mohanpur in collaboration with Physical Education Foundation of India
3. International webinar on “ The World of Plants” Date: 18-19 November, organized by Department of Botany, GGDC, Mohanpur
4. Three Days International Webinar on “Present and Future Strategies to combat emerging and re-emerging contagious diseases”. Organised by Department of Microbiology, The University of Burdwan. Date – 16-18 August, 2020
5. Fourth International Conference on “Mother Earth: Nurture the Nature To have a Better Future” scheduled during 27 to 29 August 2020. Organised By Department of Environmental Science, The University of Burdwan. (Paper Presented)
6. One day international webinar on “A modern outlook in Molecular Biology and Environmental Modelling – Now and Beyond” Date: 20 September, 2020 organized by Department of Zoology, GGDC, Mohanpur
7. International Seminar on Genetic Analysis: Translational and Developmental & Annual meeting of Society for Bio-technologist (India)
8. Invited Lecture: - International Level lecture series on Arachnology
Topic: Lesser Arachnids – A much ignored jewels of Nature
Organized by: Team Saaliga, Mysore, Karnataka
Date: 28th June, 2020

National Level:

1. One day National Webinar "Struggle for coexistence: Affect of Anthropocene non-human life forms" Organized by Department of Zoology, Sonamukhi College, Bankura on 20th June, 2020
2. Science Academies' Lecture Workshop on Progress and Prospects of Biological Science organized by Burdwan Raj College, sponsored by IAS, Bangalore; INSA, New Delhi; NAS, Allahbad
3. UGC- DRS sponsored National seminar on Bioprospecting of Natural Products organized Dept.of Zoology, University of Burdwan.

AYAN MONDAL

4. District Science Fair – 2006, District Science Fair – 2007(1st Position), District Science Fair – 2009(5th Position), State Level Science Fair (Special Prize)– 2007, State Level Science Fair – 2009(1st Position), Eastern India Science Fair - 2007 organized by BITM, Dept. of Sports and Youth Services, Govt. of West Bengal and NCERT, Govt. of India.
5. Department of Science & Technology, Govt. of West Bengal sponsored workshop on Quality Standardization in Air, Water including Detection of Histotechnological Parameters, organized by Dept. of Environmental Science, The University of Burdwan.
6. Invited Lecture:- 4th SpiderIndia Annual Meet, Castlerock, Karnataka
Topic: An Introduction to lesser arachnids of India
Organized by Team SpiderIndia – a group of Diversity India
Date: 3-6 December, 2019

State Level:

1. UGC Sponsored state level Seminar on Conservation of Biodiversity: Assesment and Awareness organized by Dept. of Zoology Hoogly Mohsin College, & Dept. of Zoology, WBSU
2. State Level Science Fair 2015 organized by University of Burdwan & Ministry of Science and Technology
3. Invited Lecture: - Lockdown Talks (Session 14): "Arachnids", with special emphasis on lesser Arachnids” Organized by WINGS, Durgapur, Date: 14th May, 2020
4. Invited Lecture: - Celebrating World Environment Day, Organized by Bejoy Narayan Mahavidyalaya, Itachuna, Hooghly, West Bengal, India
Topic: The Loss of Nature and Rise of Pandemics
Date: 5th June, 2021
5. Invited Lecture: - State Level Webinar, Organized by NSS Unit, GGDC, Mohanpur, Paschim Medinipur, West Bengal, India
Topic: The Loss of Nature and Rise of Pandemics
Date: 5th June, 2021

Resource Person:

1. Invited Lecture: - International Level lecture series on Arachnology, Organized by : Team Saaliga, Mysore, Karnataka, India, 28th June, 2020

AYAN MONDAL

2. Invited Lecture:- 4th SpiderIndia Annual Meet, Castlerock, Karnataka, Organized by Team SpiderIndia – a group of Diversity India, 3-6 December, 2019
3. Invited Lecture: - Lockdown Talks (Session 14): Organized by WINGS, Durgapur, Date: 14th May, 2020
4. Invited Lecture: - Celebrating World Environment Day, Organized by Bejoy Narayan Mahavidyalaya, Itachuna, Hooghly, West Bengal, India, 5th June 2021
5. Invited Lecture: - State Level Webinar, Organized by NSS Unit, GGDC, Mohanpur, 5th June 2021
6. 1st - 5th Annual Biodiversity Assessment Camp at Neora Valley National Park, Organized by Directorate of Forest, Govt. of West Bengal, Date: 11th -16th March, 2021
Role as resource person: Arachnid Expert

Publication List :

1. Sen, P., Das, N., Saha, N. C., Ghosh, S., Mondal, A., & Mandal, S. (2023). Modeling of Cadmium Bioaccumulation Dynamics in *Channa punctata* (Bloch, 1793) of Dankuni Wetland Ecosystem and Assessment of Risk to Human Health. *Applied Biochemistry and Biotechnology*, 1-18.
2. Bag, S., Sarkar, B., Seal, M., Chatterjee, A., Mondal, A., & Chatterjee, S. (2023). Diversity and seasonal prevalence of starch hydrolysing, phosphate solubilizing and nitrogen-fixing bacterial groups of rooted and un-rooted regions of tropical mangrove sediments of Sundarbans, West Bengal, India. *Marine Biology Research*, 1-13.
3. Das, N., Chakraborty, R., Pal, S. C., Mondal, A., & Mandal, S. (2023). A novel coupled framework for detecting hotspots of methane emission from the vulnerable Indian Sundarban mangrove ecosystem using data-driven models. *Science of The Total Environment*, 161319.
4. Mandal, A., Bag, S., Sarkar, B., Seal, M., Mondal, A., & Chatterjee, S. (2023). Soil bacterial diversity in the tropical dry deciduous forest of Ajodhya hills, Purulia, West Bengal. *Acta Ecologica Sinica*.
5. Gangopadhyay, S., Saha, A., Pal, S. C., Banerjee, R., Batabyal, S., Das, N., ... Mondal, A., & Mandal, S. (2023). A new methodological approach to the establishment of sustainable agricultural ecology in drought vulnerable areas of eastern India. *Ecological Informatics*, 75, 102013.

AYAN MONDAL

6. Mondal, A., Das, N., Banerjee, R., Batabyal, S., Gangopadhyay, S., Ray, H., ... & Mandal, S. (2023). Investigating the Health of a Rice Field Ecosystem Using Thermodynamic Extremal Principles. *Ecology, Economy and Society—the INSEE Journal*, 6(1), 81-108.
7. Mukherjee, S., Atique, U., Mukherjee, R., Chatterjee, S., Altaf, M., Sinha, D., ... Mondal, A., & Chowdhury, S. (2022). Potential of extremophiles: a review of current research in nanoparticle synthesis. *Extremophiles*, 289-314.
8. Ghosh, S., Mondal, A., & Pore, S. (2022). Understanding Plant Microbial Affiliation for Agricultural Sustainability. In book: *Plant and Soil Microbial Interactions (Theory to Applications)* Publisher: Bharti Publications, 193-200
9. Batabyal, S., Das, N., Mondal, A., Banerjee, R., Gangopadhyay, S., & Mandal, S. (2022). Land Cover Changes in Green Patches and Its Impact on Carbon Sequestration in an Urban System, India. In *Applied Geomorphology and Contemporary Issues* (pp. 397-409). Cham: Springer International Publishing.
10. Gangopadhyay, S., Banerjee, R., Batabyal, S., Das, N., Mondal, A., Pal, S. C., & Mandal, S. (2022). Carbon sequestration and greenhouse gas emissions for different rice cultivation practices. *Sustainable Production and Consumption*, 34, 90-104.
11. Das, N., Mondal, A., & Mandal, S. (2022). Maximum entropy modelling for predicting the potential distribution of methanogens in Sundarban mangrove ecosystem, India. *Theoretical and Applied Ecology*, 2, 42-47
12. Mandal, S., Chatterjee, P., Das, N., Banerjee, R., Batabyal, S., Gangopadhyay, S., & Mondal, A. (2022). Modelling the role of urban forest in the regulation of carbon balance in an industrial area of India. *Acta Ecologica Sinica*, 42(5), 553-564.
13. Gangopadhyay, S., Banerjee, R., Batabyal, S., Mondal, A., Das, N., Ghosh, S., & Mandal, S. (2023). Intensification and no till system are efficient nitrogen allocators in rice crops. *Journal of Plant Nutrition*, 46(6), 958-970.
14. Das, N., Mondal, A., & Mandal, S. (2022). Dynamics of methane and carbon dioxide emissions in the reclaimed islands of Sundarban mangrove ecosystem, India. *Austral Ecology*, 47(2), 412-427.
15. Das, N., Mondal, A., & Mandal, S. (2022). Polluted waters of the reclaimed islands of Indian Sundarban promote more greenhouse gas emissions from mangrove ecosystem. *Stochastic Environmental Research and Risk Assessment*, 1-12.
16. Mondal, A., Das, N., & Mandal, S. (2022). Domestication of rice reshaped associated biodiversity of rice field ecosystem. *Journal of Animal Diversity*, 4(1), 74-90.

AYAN MONDAL

17. Kar, S., Mondal, B., Pal, A., Mondal, A., & Mazumdar, A. (2022). Report of spiders preying on adult *Culicoides* spp. using molecular based marker with notes on its feeding activity. *International Journal of Tropical Insect Science*, 1-7.
18. Bag, S., Biswal, D., Roy, A., Sarkar, B., Mondal, A., & Chatterjee, S. (2022) Diversity of soil bacteria in some sacred patches of Purba Bardhaman District, West Bengal, India. *Ecology, Environment and Conservation* 28(1), 269-279.
19. Mondal, A., Mondal, S., & Mandal, S. (2022). Empirical dynamic model deciphers more information on the nutrient (N)—phytoplankton (P)—zooplankton (Z) dynamics of Hooghly-Matla estuary, Sundarban, India. *Estuarine, Coastal and Shelf Science*, 265, 107711.
20. Das, N., Mondal, A., Saha, N. C., Ghosh, S., & Mandal, S. (2021). Decadal loss of above-ground biomass and subsequent potential CO₂ emission from the Sundarbans mangrove ecosystem, India. *Acta Ecologica Sinica*.
21. Chakraborty, R., Pal, S. C., Ghosh, M., Arabameri, A., Saha, A., Roy, P., Pradhan, B., Mondal, A.,... & Das, B. (2021). Weather indicators and improving air quality in association with COVID-19 pandemic in India. *Soft computing*, 1-22.
22. Mondal, A., Chanda, D., Vartak, A., & Kulkarni, S. (2020). A Field Guide to the Spider Genera of India. Ayan Mondal.
23. Banerjee, R., Batabyal, S., Guha, S., Mondal, A., Gangopadhyay, S., Das, N., ... & Mandal, S. (2020). Temporal stratification of weeds under System of Rice Intensification and conventional rice cultivation. *International Journal of Chemical and Environmental Sciences*, 2(1), 41-52.
24. Das, N., Mondal, A., Gangopadhyay, S., Banerjee, R., Batabyal, S., Ghosh, P. B., & Mandal, S. (2020). Environmental variables regulating organic carbon dynamics of Sundarban mangrove ecosystem, India. *International Journal of Chemical and Environmental Sciences*, 2(1), 7-17.
25. Chakraborty, R., Pal, S. C., Sahana, M., Mondal, A., Dou, J., Pham, B. T., & Yunus, A. P. (2020). Soil erosion potential hotspot zone identification using machine learning and statistical approaches in eastern India. *Natural Hazards*, 104, 1259-1294.
26. Mondal, A., Chanda, D., Patra, S., & Barman, M. (2020). *Phrynus whitei* (Gervais, 1842) from the type locality Burdwan is actually *Charinus bengalensis* (Gravely, 1911). *Bugs R All# 187. Zoo's Print*, 35(7), 01-03.

AYAN MONDAL

27. Mukherjee, K., & Mondal, A. (2020). Butterfly diversity in heterogeneous habitat of Bankura, West Bengal, India. *Journal of Threatened Taxa*, 12(8), 15804-15816.
28. Ghosh, S., Mondal, A., Gangopadhyay, S., & Mandal, S. (2020). Cadmium bioaccumulation in *Lamellidens marginalis* and human health risk assessment: A case study in India. *Human and Ecological Risk Assessment: An International Journal*, 26(3), 713-725.
29. Mirza, Z. A., & Mondal, A. (2018). A new genus *Gravelyia* with two species of the family Nemesiidae (Araneae: Mygalomorphae) from India. *Acta Arachnologica*, 67(1), 43-48.
30. Majhi, B. M., Nath, A. M., Dey, C., Mondal, A., & Saha, N. M. (2018). Ecological Assessment of Hooghly-Bhagirathi River System through the Study of Diversity of Bivalves and Gastropods in Relation to Physico-Chemical Parameters. *Int. Jour. Curr. Microbiol. App. Sci*, 7(7), 2700-2715.
31. Ghosh, D., & Mondal, A. (2016). In imminent jeopardy: sunderbans in danger. *Resonance*, 21(2), 173-188.
32. Ghosh, D., & Mondal, A. (2015). Eating Bark to Survive. *Science Reporter*, 34-37

Work Experience:

Assistant Professor in Zoology since 15/10/2019 at **Government General Degree College, Mohanpur**, under Department of Higher Education, Govt. of West Bengal

As **Secretary of Ecocampers** (a society for working against Environmental degradation and People's Welfare) Registered under West Bengal Act XXVI of 1961

Resistration Number: S/IL 99125 of 2012-13, since 14th December, 2012 to December,2014

Computer skills: Basic knowledge of computer operating which include MS Word, MS Excel, and MS Power point, Photoshop

Statistical skill: SPSS, STATISTICA, PAST, R Studio, Origin, Stella, VenSim, XLStat, Ecopath Ecosim, Chimera, AutoDockVina and other basic and advance statistical, bioinformatics tool.

Language skills:

Bengali: Expert, Hindi: Proficient, English: Proficient.

Memberships:

AYAN MONDAL

- Member of **Ecocampers** (Registered under West Bengal Act XXVI of 1961 Registration Number: S/IL 99125 of 2012-13, since 14th December, 2012 to December, 2014.
- Member of Zoological Association of Burdwan.
- Member of WSC (World Spider Catalogue)
- Executive member of SpiderIndia – a citizen science initiative.

Declaration: I hereby declare that information given above are true and correct to the best of my knowledge.

Ayan Mondal

Date: 31/08/2021

**Signature: Dr. Ayan Mondal, WBES
Assistant Professor
GGDC, Mohanpur**