### **Curriculum Vitae Of Dr. Debashri Mondal**



Name: Dr. Debashri Mondal

**Designation:** Associate Professor

and Head of the Department of Zoology,

Raiganj University

**Specialization:** Fisheries

**Qualification:** M.Sc., B.Ed., Ph.D. **ORCID iD:** 0009-0009-9012-312x

**Scopus Author ID:**37024591700

Researcher ID: ONJ-5686-2025

Google Scholar ID: 6vbUsc4AAAJ

### **CARRIER HIGHLIGHTS:**

Associate Professor of Zoology with over 17 years of teaching and research experience in limnology, hydrobiology, aquatic toxicology, and wastewater management. Published 28 peer-reviewed research papers and authored books and book chapters with international publishers. Successfully guided Ph.D. and M.Phil. scholars and currently supervising doctoral research. Experienced academic administrator with roles as Head of Department, Board of Studies member, and journal editor.

### **RESEARCH INTERESTS:**

- Limnology
- Hydrobiology
- Aquatic Toxicology
- Aquaculture

- Pharmaceutical and Pesticidal
   Pollution
- Biosorption
- Environmental and Sustainability

# **PROFESSIONAL EXPERIENCE:**

# **Academic Appointments (from present to past):**

Organization	Period		Designation	Type of	Nature of Work
	From	To		Experience	
Raiganj University,	29.08.2018	Till Date	Assistant	Teaching and	Conducting
Raiganj, Uttar			Professor and	Research	Theory and
Dinajpur, West			Head in		Laboratory
Bengal			Zoology		Session of UG
					and PG students,
					Guiding M.Phil
					and Ph. D.
					scholars
Charuchandra	04.02.2017	28.08.2018	Assistant	Teaching	Conducting
College, Kolkata,			Professor		Theory and
West Bengal, India			(Stage-III) in		Laboratory
			Zoology		Session
Raiganj	03.10.2008	03.02.2017	Assistant	Teaching and	Conducting
Surendranath			Professor	other	Theory and
Mahavidyalaya,			(Stage-II) in	administrative	Laboratory
Raiganj, Uttar			Zoology	Jobs	Session
Dinajpur, West					
Bengal, India					
Maharani	15.12.2007	02.10.2008	Assistant	Teaching	Conducting
Indiradevi Balika			Mistress in		Theory Classes
Vidyalaya,			Biological		
Coochbehar, West			Sciences		
Bengal, India					
Birsha Bidyabhaban	12.10.2007	05.12.2007	Assistant	Teaching	Conducting
Vidyalaya,			Teacher in		Theory Classes
Jalpaiguri, West			Biological		
Bengal, India			Sciences		

## **Research experience:**

- Currently engaged in research on wastewater management using adsorption-based treatment with shrimp shell-derived chitosan as an eco-friendly biosorbent. The study involves material characterization and evaluation of adsorption performance against pharmaceutical contaminants to assess treatment efficiency and underlying mechanisms.
- Conducted comprehensive research on chromium contamination in urban sewage-fed wetlands, with special reference to the East Kolkata Wetlands (Ramsar site). The study involved multi-seasonal field sampling, physico-chemical characterization of water and sediment, evaluation of chromium distribution, bioaccumulation, and trophic transfer across aquatic biota, and supervised in vivo toxicity experiments on commercially important fish species to assess ecological risks, fish health impacts, and implications for human consumers.
- Executed systematic research on the ecological health of the Kankai River, eastern Nepal, through a two-year integrated assessment of water quality, macroinvertebrate communities, and ichthyofaunal diversity across spatial and seasonal gradients. The study employed standardized physico-chemical analysis, biodiversity assessment, and multivariate statistics to identify anthropogenic impacts, threatened species occurrence, and key drivers of river health, supporting sustainable watershed management.
- Conducted experimental research on pesticide-induced aquatic toxicity using *Channa punctata* as a bioindicator, evaluating acute and chronic effects of synthetic and biopesticide formulations through LC<sub>50</sub> assessment, behavioral analysis, water quality monitoring, along with histopathological and haematological investigations to understand ecological risks and impacts on fish health.
- Carried out hydrobiological assessment of the Kulik River, Uttar Dinajpur, West Bengal (2019–2021), evaluating physico-chemical parameters of water, fish diversity, plankton dynamics, and pollution status to assess ecosystem health and support conservation and sustainable river management.

- Conducted a hydrobiological study of the Tangon River, Uttar Dinajpur, West Bengal (Dec 2019–Nov 2020), assessing surface water physico-chemical parameters and their relationship with fish diversity. Seasonal sampling across four sites recorded 40 fish species (Cyprinidae dominant) and indicated low pollution status, highlighting the role of water quality in species distribution.
- Conducted field-based ecological and soil quality assessment at Raiganj Wildlife Sanctuary, Uttar Dinajpur, West Bengal (July 2018 June 2019), focusing on the influence of migratory bird activity on soil physico-chemical characteristics, nutrient dynamics, and soil microarthropod diversity. The work involved seasonal sampling, ecological monitoring, and evaluation of biotic–abiotic interactions within a protected wetland ecosystem.
- Conducted doctoral research on the limnological assessment of Mirik Lake (Sumendu Lake), a high-altitude freshwater ecosystem in the Darjeeling Himalaya, focusing on physico-chemical, biological, and bacteriological responses to anthropogenic stress. The study was carried out during 2005–2007 and involved systematic, multi-seasonal sampling at seven strategically selected sites representing varying degrees of human influence. Standard APHA and NEERI protocols were used to analyze key water quality parameters, including temperature, pH, dissolved oxygen, alkalinity, hardness, chloride, conductivity, and biological oxygen demand. Biological assessment comprised qualitative and quantitative analysis of phytoplankton and zooplankton, supported by diversity and pollution indices to evaluate ecological condition. Bacteriological analysis of total and fecal coliforms was conducted to assess potential public health risks. The findings revealed pronounced spatial and seasonal variability, indicating increasing anthropogenic pressure on the lake and underscoring the need for effective conservation and sustainable management strategies.
- Previously served as Project Fellow under the research project entitled "Revival of Mirik Lake, Darjeeling for Designated Use" at the National Environmental Engineering Research Institute (NEERI), CSIR, Nagpur, funded by Kolkata Metropolitan Development Authority (KMDA), during October 2005 September 2007.

• Worked as a Research Scholar in the Department of Zoology, University of North Bengal, from June 2003 to September 2005.

# Research guidance:

- Ph.D. Scholars Awarded: 02
- M.Phil. Scholars Awarded: **02**
- Ph.D. Scholars Currently Under Supervision: 04

### **PUBLICATIONS:**

● Total No. – Forty-one (41)

Papers in peer-reviewed Journals: Thirty-three (33)

Ray, A., & **Mondal**, **D**. (2025). Evaluation of chromium stress in Nile tilapia: Insights into haemato-biochemical and physiological alterations. *Journal of Applied Toxicology*, 0, 1–11. <a href="https://doi.org/10.1002/jat.70034">https://doi.org/10.1002/jat.70034</a> **Journal Impact Factor: 2.8** 

Ray, A., **Mondal, D.**, Mukherjee, D., et al. (2025). Hexavalent chromium-induced bioaccumulation, oxidative responses and histological anomalies in freshwater carp *Labeo rohita* (Hamilton, 1822). *Biometals*, *38*, 1315–1335. <a href="https://doi.org/10.1007/s10534-025-00708-3">https://doi.org/10.1007/s10534-025-00708-3</a> **Journal Impact Factor: 3.6** 

Ray, A., **Mondal, D.**, Chakraborty, N., et al. (2025). Toxicity effects of hexavalent chromium on hematological, biochemical and digestive enzyme profiles of *Labeo rohita* (Hamilton, 1822). *Ecotoxicology*, *34*, 76–88. <a href="https://doi.org/10.1007/s10646-024-02815-2">https://doi.org/10.1007/s10646-024-02815-2</a> **Journal Impact Factor: 2.7** 

Chakraborty, D., & **Mondal, D**. (2025). Acute toxicity and behaviour of freshwater murrel (*Channa punctata*, Bloch 1793) exposed to agricultural pesticides. Page 5 of 22

International Journal of Environmental & Earth Sciences. Advance online publication. <a href="https://doi.org/10.55863/ijees.2025.0617">https://doi.org/10.55863/ijees.2025.0617</a>

Gurung, J., & **Mondal**, **D**. (2025). Physico-chemical characteristics and ecological monitoring of the River Kankai, Eastern Nepal. *Indian Hydrobiology*, 24(1), 47–72.

Gurung, J., & **Mondal, D**. (2025). Diversity of macroinvertebrates in the River Kankai, Eastern Nepal. *International Journal of Ecology and Environmental Sciences*, 51(5). <a href="https://doi.org/10.55863/ijees.2025.0732">https://doi.org/10.55863/ijees.2025.0732</a>

Gurung, J. K., & **Mondal**, **D**. (2025). A new inclusion to the ichthyofauna of Nepal. *Our Nature*, *23*(1), 14–18. https://doi.org/10.3126/on.v23i1.74960

Chakraborty, D., & **Mondal, D**. (2024). Acute toxicity and behavioural effects of the neem-based biopesticide "Azaray" (1% Azadirachtin) on the freshwater murrel *Channa punctata* (Bloch, 1793). *Indian Hydrobiology, 23*(2), 403–408.

Gurung, J. K., & **Mondal, D**. (2024). Fish species composition, distribution, and community structure in the River Kankai, Eastern Nepal. *International Journal of Ecology and Environmental Sciences*, 50(1), 1–11. <a href="https://doi.org/10.55863/ijees.2024.0307">https://doi.org/10.55863/ijees.2024.0307</a>

Gurung, J. K., **Mondal, D.**, Basnet, R., & Acharya, A. (2025). Comparative study on macro-invertebrates as bio indicator from the rivers Mawa and Ratuwa, Nepal. *Zoorika*, 2, 92–104.

Das, T. & **Mondal**, **D**., & (2025). Harnessing halophytes for sustainable aquaculture: Innovative nutrient recovery and eutrophication mitigation. *Zoorika*, 2, 83–91.

Ray, A., Ganguly, S., & **Mondal, D**. (2025). Prevalent fish diseases in freshwater aquaculture of West Bengal: Mitigation and biosecurity. *Zoorika*, 2, 13–21.

Sen, A., **Mondal, D**., Roy, G., & Abraham, T. J. (2025). Biotherapeutic microbial supplementation vis-à-vis fish health management in Indian fisheries sector. *Zoorika*, 2, 1–12.

Ray, A., & **Mondal, D**. (2023). Phytoplankton diversity in a wastewater-impacted Indian Ramsar site: A study from East Kolkata Wetland. *Environmental Monitoring and Assessment, 195*, 938. <a href="https://doi.org/10.1007/s10661-023-11541-x">https://doi.org/10.1007/s10661-023-11541-x</a> **Journal** 

**Impact Factor: 3.307** 

Roy, G., & **Mondal, D**. (2023). Effect of probiotic bacteria on the growth of edible and ornamental fish *Trichogaster lalius* (Hamilton, 1822). *Indian Hydrobiology*, 22(1), 103–108.

Majumder, J., & **Mondal, D**. (2023). Physico-chemical characteristics of the River Kulik, Uttar Dinajpur District, West Bengal, India. *Current World Environment*, 18(3), 1277–1297. <a href="https://doi.org/10.12944/CWE.18.3.29">https://doi.org/10.12944/CWE.18.3.29</a>

Majumder, J., & **Mondal, D**. (2023). Plankton diversity of the River Kulik, Uttar Dinajpur District, West Bengal, India. *International Journal of Ecology and Environmental Sciences*, 50(1), 63–81. <a href="https://doi.org/10.55863/ijees.2024.3039">https://doi.org/10.55863/ijees.2024.3039</a>

Majumder, J., & **Mondal**, **D**. (2022). Ichthyofaunal diversity of the Kulik River, Uttar Dinajpur District, West Bengal, India. *Indian Hydrobiology*, 21(2), 1–14.

Sarkar, M., & **Mondal, D**. (2021). Investigations on water quality parameters and ichthyofaunal diversity of the River Tangon at Radhikapur, Uttar Dinajpur, West Bengal, India. *Uttar Pradesh Journal of Zoology, 42*(10), 75–89.

**Mondal, D.** (2020). Seasonal variations in abundance and distribution of pollution indicator bacteria of an Eastern Himalayan lake of India. *Advances in Zoology and Botany*, 8(5), 383–391. <a href="https://doi.org/10.13189/azb.2020.080502">https://doi.org/10.13189/azb.2020.080502</a>

**Mondal, D.** (2020). Diversity of Chlorophyceae in the Mirik Lake of the Darjeeling Himalayan region. *Uttar Pradesh Journal of Zoology*, 41(7), 1–6.

**Mondal, D.** (2018). Utilization of aquatic weeds in an environmentally friendly way for fish feed formulation: A review. *International Research Journal of Environmental Sciences*, 7(2), 60–66.

**Mondal, D.**, & Pal, J. (2014). Diversity of Cyanophyceae in the Mirik Lake of Darjeeling Himalaya, India. *International Journal of Science and Research*, 3(12), 2080–2083.

Mondal, T., **Mondal, D**., & Mondal, S. (2013). Conservation strategies of medicinal plants of North Bengal for a better tomorrow. *Journal of Today's Biological Sciences: Research & Review, 2*(2), 83–88.

**Mondal, D.**, Pal, J., Ghosh, T. K., & Biswas, A. K. (2013). Diversity of cladocerans and copepods of Mirik Lake, Darjeeling Himalaya. *Journal of Today's Biological Sciences: Research & Review*, 2(1), 36–46.

Ghosh, T. K., & **Mondal**, **D**. (2012). Eutrophication: Causative factors and remedial measures. *Journal of Today's Biological Sciences: Research & Review*, 1(1), 160–190.

**Mondal, D.**, Pal, J., Ghosh, T. K., & Biswas, A. K. (2012). Rotifer diversity of Mirik Lake in Darjeeling Himalaya. *European Journal of Experimental Biology*, 2(5), 1451–1456.

**Mondal, D.**, Pal, J., Ghosh, T. K., & Biswas, A. K. (2012). Abiotic characteristics of Mirik Lake water in the hills of Darjeeling, West Bengal, India. *Advances in Applied Science Research*, 3(3), 1335–1345.

**Mondal, D.**, & Mondal, T. (2012). Efficacy of *Azadirachta indica* A. Juss-based biopesticides: An Indian perspective. *Research Journal of Recent Sciences, 1*(3), 94–99.

**Mondal, D.**, Pal, J., Ghosh, T. K., & Biswas, A. K. (2008). Biological assessment of water quality of Mirik Lake with reference to algal communities. *NBU Journal of Animal Science*, 2(2), 50–59.

**Mondal, D.**, Pal, J., Ghosh, T. K., & Biswas, A. K. (2007). Fecal coliform, total coliform and heterotrophic bacterial analysis of water of Mirik Lake. *NBU Journal of Animal Science*, 1, 99–103.

**Mondal, D.**, Barat, S., & Mukhopadhyay, M. K. (2007). Toxicity of neem pesticides on a freshwater loach *Lepidocephalichthys guntea*. *Journal of Environmental Biology*, 28(1), 119–122.

**Mondal, D.**, & Barat, S. (2004). Effect of varying stocking density of swordtail (*Xiphophorus helleri*) on water quality and growth rate. *Journal of Inland Fisheries Society of India*, 36(2), 25–30.

## Book: One (1)

**Mondal, D.** (2020). Hydrobiological Study of the Mirik Lake of the Darjeeling Hills. Lambert Academic Publishing, Germany. ISBN (978-620-2-52488-9). 08th May, 2020.

## **Book Chapters: Seven (7)**

Roy, G., **Mondal, D.,** & Mondal, S. Harnessing nanostructures for the delivery of plant antimicrobial peptides (PAMPs). In A. Sarkar, P. Singh, R. Rakwal, & G. K. Agrawal (Eds.), *Exploring plant peptide potentials: A comprehensive guide* (1st ed.). Academic Press. Paperback ISBN: 9780443156526 (**Accepted**)

Ray, A., Chakraborty, N., Ganguly, S., Mondal, S., & **Mondal, D.** (2024). Fishing and aquaculture bioprospecting of the ocean. In S. A. Aransiola, A. Bamisaye, O. P. Abioye, & N. R. Maddela (Eds.), *Marine bioprospecting for sustainable blue-bioeconomy*. Springer. <a href="https://doi.org/10.1007/978-3-031-68911-6\_5">https://doi.org/10.1007/978-3-031-68911-6\_5</a>. Print ISBN978-3-031-68910-9, Online ISBN978-3-031-68911-6

Mondal, S., **Mondal, D.**, Mondal, T. and Malik, J. (2022). Application of Probiotic Bacteria for the Management of Fish Health in Aquaculture. In: Dar, G.H., Bhat, R.A., Qadri, H., Al-Ghamdy, K.M. and Hakeem, K.R. (eds.) *Bacterial Fish Diseases*. Academic Press, Elsevier, United Kingdom. ISBN: 978-0-323-85624-9

**Mondal, D**. (2021). Status of water pollution during COVID-19 pandemic situation: Indian scenario. In: Karmakar, M. (Eds.), *The Covid*. Blue Rose Publisher. (pp.). ISBN: 978-93-5427-451-0

**Mondal, D.** (2020). Toxic Effects of Neem Based Bio-pesticides on Fish. pp. 63–70. In: Mitra, S. and Sarkar, S. (eds.) *Frontier Aspects of Natural Sciences*. The Banaras Mercantile Co., Kolkata. ISBN-978-81-86359-83-4

**Mondal, D.,** Pal, J., Ghosh, T.K. (2015). Diversity of bacillariophyceae in the Mirik Lake of Darjeeling Himalaya. pp. 23–30. In: Das Biswas, R. and Sarkar, A. (eds.) *Biodiversity and Sustainability: Opportunities and Challenges*. Raiganj Surendranath Mahavidyalaya, West Bengal. ISBN: 978-93-5254-104-1

**Mondal, D.,** Pal, J., Ghosh, T.K. and Biswas, A.K. (2009). Biological monitoring of water quality of Mirik lake in the Darjeeling Himalaya on the basis of algal communities. pp. 86–94. In: Kosygin, L. (ed.) *Wetlands of North East India: Ecology, Aquatic Bioresources and Conservation*. Akanksha Publishers, New Delhi. ISBN-8183701876

# Administrative & Academic Governance Experience

- Convener, "Breeding Bird Census 2025: Scientific Training on Bird Counting Techniques at Kulik Wildlife Sanctuary with Emphasis on the Asian Openbill Stork", held during September 22–24, 2025, organized by the Department of Zoology, Raiganj University.
- Convener, 4-Day Hands-on National Workshop on "Statistical Analysis Using SPSS and Computer-Aided Drug Designing (CADD)", held during June 28 July 1, 2025, organized by the Department of Zoology, Raiganj University, West Bengal.
- Convener, Parent Teacher Meet, Department of Zoology, Raiganj University, held on 11.06.2025.
- Member of the 6th Governing Body, Shree Agrasen Mahavidyalaya, Dalkhola, Uttar Dinajpur, since 01.06.2025.
- Convener, Observation of World Wildlife Day, Raiganj University, held on 03.03.2025.
- Convener, National Seminar on "Avian Diversity of India: A Scientific and Cultural Exploration", held during January 20–21, 2025, organized by the Department of Zoology, Raiganj University.
- Convener, 7-Day National Workshop on "Practical Laboratory Techniques and Field Research Studies in Applied Biological Sciences", held during December 3–9, 2024, organized by the Department of Zoology, Raiganj University, West Bengal.
- Member of Board of Studies (Under Graduate) in Environmental Studies, University of Gour Banga, Malda, since 16.05.2024.
- Head of the Department of Zoology, Raiganj University, from 05.02.2024 to Till Date.

- Joint Convenor, Celebration of World Wetlands Day, Raiganj University, held on 02.02.2021.
- Member of Board of Research Studies in Zoology, Raiganj University, since 16.01.2019.
- Member of Board of Studies (Post Graduate) in Zoology, Raiganj University, Uttar Dinajpur, since 02.09.2018.
- Member of Board of Studies (Under Graduate) in Zoology, Raiganj University, Uttar Dinajpur, since 02.09.2018.
- Member of Board of Studies (Under Graduate) in Zoology, University of Gour Banga, Malda, since 21.03.2016.
- Expert for Selection of Teacher, Kendriya Vidyalaya, Raiganj (BSF Govindpur, Uttar Dinajpur), on 03.03.2016.
- Expert for Selection of Guest Lecturer, Raiganj Surendranath Mahavidyalaya, during 2010, 2014, and 2016.
- Member of IQAC, Raiganj Surendranath Mahavidyalaya, from 19.08.2015 to 03.02.2017.
- Member of Board of Studies (Under Graduate) in Zoology, University of Gour Banga, Malda, during the academic years 2013–2017.
- Member of Election Committee, Raiganj Surendranath Mahavidyalaya, during the academic years 2010–2011, 2013–2014, and 2014–2015.
- Member of Academic Council, Raiganj Surendranath Mahavidyalaya, from 03.10.2008 to 03.02.2017.
- Head of the Department of Zoology, Raiganj Surendranath Mahavidyalaya, Raiganj, from 03.10.2008 to 03.02.2017.

#### EDITORIAL & PEER-REVIEW RESPONSIBILITIES

- Chief Editor of the "Zoorika", the journal of the Department of Zoology, Raiganj University
- Chief Editor of the open access journal, the "Journal of Today's Biological Sciences: Research & Review"

### **Reviewer for the following journals: (Total:04)**

- Chemistry and Ecology, Impact Factor 1.8 (2024) (Tailor and Francis): 01
- Bulletin Of Environmental Contamination and Toxicology, Impact Factor 2.2 (2024) (Springer): **02**
- Environmental monitoring and assessment, Impact Factor 3.0 (2024) (Springer): 01

# MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

- Life Member of Inland Fisheries Society of India
- Life Member of International Association of Hydrobiological Sciences

## **AWARDS, FELLOWSHIPS & RECOGNITION**

- Invited as Chief Resource Person for the World Environment Day 2025 Celebration Programme, organized by the Departments of Botany and Zoology, and IQAC, Raiganj Surendranath Mahavidyalaya.
- Invited as Resource Person for the Dr. Prithwiraj Jha Second Memorial Lecture 2024, January 24, 2024, organized by the Department of Zoology in collaboration with IQAC and Nature Club, Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur, West Bengal.
- Acted as Judge, District Science Fair Competition, 28th September 2015, at the invitation of the District Youth Officer, Uttar Dinajpur District.
- Acted as Judge, District Science Project Competition, 25th September 2015.

- Recipient of UGC Minor Research Project, 2014 (Project No. PSW-090/13-14 (ERO), ID No. WGB-007, Dated 18 March 2014).
- Obtained fellowship under a project of National Environmental Engineering Research Institute (CSIR), Nagpur.
- Ph.D., University of North Bengal, 2009.
- Qualified in UGC-CSIR NET, 2004 and 2005.
- Qualified in GATE (Graduate Aptitude Test in Engineering) in Life Sciences, 2004.

# PARTICIPATION IN WORKSHOP/ ORIENTATION/ REFRESHER / TRAINING PROGRAMME/ COURSES/ FACULTY DEVELOPMENT PROGRAMMES:

**Total No.- Twenty-one (21)** 

# **Workshops: Total No.-Fifteen (15)**

National Hands-on Workshop on "**Residential Skills**" on November 22–23, 2024, organized in the "Autism Convention 2024" at Ramakrishna Mission, Gol Park, Kolkata, West Bengal.

National Hands-on Workshop on "**Financial Skills**" on November 22–23, 2024, organized in the "Autism Convention 2024" at Ramakrishna Mission, Gol Park, Kolkata, West Bengal.

National Hands-on Workshop on "**legal**" on November 22–23, 2024, organized in the "Autism Convention 2024" at Ramakrishna Mission, Gol Park, Kolkata, West Bengal.

National Hands-on Workshop on "**Life Skills**" on November 22–23, 2024, organized in the "Autism Convention 2024" at Ramakrishna Mission, Gol Park, Kolkata, West Bengal.

Department of Higher Education, Government of West Bengal sponsored Workshop on "Understanding Sexuality in Autism Spectrum Conditions" on June 22, 2023, organized by DWish under AKB Memorial Trust in association with Mental Health Foundation, Kolkata, West Bengal.

International Workshop on "Exploring Gender Paradigms" during February 20–26, 2023, organized by Kailashbasini Centre for Women's Studies, Women's Cell and Internal Quality Assurance Cell (IQAC), Dr. Meghnad Saha College, in collaboration with UGC-HRDC and the Department of Women's Studies, University of North Bengal.

Workshop on "Social Communication and Autism Development" on December 18, 2022, organized by Disha Educational and Social Welfare Trust, Anandapur, Kolkata, West Bengal, India.

Workshop on "Sensory Issues: Improving Behavior and Sensory Issues Inside and Outside Home" on September 18, 2022, organized by DWish, Kolkata, in collaboration with SOCH, Gurgaon, at Kolkata, West Bengal.

Workshop on "Applied Behaviour Analysis (ABA)" on July 6, 2022, organized by DWish in association with East Calcutta Girls' College, Lake Town, Kolkata, West Bengal.

UGC-RUSA 2.0 sponsored Workshop on "Analysis and Representation of Educational Data through SPSS and AMOS" during February 3–9, 2020, organized by the Department of Education, Jadavpur University, Kolkata, West Bengal.

Workshop on "Real-Time PCR" on February 16, 2019, organized by Diverse Genomics Pvt. Ltd. in association with the Department of Zoology, Charuchandra College, Kolkata, West Bengal.

Department of Higher Education, Government of West Bengal sponsored National-level Workshop on "Contemporary Laboratory and Field Courses in Zoological Science" during Page 15 of 22

November 22-December 1, 2015, organized by the Department of Zoology, A.P.C. Roy Government College, Matigara, Siliguri, West Bengal.

Workshop on "Know Your CAS (Career Advancement System)" on February 14, 2015, organized by the Internal Quality Assurance Cell (IQAC), Shree Agrasen Mahavidyalaya, Dalkhola, West Bengal.

UGC-Sponsored National Workshop on "Application of Statistical Methods: An Interdisciplinary Approach" during September 5–11, 2012, organized by Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur.

Workshop on "Sustainable Aquaculture Development in North Bengal" on May 6, 2003, organized by the Department of Zoology, University of North Bengal.

# **Faculty Development Programme:**

Total No. - One (01)

Faculty Development Programme on "ICT Based New Paradigms of E-Teaching and E-Learning: Digital Pedagogy "organized by Mata Sundari College for Women in association with Ramanujan College, University of Delhi during 15<sup>th</sup> September,2020 to 30<sup>th</sup> September (two weeks), 2020.

### **Refresher Courses:**

Total No.-Two (02)

UGC Sponsored 3<sup>rd</sup> Refresher Course in Life Sciences organized by the UGC Academic Staff College, University of North Bengal, Raja Rammohanpur, Darjeeling during 29<sup>th</sup> November-09<sup>th</sup> December (21 days), 2014.

UGC Sponsored 1<sup>st</sup> Refresher Course in Life Science (Inter disciplinary) organized by the UGC Academic Staff College, University of North Bengal, Raja Rammohanpur, Darjeeling during 8-28 September (21 days), 2011.

# **Orientation Programme:**

Total No.-One (01)

UGC Sponsored 3<sup>rd</sup> Orientation Programme organized by the UGC Academic Staff College, University of North Bengal, Raja Rammohanpur, Darjeeling during 3-30 August (28 days), 2010.

### **OTHER COURSES**

Total No.-One (01)

Participated in the 5-week massive open online course on "Understanding Neurodiversity' from 07-02-2022 to 14-03-2022, organized by Netaji subhas Open University and Commonwealth Education Media Centre for Asia.

# CONFERENCES/ SEMINARS/ SYMPOSIA/WEBINARS/ TRAINING PROGRAMMES

### **International Level**

**Total No. - Six (06)** 

International Seminar on "Sustainable Development and Inclusive Growth" during March 3-4, 2020, organized by Post Graduate Department of Geography and Department of Statistics Lady Brabourne College, Kolkata **Title of Paper:** Plankton Diversity of Mirik Lake in the Darjeeling Himalaya.

International Seminar on "Environmental Crisis: Issues, Challenges, Portrayals and Laws" during February, 14, 2020 organized by Manikchak College, Malda, West Bengal, India. **Title of Paper:** Pollution Tolerant Plankton of Mirik Lake in the Darjeeling Himalaya.

International Conference on "Biological Sciences in Human Welfare" during July, 09, 2018 organized by Department of Botany, Rishi Bankim Chandra College, Naihati, 24 Parganas (North), West Bengal. **Title of Paper:** Nutritional Anemia in Young Children.

International Conference on "Contemporary Health Issues and Environmental impact" during November, 30, 2017 organized by Department of Zoology, Sarojini Naidu College for Women, Kolkata In collaboration with: Department of Zoology, West Bengal State University & Lincoln University College, Malaysia **Title of Paper:** The Role of Environmental Factors in Childhood Asthma.

International Conference on "Modern trends in Social and Basic Sciences" during March, 27-28, 2015, organized by Alipurduar College, Alipurduar, West Bengal, India. **Title of Paper:** Bacteriological Analysis of Water of Mirik Lake in Darjeeling Himalaya.

International Conference on the Theme "Mother Earth: Save it to Achieve a Sustainable Future for All" during December, 10-12, 2014, organized by Department of Environmental Science, The University of Burdwan. **Title of Paper:** Density and Diversity of Chlorophyceae in the Mirik Lake of Darjeeling Hills.

### **National & State-Level**

**Total No. – Twenty-two (22)** 

National Webinar on "Scientific Manuscript and Research Grant Writing" held on February 28, 2024, organized by the PG Department of Conservation Biology and the Internal Quality Assurance Cell (IQAC), Durgapur Government College, West Bengal.

One-Day Webinar on "Picture Exchange Communication System" held on July 8, 2023, organized by Joy of Learning Foundation, Shanti Welfare Trust.

One-Day State Level Webinar on "Virtual Learning: Virtual Lab and Skill Development" held on June 14, 2022, organized by Shree Agrasen Mahavidyalaya, Dalkhola, Uttar Dinajpur, West Bengal.

Webinar on "Visual Processing Disorder" held on December 27, 2022, organized by Joy of Learning Foundation, Shanti Welfare Trust, West Bengal.

Participated in the Training programme on "Encouraging Language Development in Early childhood Setting from September, 24-26, 2021, organized by Teachers Talk, The Hanen Program.

Two-Day State Level Seminar on "CAS, WBHS and Other Service Benefits for College Employees" held on June 8–9, 2021, organized by Women's College, Calcutta, in association with Bhairab Ganguli College, Kolkata, West Bengal.

One Day National Webinar on "Scope and Challenges in Reviving and Sustenance of Biodiversity in Present Day Context" held on June 5, 2021, organized by Raiganj Surendranath Mahavidyalaya, Raiganj, West Bengal.

International Webinar on "COVID-19 Pandemic and Co-infections: Challenges, Prospective Treatments and Societal Impact" held on August 31, 2020, organized by the Department of Microbiology, Raiganj University, Raiganj, West Bengal.

International Webinar on "Covid-19 Pandemic: A Search for Relief" held on August 22, 2020, organized by the Department of Chemistry in association with IQAC, Charuchandra College, Kolkata, West Bengal.

State Level Webinar on "Mosquito Borne Diseases, Their Control and Perspectives of Environmental Health" held on September 4, 2020, organized by the Department of Zoology, patronized by IQAC, Maharajadhiraj Uday Chand Women's College, Burdwan, West Bengal.

National Webinar on "The Autism World: Exploring the Backstage and Finding the WHYs" held from June 1–5, 2020, organized by Pushpa Khanna Memorial Centre, Kanpur, Uttar Pradesh, India.

State Level Seminar on "Industrialisation in Post-Colonial India with Special Reference to West Bengal: Some Key Observations" held on April 29, 2016, organized by RSM Research Group, Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur.

National Seminar on "Man and Microbes" held during March 28–29, 2016, organized by Raiganj University, Raiganj, Uttar Dinajpur, West Bengal **Title of Paper:** Coliform Bacterial Analysis of the Mirik Lake in Darjeeling Himalaya.

State Level Seminar on "Industrialisation during Colonial and Post-Colonial India with Special Reference to Tea" held on March 16, 2016, organized by RSM Research Group, Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur.

National Seminar on "Back to Nature: Entrepreneurship Development by Learning from Nature" held on February 7, 2016, organized by Nature Club, Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur.

A State-Level Convention on "To Kill or Not to Kill? Rethinking Capital Punishment, Governance and Justice" held on September 28, 2015, organized by IQAC, Department of English and Philosophy, Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur.

National Seminar on "Different Horizons of Lokosangskriti" held during May 2–3, 2015, organized by Raiganj Surendranath Mahavidyalaya, Raiganj, West Bengal, and the Folklore Congress Association of India.

22nd West Bengal State Science and Technology Congress, 2015, held during February 28–March 1, 2015, organized by the Department of Science and Technology, Government of West Bengal, West Bengal State Council of Science and Technology, and the University of North Bengal.

National Conference on "Applied Zoology in Sustainable Development: An Update" held during January 30–February 2, 2015, organized by the Department of Zoology, University of

North Bengal. **Title of Paper:** Density and Diversity of Zooplankton in the Mirik Lake of Darjeeling Hills.

National Seminar on "Cultural Plurality and Nation Making in India: Issues and Problems in Retrospect (Focus on Eastern and North-Eastern India)" held during November 7–8, 2014, organized by Shree Agrasen Mahavidyalaya, Dalkhola, Uttar Dinajpur, West Bengal.

National Seminar on "Relevance of Swami Vivekananda in the 21st Century" held during March 22–23, 2013, organized by Raiganj University College, Raiganj, Uttar Dinajpur, West Bengal.

UGC-Sponsored National Seminar on "Biodiversity and Sustainability vis-à-vis Economic Development in the Northern Parts of West Bengal" held during August 26–27, 2012, organized by Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur. **Title of Paper:** Rotifer Diversity of Mirik Lake in Darjeeling Hills.

National Conference on "Evaluation of Biodiversity of Eastern Himalaya and Adjoining Plains" held during December 1–4, 2010, organized by the Department of Zoology, University of North Bengal. **Title of Paper:** Diversity of Phytoplankton of Mirik Lake in the Hills of Darjeeling, West Bengal.

National Symposium on "Pesticide Stress on Target, Non-target Organisms and Human Health" held during February 11–12, 2010, organized by the Department of Zoology, University of North Bengal.

Silver Jubilee Symposium on "Dimensions of Research Applications in Animal Sciences" held during December 2–3, 2008, organized by the Department of Zoology, University of North Bengal. **Title of Paper:** Biological Assessment of Water Quality of Mirik Lake in Darjeeling Hills, West Bengal with the Help of Algal Communities.

UGC-Sponsored State Level Conference on "Remembering the Revolt of 1857: Nationalist Thought in Postcolonial India" held during November 27–28, 2008, organized by the Department of English, Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur.

National Symposium on "Cross-Talk between Zoology and Technology" held during November 16–17, 2006, organized by the Department of Zoology, University of North Bengal. **Title of Paper:** Physico-Chemical Properties of Water of Mirik Lake in Darjeeling Himalayas.

National Seminar on "Management Challenges in Fisheries of Rivers and Associated Ecosystems: Issues and Strategies" held during April 16–17, 2005, organized by Central Inland Fisheries Research Institute, Barrackpore, West Bengal. **Title of Paper:** Toxicity of Two Neem Pesticides on a Hill Stream Fish *Lepidocephalichthys guntea* (Hamilton Buchanan).

National Seminar on "Prospects of Ornamental Fish Breeding and Culture in Eastern and North-Eastern India" held during February 16–17, 2004, organized by the Central Institute of Fisheries Education (Deemed University), ICAR, Kolkata Centre. **Title of Paper:** Effect of Varying Stocking Density of Red Sword Tail (*Xiphophorus helleri* Heckel) on the Water Quality and Growth Rate.

National Symposium on "Assessment and Management of Bio-resources" held during May 28–30, 2003, organized by the Department of Zoology, University of North Bengal. **Title of Paper:** Survey of the Ichthyofauna in the Mahananda Reservoir at Fulbari Barrage, Jalpaiguri District, West Bengal.

### **EXTRA-CURRICULAR ACTIVITIES:**

- Sangeet visharad in Rabindra Sangeet.
- Senior Diploma in Najrul Geeti.
- Obtained "Diploma in Office Automation" from M.I.C.E. (Manipal Institute of
- •Computer Education).