

**FACULTY MEMBERS' ACADEMIC PROFILE**

1. **Name of the Faculty member:** Dr. Tanmay Sanyal
2. **Designation:** Assistant Professor
3. **Qualification:** M.Sc. in Zoology, M.Phil in Environmental Science, Ph.D In Zoology ( University of Kalyani), B.Ed (NSOU ODL)
4. **Specialization:** Zoology with Fish and Fishery
5. **E-mail address:** tanmaysanyal@gmail.com
6. **Date of Joining in W.B.E.S.:** 22.10.2019
7. **Date of Joining in this College:** 22.10.2019
8. **Total Teaching experience in College level:** 3 Year 2 Months
9. **Research interests:** Ecology, Toxicology, Limnology, Environment and biodiversity, Conservation biology, Fisheries
10. **Title of thesis (Ph.D.) with year:** Bioaccumulation and Toxicity of Chromium to Fish and Other Aquatic Organisms with Reference to Pollution from Dye Factory Effluents. (Awarded October 2016).
11. **Research guidance:** Nil
12. **Research Projects (Completed and ongoing):** Nil
13. **List of publications:**



**A) Published papers in Journals:**

Das, R., Datta, S., Kaviraj, A., Sanyal, S.N., Nielsen, P., Nielsen, I., Sharma, P., Sanyal, T., Dey, K. And Saha, S., 2020. A decision support scheme for beta thalassemia and hbe carrier screening. *Journal of Advanced Research*, 24, pp.183-190.

Deb, H., Sanyal, T., Kaviraj, A. And Saha, S., 2020. Hazards of wind turbines on avifauna-a preliminary appraisal within the Indian context. *Journal of Threatened Taxa*, 12(4), pp.15414-15425.

Sanyal, T., Kaviraj, A. And Saha, S., 2017. Toxicity and bioaccumulation of chromium in some freshwater fish. *Human and Ecological Risk Assessment: An International Journal*, 23(7), pp.1655-1667.

**Sanyal, T., Kaviraj, A. And Saha, S.,** 2015. Deposition of chromium in aquatic ecosystem from effluents of handloom textile industries in Ranaghat–Fulia region of West Bengal, India. *Journal of advanced research*, 6(6), pp.995-1002.

**Sanyal, T., Deb, H. And Mukherjee, S.,** Use Of Surface Water To Combat Groundwater Pollution: With Special Reference To Ganga Water Treatment Plant Of Chakdaha, Nadia, West Bengal. (ISSN: 2277-9655), , 6(9), pp.595-605.

Deb H , **Sanyal T** (2017) Human Trafficking an Overview With Special Emphasis on India and West Bengal; International Organization of Scientific Research- Journal of Humanities and Social Science(IOSR-JHSS) (e-ISSN: 2279-0837, p-ISSN: 2279-0845) vol22 issue 9 version, pp 76-97.

**Sanyal, Tanmay & Sen, Koushik.** (2018). Diversified Role of Prolactin in Fish: A Review. *Global Journal of Engineering Science and Researches*. 5. 212-220. 10.5281/zenodo.1495605.

Deb, H., **Sanyal, T., Kaviraj, A., & Saha, S.** (2020, March 26). Hazards of wind turbines on avifauna - a preliminary appraisal within the Indian context. *Journal of Threatened Taxa*, 12(4), 15414–15425. <https://doi.org/10.11609/jott.5165.12.4.15414-15425>

Sen, K., **Sanyal, T., & Karmakar, S. R.** (2021). COVID-19 Forced Lockdown: Nature’s Strategy to Rejuvenate Itself. *World Journal of Environmental Biosciences*, 10(2), 9–17. <https://doi.org/10.51847/mhlv0gijx5>

Basak, A., Rahaman, S., Guha, A., & **Sanyal, T.** (2021, August 24). *Dynamics of the Third wave, modelling COVID-19 pandemic with an outlook towards India.* <https://doi.org/10.1101/2021.08.17.21262193>

Saha, A., Mukherjee, P., Roy, K., Sen, K., & **Sanyal, T.** (2022). A review on phytoremediation by aquatic macrophytes: A natural promising tool for sustainable management of ecosystem. *International Journal of Experimental Research and Review*, 27, 9–31. <https://doi.org/10.52756/ijerr.2022.v27.002>

Deb, H., Saha, A., Deore, S., & **Sanyal, T.** (2022). Elephant Corridor loss due to anthropogenic stress – a study of change in forest cover using satellite data in the Sonitpur District, Assam, India. *Journal of Wildlife and Biodiversity*, 6(X). <https://doi.org/10.5281/zenodo.6627395>



Mukherjee, P., Sarkar, G., Saha, A., & **Sanyal, T.** (2022). Extensive study and data collection on the pituitary gland: A promising prospect revealed by surveying the fish market during the monsoon season. *International Journal of Experimental Research and Review*, 29, 73–79. <https://doi.org/10.52756/ijerr.2022.v29.008>

Basak, A., & **Sanyal, T.** (2022, December 30). *Study of an age-based Covid-19 outbreak model and the effect of demographic structure of a state on infectious disease dynamics*. <https://doi.org/10.1101/2022.12.28.22284021>

#### **B) Thesis Publication:**

**Sanyal T,** Aquatic Weed Biodiversity and its' impact on Fish Productivity in some specific sites of South Bengal; *International Journal of Engineering Sciences & Research Technology* (ISSN: 2277-9655) *pp 1-49*

#### **C) Published Book Chapters:**

Mukherjee, P., Saha, A., Sen, K., Erfani, H., Madhu, N. R., & **Sanyal, T.** (2022). Conservation and prospects of Indian Lacustrine fisheries to reach the Sustainable Developmental Goals (SDG 17). *A Basic Overview of Environment and Sustainable Development*, 98–116. <https://doi.org/10.52756/boesd.2022.e01.010>

Raha, S., Mukherjee, P., Saha, A., & **Sanyal, T.** (2022). Aquatic Macrophytes: An Untold and Valuable Panoramic Resource of Ethnomedicine. *The Basic Handbook of Indian Ethnobotany and Traditional Medicine*, 46–61. <https://doi.org/10.52756/bhietm.2022.e01.004>

Saha, A., Moitra, S., & **Sanyal, T.** (2022). Anticancer and Antidiabetic Potential of Phytochemicals Derived from *Catharanthus roseus*: A Key Emphasis to Vinca Alkaloids. *The Basic Handbook of Indian Ethnobotany and Traditional Medicine*, 1–19. <https://doi.org/10.52756/bhietm.2022.e01.001>

#### **D) Conference Proceedings:**

Poster Presentation and Abstract Publication: *Frontier in Molecular Biology* (IISER, Kolkata), 2013

- 14. Membership of Learned Societies/ Editorial Boards, etc.:** Honorary Assistant Adjunct Professor. Noble International University USA.



**15. Patents:** Nil**16. Awards:**

- i. TEACHER INNOVATION AWARD ZIIEI ( zero-investment innovative ideas) [September 2019].
- ii. TEACHER INNOVATION AWARD ZIIEI ( zero-investment innovative ideas) [March 2020]
- iii. Selected for National Award Teacher (NAT), 2017 by State Selection Committee (SSC).
- iv. The Dhruv Ratan Award April 2021 (With the association with YUVA KHELKUD MAHASANGH Approved by- NITI Aayog Govt. of India, Ministry of MSME Govt. of India.)
- v. LAKSHYAM (Dr. Sarvepalli Radhakrishnan's Best Tr Award-2021)
- vi. IGEN IVD Volunteer Recognition Award 2021 under Research Volunteer Category by The Institution of Green Engineers (IGEN) and The Noble Institution for Environmental Peace.

**17. Other notable activities:**Co-curricular activities

- Conveyer of School Level Science Exhibition in 2007-2011
- Conveyer of Low-Cost Model and TLM, 2011 to 2019 at School Level
- Organized various Workshop month wise as formative work
- Participated in the Inter-University Wetland Photography Competition organized on the occasion of "World Wetland Day -2021" by Department of Botany and IQAC, Shri Shivaji College of Arts, Commerce and Science, Akola (MS) on Date: 2<sup>nd</sup> February, 2021.

Extra-curricular activities

- Plantation.
- In-situ conservation of medicinal plants and butterflies.
- Low-cost model making for everyday science.
- Making of 3D model for education purpose for better understanding biological science by waste management.
- Wall painting on biological sciences, environmental awareness and conservation of resources on class room.



Formerly served 12 years as an Assistant Teacher of Fulia Sikshaniketan, Nadia, West Bengal.

### Project, Achievements & Awards (As a Guide Teacher)

#### • Innovative Project ( 2009)

**Conferrer:** District Youth Science Fair

**Title:** Waste water and its integrated management

**Award:** Achieved 3<sup>rd</sup> place and Bronze Medal & awarded by District Science fair

Achieved Special Prize & awarded by West Bengal State level Science Fair

Achieved Special Prize & awarded by Eastern India Science Fair

#### • Innovative Project ( 2009)

**Conferrer:** National Council of Educational Research and Training (NCERT)

**Title:** Exhibit Waste Water and its Integrated Management

**Award:** Achieved Special Prize & awarded by 36<sup>th</sup> Jaharlal Neheru National Science Exhibition for Children, Kolkata)

**Participant:** i) Sagardwip Das

ii)Arunava Basak

#### • Innovative Project ( 2013)

**Conferrer:** District Youth Science Fair and State youth Science fair

**Title:** Uses of T-DNA Of Ti-plasmid in nitrogenase productions-A Blessing tool for agriculture

**Award:** Achieved 1<sup>st</sup> position (Gold Medal)in District Level

Achieved 1<sup>st</sup> position and Champion in State Level and win 25,000/- prize money for

School and 15,000/- prize money for Students

Achieved special prize & awarded by Eastern India

Achieved Gold Medal in College Level

**Participant:** Rudrarup Das

#### • Innovative Project ( 2014)

**Conferrer:** District Youth Science Fair and State youth Science fair

**Title:** Inhibition of HIV replication cycle by three probable ways:molecular effort to achieve the goal.

**Award:** Achieved 1<sup>st</sup> position (Gold Medal)in District Level& awarded by Nadia



District Youth

**Participant:** i) Deblina Basak  
ii) Soumik Ghosh

**Title:** Use of mathematical modeling in biological system

**Award:** Achieved 2<sup>nd</sup> position (Silver Medal) in same Competition.

**Participant:** Souvik Basak

**Poster Title:** "Global crisis of water and its management"

**Award:** Achieved 1<sup>st</sup> position (Gold Medal )

**Participant:** Debangana Basak

- **Innovative Project ( 2015)**

**Conferrer:** Office of the District Magistrate & District Project Director, RMSA, Nadia

**Title:** Role of mi-RNA in expression of gene : special emphasis on gene silencing or gene knock-down, a future prospect for human welfare and agriculture.

**Award:** Achieved 2<sup>nd</sup> position (Trophy and Cash-5000/-)for School

**Participant:** i) Sayandip Sengupta  
ii) Prince Biswas

- **Innovative Project ( 2016)**

**Conferrer:** District Youth Science Fair and State youth Science fair

**Title:** The wind turbines- A threat to birds and bats : an approach to protect the biodiversity of Volant animals.

**Award:** Achieved 1<sup>st</sup> position (Gold Medal)in District Level

Achieved Special Prize in State Level and win 15,000/- prize money

**Participant:** i) Arindam Ghosh  
ii) Dushyantaraj Bhowmik

- **Innovative Project ( 2017)**

**Conferrer:** 25<sup>th</sup> National Children Science Congress

**Title:** In search of various nutrition rich low-cost food to get rid of from monotonousness of mid-day meal.

**Award:** Special prize

**Participant:** Rounak Basak (Class-VI)

- **Innovative Project ( 2018)**



**Conferrer:** SRM University, Kolkata

**Title :** The Wind Turbine- A Threat to Birds and Bats: An approach to protect the biodiversity of Volant Animal

**Award:** Special prize

**Participant:** Dushyantaraj Bhowmik

- **Innovative Project ( 2019)**

**Conferrer:** Atal Tnkering Fest (Science exhibition cum science model competition)

**Title :** The Wind Turbine- A Threat to Birds and Bats: An approach to protect the biodiversity of Volant Animal

**Award:** Special prize

**Participant:** i) Dushyantaraj Bhowmik

ii) Shamik Mondal

iii) Pratham Majumder

## **18. Participation in Seminars/Symposia/Conferences/Workshops & Participation in OP/RC**

### **A) Participation in Seminars/Symposia/Conferences/Workshops:**

#### **[1] As a Participant:**

- Webinar on 'Say no to plastic' organised by ENVIS resource partner on Environmental Biotechnology, University of Kalyani on 18th July,2020.
- One Day international webinar on "Modern Era of Scientific Research and Medical Ethics to Combat Corona Pandemic" Organized by Department of Chemistry & IQAC, Jangipur College, Murshidabad, W.B., India on 28th July, 2020.
- Participated in 61st Annual Conference of the Indian Society of Hematology & Blood Transfusion (HAEMATOCON Virtual 2020) held from November 20-22, 2020.
- Participated in the One Day international webinar on "The Enigma of COVID-19: Features, Genomic Plasticity and Treatment Modalities" organised by Department of Botany and IQAC, Krishnagar Govt. College on 22nd July, 2020.
- Participated in the One Day State Level webinar on "Physiological Well-Being During the COVID19 Pandemic" organised by Department of Physiology and IQAC, Krishnagar Govt. College on 10th July, 2020.





- vi. Participated in the One Day National webinar on “Interface of Chemistry and Biology: A Molecular Approach” organised by Department of Chemistry and IQAC, Krishnagar Govt. College on 14th July, 2020.
- vii. Participated two days International Webinar ‘Aquatic Ecosystem: Prospect and future challenges’ organized by Marine Ecology Laboratory, Presidency University in association with Aquaphile on 18-19 July, 2020.
- viii. Participated in the One-Day International Webinar on “Immunological and Psychosocial Spectrum of COVID19” organized by The Department of Physiology and IQAC, Krishnagar Government College, held on 23rd August 2020.
- ix. Participated in the One Day international webinar on “The COVID-19 Pandemic: Myths, Science and Hope” organised by Department of Botany and IQAC, Krishnagar Govt. College on 26 th July, 2020.
- x. The Two-Day online workshop on “How to Organize Webinars and Classes on Digital Platforms” organized by Department of Zoology, Jhargram Raj College, Jhargram, India on 23rd & 24th August, 2020.
- xi. Participated in the Webinar on “The Mysteries of the Living Fossil-Horseshoe Crab” conducted by Marine Aquarium and Regional Centre (MARC), Zoological Survey of India, Ministry of forest environment and climate change, Digha, W.B. on 20th June, 2020.
- xii. Participated in the One Day National Webinar on “Fight Against Covid-19” jointly organised by Department of Zoology, Botany & Chemistry in collaboration with IQAC, S.B.S. Government College, Hili.
- xiii. Participated in the One Day International Webinar on “Science, Biology and the World’s Future” organised by the Department of Botany in collaboration with IQAC, Dinabandhu Andrews College on 25th August, 2020.
- xiv. The Importance of Thalassemia and Hemoglobinopathies Screening in ANC Profile held on 24 June 2022 organized by BIORAD.

**[2] As a Resource Person:**

- i. State level webinar “Recent Ecological Challenge & Scientific Knowledge: COVID-19” organised by Department of Botany and Department of Education, Siddhinath Mahavidyalaya, East Medinipur,





W.B.

- ii. 'Montreal Protocol- Keeping us, our food and vaccines cool' held on the occasion of 'World Ozone Day' (36 years of Ozone layer protection) on 16th September, 2021 organised by ENVIS Centre on Biodiversity (Fauna), Zoological Survey of India, Kolkata.

**B) Participation in OP/RC:**

- i. One Month Online **Faculty Induction Programme II** from 22nd February to 23rd March, 2021, organized by UGC-HUMAN RESOURCE DEVELOPMENT CENTRE, UNIVERSITY OF HYEDRABAD, Hyderabad-500046.
- ii. **Refresher Course in Life Sciences**, From 06.09.2022 to 19.09.2022. Organized by: University Grants Commission, Human Resource Development centre (HRDC), Ranchi University.

