



**VIDYASAGAR COLLEGE**

39 SANKAR GHOSH LANE  
KOLKATA

Name DR. ARNAB BASU

|                         |                                                         |                                                                                                                                                                                                                                                 |                     |      |
|-------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------|
| 1                       | Name                                                    | DR. ARNAB BASU                                                                                                                                                                                                                                  |                     |      |
| 2                       | Designation                                             | STATE AIDED COLLEGE TEACHER (GRADE 1)                                                                                                                                                                                                           |                     |      |
| 3                       | Mail ID                                                 | arnabbasu23@gmail.com                                                                                                                                                                                                                           |                     |      |
| 4                       | Contact No                                              | +919836405821                                                                                                                                                                                                                                   |                     |      |
| 5                       | Date of Joining                                         | 30.10.2009                                                                                                                                                                                                                                      |                     |      |
| Academic qualifications |                                                         |                                                                                                                                                                                                                                                 |                     |      |
| 6                       | Degree                                                  | Subject                                                                                                                                                                                                                                         | University          | Year |
|                         | Ph.D                                                    | LIFE SCIENCES                                                                                                                                                                                                                                   | JADAVPUR UNIVERSITY | 2017 |
|                         | M.Phil                                                  | NA                                                                                                                                                                                                                                              | NA                  | NA   |
|                         | MA/M.sc                                                 | ZOOLOGY                                                                                                                                                                                                                                         | CALCUTTA UNIVERSITY | 2009 |
|                         | BA/B.Sc                                                 | ZOOLOGY                                                                                                                                                                                                                                         | CALCUTTA UNIVERSITY | 2007 |
| PH.D. DETAILS           |                                                         |                                                                                                                                                                                                                                                 |                     |      |
| 7                       | Title of the Thesis                                     | ECOLOGICAL ASSESSMENT, PRODUCTIVITY AND CONSERVATION OF THE FISHERY RESOURCES OF ICHAMATI RIVER                                                                                                                                                 |                     |      |
|                         | Field of specialization under subject/ discipline       | FISHERIES AND AQUACULTURE                                                                                                                                                                                                                       |                     |      |
| 8                       | PREVIOUS POSITIONS/Engagement                           | GOVT. APPROVED PART-TIMER LECTURER AT VIDYASAGAR COLLEGE                                                                                                                                                                                        |                     |      |
| 9                       | Google scholar page:                                    | <a href="http://scholar.google.com/citation?hl=en&amp;user=MHkQ9Q8AAAAJ">http://scholar.google.com/citation?hl=en&amp;user=MHkQ9Q8AAAAJ</a>                                                                                                     |                     |      |
| 10                      | ORCID ID                                                | 0000-0002-5381-795X                                                                                                                                                                                                                             |                     |      |
| 11                      | HONOURS AND AWARDS                                      | ANNEXURE 1                                                                                                                                                                                                                                      |                     |      |
| 12                      | CURRENT RESEARCH PROJECT/Field of Research              | ANNEXURE 2                                                                                                                                                                                                                                      |                     |      |
| 13                      | TECHNICAL UNDERSTANDING AND EXPERIENCE                  | 1. Certificate in Information Technology, YCTC, Govt. of West-Bengal.<br>2. Certificate in R-STAT, The Centre for Environment and Economic Development, New Delhi.<br>3. EXPERTISE ON SPSS, PAST, GRAPHPAD AND ORIGINPRO STATISTICAL SOFTWARES. |                     |      |
| 14                      | SUMMARY OF RESEARCH EXPERIENCE                          | 16 YEARS OF RESEARCH EXPERIENCE.<br>RESEARCHED ON DIFFERENT AQUACTIC COMMUNITIES, BIOLOGY OF DIFFERENT FISH SPECIES.                                                                                                                            |                     |      |
| 15                      | EXPERIENCE OF PROJECT MANAGEMENT                        | SUPERVISED M.SC. STUDENT DISSERTATION PROJECTS SINCE 2017.                                                                                                                                                                                      |                     |      |
| 16                      | COMPLETE LIST OF PUBLICATIONS (Maintain Harvard Format) | ANNEXURE 3                                                                                                                                                                                                                                      |                     |      |
| 17                      | Extracurricular Activities                              | PAINTING, PLAYING FOOT-BALL                                                                                                                                                                                                                     |                     |      |
| 18                      | Link to personal website (if any)                       | NA                                                                                                                                                                                                                                              |                     |      |

## **ANNEXURE 1**

### **HONOURS AND AWARDS:**

1. **Awarded 3<sup>rd</sup> prize in National seminar** on ‘Natural and anthropological hazards of environment’ organized by Department of Zoology, Vidyasagar College, Kolkata held on and from 9/12/2011 to 10/12/2011.
2. **Awarded special Achievement prize in International conference** on “India Biodiversity Meet 2015” organized by Indian Statistical Institute, Kolkata held on and from 16/11/15 to 18/11/15.
3. **Awarded 1<sup>st</sup> prize in Taxonomy and systematics in** International conference on ‘Aquatic resources and sustainable management’ organized by Central Calcutta Science & cultural organization for youth in co-operation with Ministry of agriculture, Earth-Sciences, Govt. Of India; Department of Fisheries, Science & Technology, Bio-technology, Govt. Of West Bengal and University of Calcutta held on and from 17/2/16 to 19/2/16.
4. **Winner of World Championship 2019 in Threatened Taxa.**

### **MEMBERSHIPS**

1. Life member of **Zoological Society, Kolkata.**
2. Life member of **Inland Fisheries Society of India.**

## **ANNEXURE 2**

### **Present Research Activities:**

- a. Assessment of environmental pollution levels of different aquatic ecosystems.
- b. Drinking water quality analysis of different districts of West-Bengal.
- c. Reproductive biology of fishes.
- d. Feed formulation and its effect on growth performance of different fishes.
- e. Toxicological effect of heavy metals on fishes.
- f. Biology of fresh water prawns.
- g. Ecology and behaviour on butterflies, birds and fishes.

## ANNEXURE 3

### Publications

#### Journal Articles

1. Sarkar, I., Basu, A., Dutta, S. and Roy, S. (2012). *Male mating activity in freshwater prawn, Macrobrachium dayanum (Henderson, 1893) Palaemonidae: caridae*. International Journal of Aquatic science. 3(2): 56-70.
2. Basu, A., Sengupta, S., Mondal, D., Kundu, G. and Roy, S. (2013). *Primary productivity and alpha-radioactivity in selected managed and unmanaged ponds at East-Calcutta wetlands*. Indian journal of Environmental protection. 33(9): 729-736.
3. Basu, A., Sengupta, S., Dutta, S., Saha, A., Ghosh, P. and Roy, S. (2013). *Studies on macrobenthic organisms in relation to water parameters at East-Calcutta wetlands*. Journal of Environmental Biology. 34(4): 733-737.
4. Basu, A., Mondal, D., Roy, D., Choudhury, S., Datta, S. and Roy, S. (2013). *The composition, diversity and population dynamics of zooplankton in river Ichamati, West Bengal (India)*. International journal of advanced life sciences. 6(4): 380-389.
5. Sarkar, I., Roy, S., Datta, S. and Basu, A. (2013). *Reproduction behaviour and dwarf male mating strategies of Macrobrachium lamarrei lamarrei (H. Milne Edwards, 1837) (Decapoda, Palaemonidae) in laboratory aquaria*. International journal of advanced life sciences. 6(5): 480-489.
6. Bhanja, D., Ghosh, J., Basu, A., Kundu, G., Ghosh, P. and Roy, S. (2013). *Dynamics of plankton community in two adjacent unmanaged ponds of West Bengal, India*. Bioscience Discovery. 5(2): 241-247.
7. Sarkar, I., Basu, A., Dutta, S. and Roy, S. (2015). *Fecundity of two freshwater prawns, Macrobrachium lamarrei lamarrei and M. dayanum*. J. Inland Fish. Soc. India. 47(1): 69-73.
8. Basu, A., Roy, S., Sarkar, I., Dhara, K. and Datta, S. (2015). *Seasonal changes in ovarian maturation of an Asian cat fish, Mystus vittatus (Bloch, 1797) in captivity*. Biolife. 3(3): 620-628.

9. Das, U., Basu, A. and Roy, S. (2016). *Physico-chemical analysis of drinking water in different districts of southern West Bengal, India*. Scientific Research Reporter. 6(2):119-125.
10. Sarkar, I., Basu, A. and Roy, S. (2016). *Chromosome analysis of two freshwater prawns, *Macrobrachium lamarrei lamarrei* (H.Milne Edwards,1837) and *Macrobrachium dayanum* (Henderson,1893)*. J. Inland Fish. Soc. India. 48(1): 102-106.
11. Basu, A., Sarkar, I., Datta, S. and Roy, S. (2018). *Community structure of benthic macroinvertebrate fauna of river Ichamati, India*. Journal of Threatened Taxa.10(8):12044-12055.
12. Das, M., Basu, A. and Ambiya, M.G. (2024). *A study on the diversity of butterfly (Insecta: Lepidoptera) fauna in Buxa Tiger Reserve West Bengal India*. International Journal of Entomology Research. 9 (2): 40-50.
13. Sarkar, I., Datta, T., Choudhary, S.S., Basu, A., Tarafdar, S.K. and Majumdar, S. (2024). *Comparative study of structural variations in gill rakers of different marine and freshwater herbivore and carnivore fishes*. Journal of entomology and Zoology studies.12(5): 118-124.
14. Basu, A., Bej, A., Mondal, M. and Mistry, I. (2024). *Histological analysis of the gonadal Development in fantail Goldfish (*Carassius auratus*)* Journal of entomology and Zoology studies.12(5): 145-151.
15. Basu, A., Mistry, I., Bej, A., and Mondal, M.(2024). *A study on fish marketing system in Kolkata and adjoining areas*. International Journal of Fisheries and Aquatic studies.12(6): 8-15.

### Book chapters

1. Basu, A., Roy, S., Sarkar, I., Das, U. and Datta, S. (2018). *Zooplankton diversity in the upper reaches of river Ichamati, West Bengal. Sustainable Management of Aquatic Resources*. **Chapter 17**. Narendra Publishing House, Delhi, India. Pages 199-210.

2. Sarkar, I., Singh, S., Basu, A. and Roy, S. (2018). *Embryonic development of black molly. Sustainable Management of Aquatic Resources. Chapter 25.* Narendra Publishing House, Delhi, India. Pages 321-328.
3. Sarkar, I., Ray, D., Basu, A. and Roy, S. (2018). *Breeding behaviour and the structure of gonopodium of black molly (Poecilia sp.). Sustainable Management of Aquatic Resources. Chapter 27.* Narendra Publishing House, Delhi, India. Pages 353-365.
4. Basu, A., Roy, S., Datta, S. and Ghosh, D. (2021). *Seasonal variations of alpha radioactivity in the river Ichamati, India. Recent trends on Environmental science and applied ecology. Chapter 11.* Bhumi publication, Maharashtra, India.1: 100-108.