



UNIVERSITY OF CALCUTTA

FACULTY ACADEMIC PROFILE/ CV

Full name of the faculty member: Dr. SUMAN BHUSAN CHAKRABORTY

Designation: Associate Professor in Zoology

Specialisation: Endocrinology

Passport size photograph:



Contact information: Flat Number – 5B, Natural View, 82 Ultadanga Main Road, Kolkata – 700067, Phone No. 9831189211 (mob), e-mail: sumanbc76@gmail.com

Academic qualifications:

College/ university from which the degree was obtained	Abbreviation of the degree
University of Calcutta	M.Sc. in Zoology
University of Calcutta	Ph.D
University of Kaposvár, Hungary	Postdoctoral

Positions held/ holding: N.A.

Research interests:

- i. Use of different phytochemicals for induction of sex reversal, growth promotion and immunostimulation in fish.
- ii. Molecular mechanism of phytochemical-induced sex reversal and growth promotion in tilapia.
- iii. Effect of heavy metal, pesticide contamination and climate change on fish reproductive physiology.

Research guidance:

Number of researchers awarded Ph.D degrees: Nil

Number of researchers pursuing Ph.D: Six

Projects:

Completed projects: 7

Current projects: 2

Membership of Learned Societies:

- i. Life Member of Zoological Society, Kolkata
- ii. Life member of Indian National Science Congress.
- iii. Fellow member of International Foundation for Environment and Ecology.

Patents:

Nil

Awards:

- i. Gold Medal by University of Calcutta for standing First Class First in M.Sc. Examination, 2000 in Zoology.
- ii. Hungarian University and Research Scholarship (Type D) in 2010.
- iii. Best Presentation Award' and 'Best Paper Award' in the 'International Conference on Fisheries and Aquaculture, Sri Lanka in 2014.
- iv. Prof. Hiralal Chaudhuri Medal for Excellence in Innovative Research by The Zoological Society, Kolkata, 2016.
- v. 'The Best Citizens of India Award 2017' by International Publishing House, New Delhi.
- vi. 'Outstanding Faculty in Zoology 2017 Award' by Venus International Foundation, Chennai.
- vii. Awarded 'Young Scientist of the Year 2017 Award' by International Foundation for Environment and Ecology, Kolkata.
- viii. Awarded 'Clean Environment Education and Promotion Award 2018' by International Benevolent Research Foundation, Kolkata; Confederation of Indian Universities, New Delhi; World Environment Foundation, Kolkata.

Tie - ups and collaborations:

- i. Prof. Debangshu Narayan Das, Department of Zoology, Rajib Gandhi University, Arunachal Pradesh.
- ii. Prof. Prabir Kumar Bandyopadhyay, Department of Zoology, Kalyani University, West Bengal.

Research group:

N.A.

Select list of publications: maximum limit of 10 publications (best and latest)

1. **Chakraborty SB**, Hancz C. 2011. Application of phytochemicals as immunostimulant, antipathogenic and antistress agents in finfish culture. *Reviews in Aquaculture* 3: 103-119.

2. **Chakraborty SB**, Horn P, Hancz C. 2014. Application of phytochemicals as growth-promoters and endocrine modulators in fish culture. *Reviews in Aquaculture* 6: 1-19.
3. Das D, Moniruzzaman M, Sarbajna A, **Chakraborty SB**. 2017. Effect of heavy metals on tissue-specific antioxidant response in Indian major carps. *Environmental Science and Pollution Research* 24 (22): 18010-18024. DOI: 10.1007/s11356-017-9415-5.
4. Mukherjee D, Ghosal I, Hancz C, **Chakraborty SB**. 2018. Dietary administration of plant extracts for production of monosex tilapia: searching a suitable alternative to synthetic steroids in tilapia culture. *Turkish Journal of Fisheries and Aquatic Sciences* 18: 267-275. DOI: 10.4194/1303-2712-v18_2_06.
5. Das D, Moniruzzaman M, Mukhopadhyay S, Karan S, Sarbajna A, **Chakraborty SB**. 2018. Impact of metal toxicity on oxidative balance and mitochondrial enzyme function in muscle of tilapia. *Bulletin of Environmental Contamination and Toxicology* 100: 647-652. DOI 10.1007/s00128-018-2303-y.
6. Das D, Das P, Moniruzzaman M, Poddar Sarkar M, Mukherjee J, **Chakraborty SB**. 2018. Consequences of oxidative damage and mitochondrial dysfunction on the fatty acid profile of muscle of Indian Major Carps considering metal toxicity. *Chemosphere* 207: 385-396. <https://doi.org/10.1016/j.chemosphere.2018.05.108>.
7. Moniruzzaman M, Ghosal I, Das D, **Chakraborty SB**. 2018. Melatonin ameliorates H₂O₂-induced oxidative stress through modulation of Erk/Akt/NFκB pathway. *Biological Research* 51: 17. DOI :10.1186/s40659-018-0168-5.
8. Moniruzzaman M, Mukherjee J, Jacquin L, Mukherjee D, Mitra P, Ray S, **Chakraborty SB**. 2018. Physiological and behavioural responses to acid and osmotic stress and effects of *Mucuna* extract in guppies. *Ecotoxicology and Environmental Safety* 163: 37-46. <https://doi.org/10.1016/j.ecoenv.2018.07.053>.
9. Deyashi M, Misra KK, **Chakraborty SB**. 2019. Evaluation of the acute toxicity of Mahua oil cake aqueous extract and its effect on the behavioral responses of the freshwater grapsid crab, *Varuna litterata* (Fabricius, 1798). *Environmental Science and Pollution Research* 26: 15631-15640. DOI: 10.1080/13813455.2018.1486428.
10. Mukherjee D, Ghosal I, Moniruzzaman M, De M, **Chakraborty SB**. 2019. Dietary administration of ethanol and methanol extracts of *Withania somnifera* root stimulates innate immunity, physiological parameters and growth in Nile tilapia, *Oreochromis niloticus*. *Croatian Journal of Fisheries* 77. *Online first*.