

Curriculum Vitae

Dr. Arup Mistri

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Academic Qualifications:

Degree	Discipline	University/Institution	Year
Ph.D.	Zoology (Fish Biology)	Banaras Hindu University	2018
M.Sc.	Zoology (Fish Biology Spl)	Banaras Hindu University	2012
B.Sc.	Zoology (H)	The University of Burdwan	2010

Research Area:

- Fish Biology
- Wound Healing
- Aquatic Toxicology

Research Interests:

My research is focused on the **Biology of Teleosts**. It includes emphasis on the study of morphology, micro-anatomy and histochemical characteristics of various cellular components and functional importance of the epidermis and gills in teleosts. These would help to understand their potential physiological adjustments with respect to their ecological niche.

In addition to this work, I am also working on the effect of different herbal products on healing of cutaneous wound in Indian major carps. Application of herbal products can stimulate tissue repair processes and may help in achieving rapid and complete healing of wounds in fish.

I am also interested to study the aspects of **Environmental Toxicology** using fish as a model. Effects of different pollutants/toxicants on non-target organisms e.g., fish are still limited. Fish are particularly important target of different pollutants, as they are exposed via wastewater residues over their whole life. Therefore, efforts are being made to investigate the potential toxic effects of several emerging contaminants to identify and characterize the toxico-pathological alterations operated in different fish species.

Research Projects (Principal Investigator):

- *Role of certain herbal products in the healing of cutaneous wound in an Indian major carp.*
Funding Agency: SERB (DST), India. Duration 3years (2022-2025). Amount: Rs 18 Lakhs

Awards / Fellowships:

1. Qualified **Joint CSIR-UGC NET** 2016, for the award of **Junior Research Fellowship (JRF)** in Life Sciences.
2. Qualified **GATE 2011, 2014** in Life Sciences.
3. Qualified **BHU RET** Fellowship, 2012.

Research Publications:

1. Saha, S., Saha, S., **Mistri, A.**, & Saha, NC. (2024). Antioxidant enzyme activity and pathophysiological consequences in the sludge worm *Tubifex tubifex* under acute and sub-lethal exposures to the fungicide Tilt®. **Pesticide Biochemistry and Physiology**, 198, 105738.
2. Dhar, S., Devnath, S., Kumar, V., Roy, S., Rout, A. K., **Mistri, A.**, ... & Behera, B. K. (2023). Bioremediation and Its Application in Aquaculture. In *Biotechnological Tools in Fisheries and Aquatic Health Management* (pp. 197-215). Singapore: Springer Nature Singapore.
3. Lakra KC, **Mistri A**, Banerjee TK & Lal B. (2022). Analyses of the health status, risk assessment and recovery response of the nutritionally important catfish *Clarias batrachus* reared in coal mine effluent-fed pond water: A biochemical, haematological and histopathological investigation. **Environmental Science and Pollution Research 29: 47462-47487.**
4. Mahapatra A, **Mistri A**, Gupta P, Kar S, Mittal S & Singh RK. (2022). Toxicopathological impact of sub-lethal concentrations of lead nitrate on the gill of the catfish *Heteropneustes fossilis*. **Acta Histochemica 124: 151848.**
5. Srivastava A, **Mistri A**, Mittal S & Mittal AK. (2020). Alterations in the epidermis of the carp, *Labeo rohita* (Cyprinidae, Cypriniformes), infected by the bacteria *Aeromonas hydrophila* to an azo dye, Eriochrome black T: A Scanning Electron Microscopic, histopathological and Immunohistochemical investigation. **Journal of Fish Disease 143: 941-953.**
6. **Mistri A**, Kumari U, Mittal S & Mittal AK. (2020). Gill epithelium of an angler catfish, *Chaca chaca* (Siluriformes, Chacidae): Enzyme and Glycoprotein histochemistry. **Anatomia, Histologia, Embryologia 49: 67-79.**
7. Arunima, **Mistri A**, Kumari U, Mittal S & Mittal AK. (2020). Modifications in the gills of hill stream Moth catfish, *Hara hara* (Erethistidae, Siluriformes): A light and scanning electron microscope investigation. **Tissue and Cell 62: 101317.**
8. **Mistri A**, Kumari U, Mittal S & Mittal AK. (2018). Keratinization and mucogenesis in the epidermis of an angler catfish *Chaca chaca* (Siluriformes, Chacidae): A histochemical and fluorescence microscope investigation. **Zoology 131: 10-19.**

9. **Mistri A**, Kumari U, Mittal S & Mittal AK. (2018). Morphological specializations of the epidermis of an angler catfish *Chaca chaca* (Siluriformes, Chacidae) in relation to its ecological niche: A scanning electron microscopic investigation. **Microscopy Research and Technique 81: 439-448.**
10. **Mistri A**, Kumari U, Mittal S & Mittal AK. (2018). Immunohistochemical localization of nitric oxide synthase (NOS) isoforms in epidermis and gill epithelium of an angler catfish, *Chaca chaca* (Siluriformes, Chacidae). **Tissue and Cell 55: 25-30.**
11. Srivastava A, Verma N, **Mistri A**, Ranjan B, Nigam AK, Kumari U, Mittal S & Mittal AK. (2017). Alterations in the skin of *Labeo rohita* exposed to an azo dye, Eriochrome black T: A histopathological and enzyme biochemical investigation. **Environmental Science and Pollution Research 24: 8671-8681.**
12. **Mistri A**, Verma N, Kumari U, Mittal S & Mittal AK. (2016). Surface ultrastructure of gills in relation to the feeding ecology of an angler catfish *Chaca chaca* (Siluriformes, Chacidae). **Microscopy Research and Technique 79: 973-981.**

Paper presented in Conferences:

Oral presentations

1. **International Conference on Advances in Zoological Research (ICAZR) and Workshop on Real-Time PCR.** Department of Zoology, Aligarh Muslim University, Aligarh - 202 002, India. (March 9-10, 2019).
2. **9th International Conference on Environment and Ecology (ICEE 2023).** The University of Burdwan, Golapbag Capmpus, West Bengal-713104, India. June 22- 24, 2023.

Poster Presentations

1. **National Symposium on Behavioural Ecology: Molecules to Organisms & 38th Annual Conference of Ethological society of India.** Banaras Hindu University, Varanasi, India. (November 7-9, 2014).
2. **First International conference on advance food science and technology.** Kottayam (Kerala), India. (November 20-22, 2015).
3. **5th International Symposium on Cage Aquaculture in Asia (CAA5).** CMFRI Kochi, Kerala. (November 25-28, 2015).
4. **ASEAN Fisheries and aquaculture conference and exposition 2016 & 11th Asian fisheries and aquaculture forum.** Bangkok, Thailand. (August 3-7, 2016).
5. **Indo-German workshop on recent applications of carbohydrates in chemistry and biology (RACCB-2017).** Banaras Hindu University, Varanasi, India. (February 14-16, 2017).
6. **International symposium on environmental, education & biological research for human welfare (EEBRHW-2018).** Banaras Hindu University, Varanasi, India. (March 25-

26, 2018).

Training courses / Workshops attended:

1. Participated in “**UGC Sponsored Six days workshop on Research Methodology and SPSS**”. Jamal Mohammed College, Tiruchirappalli, Tamil Nadu. (October 20-25, 2016).
2. Participated in one day workshop on “**Awareness and sensitization towards use of animals in teaching and research as per CPCSEA and UGC Guidelines**”. Department of Zoology, Institute of Science, Banaras Hindu University. (April 16, 2018).

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