



Personal Information

Name	Dr. Tuhin Bhadra
Current Position	Assistant Professor of Geography, Adamas University, Kolkata 126
Home Address	Baidya Para Road, Baruipur, Ward No-16, South 24 Parganas, Kolkata 144
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E -Mali ID	tuhinbhadra.au@gmail.com tuhin.bhadra@adamasuniversity.ac.in

DOB: 20th April 1988

Nationality: Indian

Teaching Experience

Feb. 2019 - Present

- Assistant Professor, Department of Geography, School of Basic and Applied Sciences, Adamas University, Kolkata 126

Research Experience

Oct. 2012 – Feb. 2019

- Research Scholar (Junior and Senior Research Fellow) at the School of Oceanographic Studies, Jadavpur University, Kolkata 32

Research Interest

- Fluvial Geomorphology, Hydrological and Hydrodynamic Modelling, Water Resource Management, Mangrove forest ecosystem, Eco-hydrology, Agriculture, Climate Change Impact Assessment and Geoinformatics.

Project Involvement as PI & CO-PI

2022-2025

- **PI** of the **SERB-CRG** project "Assessing the Potential of River Restoration and Reconnection in the Western Ganges Delta towards Improving Freshwater Availability for Sustainable Agriculture and Mangrove Forest Ecosystem in the Indian Sundarbans". *Funded by SERB-DST, Govt. of India.*

2021-2023

- **PI** of the **SEED** project "Micro level planning for sustainable flood management in Ghatal block, West Medinipur." *Funded by Adamas University, Kolkata.*

2021-2023

- **Co-PI** of the **SEED** project "Sustainable Planning for Managing Health in the Changing Urban Environment - A Case Study of Kolkata Metropolitan Development Authority (KMDA), West Bengal, India." *Funded by Adamas University, Kolkata.*

Thesis Supervision

Ph.D.

- Completed: 1, Ongoing: 4

M.Sc.

- Completed: 20, Ongoing: 12

Project Involvement as Researcher

2018-2019

- Vulnerability Assessment of Mangroves and Corals of West Bengal, Odisha and Andaman Islands. *Funded by DST, Govt. of India.*

2016-2019

- Tidal Energy Resource Mapping in Sundarban Biosphere Area. *Funded by Foreign & Commonwealth Office, UK*

2013-2014

- Impacts of Climate Change in Sundarban Area of West Bengal, India. *Funded by Caritas India*

2012-2014

- Pilot Assessment of Environmental Flows for Sundarban. (Phase I & II) *Funded by IUCN*

2012-2013

- Micro Level Vulnerability Assessment of Kusumtala Mouza, Mousuni Island in Sundarban, West Bengal. *Funded by WWF*

Academic Qualification

Ph.D. (in Science)

2013 - 2019

Jadavpur University

P. G. Diploma (2016)

Jadavpur University

M. Phil (2013)

Jadavpur University

Master's (2010)

Rabindra Bharati University

B. Sc. (2008)

University of Calcutta

- **Thesis Title:** Modelling Freshwater Availability and Demand in the Sundarban Biosphere Reserve, India
- ****Ph.D. Internship at The University of Edinburgh, UK** from June to August 2017 (Hydrodynamic Modelling for Indian Sundarban)
- **Remote Sensing & Geographical Information System** (Rank: 1st)
- **Oceanography and Coastal Management** (Rank:1st)
Specialization: River Hydraulics, Coastal Water Resource Management
- **Geography**
Specialization: Fluvial Geomorphology
- **Geography (Honours)**
Geology (Pass) and Economics (Pass)

Qualified National Exams

CSIR-UGC NET

UGC NET

- JRF in Earth Science (December 2011)
- LS in Geography (June 2012)

Attended Training Courses

International

- Modelling the Complexities of Water Climate & Society, BSRS Summer School 2016, at Bergen University, Norway
- Sustainable Water Management in Rural Landscapes, IGCS Summer School 2015, at Kiel University, Germany

National

- River Hydrodynamic and Nourishment of Beach Morphology using MIKE-11 and MIKE-21 Software, 2017 at River Research Institute, Mohanpur, Nadia, India
- Integrated Catchment Modelling, 2015 at National Institute of Hydrology (NIH), Roorkee, India
- Groundwater Modelling using MODFLOW and MIKESHE, 2015 at National Institute of Hydrology (NIH), Roorkee, India
- Statistical Data Analysis Methods, 2015 at Indian Statistical Institute (ISI), Kolkata, India
- Advances in Numerical Simulation Techniques for Hydraulics, Hydrology and Water Resources Management, 2015 at Indian Institute of Technology (IIT), Kharagpur, India

Software Skill

- Arc GIS, Arc-View GIS, Erdas Imagine
- SWAT, HEC-RAS, Arc-Hydro, Mike 11, Mike 21, CROP-WAT

Survey Skill

- River Bathymetric Survey & Cross-section Survey using Eco-Sounder and ADCP, Velocity Measurement using Current Meter and ADCP, Land Survey using Dumpy Level and Household Survey.

Awards & Honours

2019

- Overseas Travel Grant of the National Centre for Groundwater Research and Training, Australia to attend the Australian Groundwater Conference 2019

2018

- American Geophysical Union (AGU) Student Travel Grant to attend AGU Fall Meeting 2018 in Washington D.C., USA.

2017

- Newton-Bhabha Fellowship (British Council, UK & Govt. of India) to attend the PhD internship at the University of Edinburgh, UK.

2016

- BSRS Fellowship to attend a Summer School at the University of Bergen, Norway.

2015

- DAAD Fellowship to attend a Summer School at the University of Kiel, Germany.

2014

- Received "Best Paper Award" at The National Seminar on Remote Sensing & Environment, organized by DST, Govt. of WB, and Jadavpur University, Kolkata.
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Publications

- **Bhadra, T.**, Mukherjee, K., Dash, P., Saha, J., & Das, R. (2024). Flood Monitoring and Mapping in the Ghatal Region of West Bengal, India. In IOP Conference Series: Earth and Environmental Science (Vol. 1382, No. 1, p. 012002). IOP Publishing.
 - Banerjee, S., **Bhadra, T.**, Saha, A., Mukherjee, K., Sardar, R., Roy, S., & Das, R. (2024). Genus Level Classification of the Mangroves in Indian Sundarbans using Sentinel-2 Multispectral Imagery. In IOP Conference Series: Earth and Environmental Science (Vol. 1382, No. 1, p. 012011). IOP Publishing.
 - Mukherjee, K., & **Bhadra, T.** (2024). A comprehensive analysis of Urban Ecosystem Services and their Valuation—a Case Study on Barasat City, India. In IOP Conference Series: Earth and Environmental Science (Vol. 1382, No. 1, p. 012001). IOP Publishing.
 - **Bhadra, T.**, Banerjee, S., Ghosh, S., Saha, A., Mukherjee, K., Sardar, R., Roy, S. & Das, R. (2023). Monitoring the Mangroves of Indian Sundarbans Using Geospatial Techniques. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-1/W2-2023, 405–412.
 - Bhui, K., **Bhadra, T.**, Samanta, S., & Hazra, S. (2023). Assessing the Tidal Influences on the Coastal Erosion-Accretion Processes in the Indian Sundarban Delta using Hydrodynamic Models and Geoinformatics. *In IOP Conference Series: Earth and Environmental Science*, 1164(1), 012002.
 - Mitra, S., Chowdhury, R. R., Saha, A., Mukherjee, K., & **Bhadra, T.** (2023). GIS-based Valuation of Ecosystem Services in the Lower Delta Plain of West Bengal with Special Reference to Indian Sundarbans. *In IOP Conference Series: Earth and Environmental Science*, 1164(1), 012004.
 - Chatterjee, S., & **Bhadra, T.** (2023). Assessing the Water Quality of Indian Sundarban Estuaries using Remote Sensing Techniques. *In IOP Conference Series: Earth and Environmental Science*, 1164(1), 012006.
 - Acharya, A., Mondal, B. K., **Bhadra, T.**, Abdelrahman, K., Mishra, P. K., Tiwari, A., & Das, R. (2022). Geospatial Analysis of Geo-Ecotourism Site Suitability Using AHP and GIS for Sustainable and Resilient Tourism Planning in West Bengal, India. *Sustainability*, 14(4), 2422.
 - Bhui, K., Hazra, S., **Bhadra, T.**, & Venugopal, V. (2022). Spatio-Temporal Variability of Tidal Velocities in the Rivers of the Indian Sundarban Delta: A Hydrodynamic Modelling Approach. *Journal of the Institution of Engineers (India): Series C*, 1-15.
 - Acharya, A., Pathak, A. K., Mondal, B. K., Pratik, D. A. S. H., & **Bhadra, T.** (2021). Assessing the Economic Impact of Tourism and Verdict Ecotourism Potential of the Coastal Belt of Purba Medinipur District, West Bengal. *Folia Geographica*, 63(2), 82-107.
 - **Bhadra, T.**, Hazra, S., & Barman, B. C. (2021). Assessing the Environmental Flows for the Transboundary River Ichamati. *In Conference GSI* (pp. 139-150).
 - **Bhadra, T.**, Hazra, S., Ray, S. S., & Barman, B. C. (2020). Assessing the groundwater quality of the coastal aquifers of a vulnerable delta: a case study of the Sundarban Biosphere Reserve, India. *Groundwater for Sustainable Development*, 11, 100438.
 - Hazra, S., **Bhadra, T.**, & Ray, S. P. (2019). Sustainable Water Resource Management in the Sundarban Biosphere Reserve, India. In *Ground Water Development-Issues and Sustainable Solutions* (pp. 147-157). Springer, Singapore.
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- **Bhadra, T.**, Mukhopadhyay, A., & Hazra, S. (2017). Identification of river discontinuity using geo-informatics to improve freshwater flow and ecosystem services in Indian Sundarban Delta. In *Environment and earth observation* (pp. 137-152). Springer, Cham.
- Hazra, S., **Bhadra, T.**, Ghosh, S. & Barman, B. C. (2015). Assessing Environmental Flows for Indian Sundarban: A suggested approach. *River Behaviour & Control*, 35, 65-74.

Date: 15.01.2025
Place: Kolkata

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