SUMIT SARKER

SONAPUR ROAD, NOAKHALI 3814, BANGLADESH
Phone: +8801629015976
ssumitssarkerr@gmail.com LinkedIn ResearchGate

EDUCATION

Noakhali Science and Technology University (NSTU), Noakhali 2020–2025
B.Sc. in Oceanography | **CGPA:** 3.81/4.00
Government City College, Chattogram 2017–2019
Higher Secondary Certificate (HSC) | **GPA:** 5.00/5.00
Nasirabad Government High School, Chattogram 2012–2017
Secondary School Certificate (SSC) | **GPA:** 5.00/5.00

RESEARCH EXPERIENCE

Position 1: Research Assistant **Feni District, Bangladesh (Feni Sadar, Fulgazi, Parshuram, Chhagalnaiya, Sonagazi)**
Project: The Unprecedented August 2024 Flood in Eastern Bangladesh: A Multidisciplinary Analysis of Hydrometeorological Drivers, Loss and Damage, Societal Impact Assessment, and Policy Frameworks for Resilience (Under The National Oceanographic and Maritime Institute – NOAMI from August 2025)
Duties: Conducted household surveys, FGDs, and KIIs; led awareness campaigns; collaborated with NOAMI and Korea SHE Foundation to support flood resilience and policy insights.

Position 2: Research Assistant (Ongoing) **Noakhali, Feni, Lakshmipur & Cumilla, Bangladesh**
Project: Flood Susceptibility Mapping Using Remote Sensing, Hydraulic Modeling, and Community-Based Data Collection.
(Under The National Oceanographic and Maritime Institute – NOAMI from April 2025 to Present)
Duties: Conducting flood mapping using remote sensing and GIS; applying MCDA, AHP, HEC-RAS, and HEC-GeoRAS; collecting field data, surveys, and interviews for model validation.

Position 3: Research Assistant (Ongoing) **Noakhali, Feni, Lakshmipur & Cumilla, Bangladesh**
Project: Multi-Hazard Coastal Vulnerability Assessment of Bangladesh Using Geospatial and Participatory Tools. (Under The National Oceanographic and Maritime Institute – NOAMI from April 2025 to Present)
Duties: Contributed to a multi-hazard coastal vulnerability assessment using GIS, remote sensing, and community-based tools. Assisted in field surveys, data analysis, and preparation of vulnerability maps with adaptation recommendations.

Position 3: Research Assistant **Noakhali, Bangladesh**
Project: Identification of Micro plastics in Calanoid Copepod from the Sandwip Channel, Bay of Bengal, Bangladesh. (February 2023 to April 2024)
Duties: Working in the field and collecting water samples; Analyzing Plankton assemblages and water quality; Separating Copepod from plankton assemblages; Extracting micro-plastics from Copepod.

Position 4: Research Assistant **Noakhali, Bangladesh**
Project: Bioaccumulation of Micro plastic in Estuarine Planktons and Associated with Human Health Risk from the Lower Meghna River Estuary. (July 2021 to November 2022)
Duties: Working in the field and collecting water samples; Analyzing Plankton assemblages and water Quality; Separating different types of plankton (gather in group) from plankton assemblages; Extracting micro-plastics from plankton.

ACADEMIC PROJECT

Detection and Analysis of Marine Heatwaves in the Bay of Bengal: ENSO, IOD, and Chlorophyll Dynamics
Course: 4211 (Undergraduate Project)

- Monitored SST anomalies (1982–2025) to detect marine heatwaves (MHWs).
- Analyzed MHW impacts on phytoplankton and coastal ecosystems.
- Assessed MHW frequency, intensity, and duration across ENSO and IOD phases.
- Proposed adaptive strategies for ecosystem and livelihood resilience.
- Investigated correlations between MHW events and chlorophyll-a concentrations using satellite data.

WRITING AND PROPOSAL EXPERIENCE

National Oceanographic and Maritime Institute (NOAMI) Ocean Olympiad 2024: Evaluating The Impact of Diverse Fertilizers on Plankton Abundance and Shrimp Growth Rates in Aquaculture.

- Won 1st Prize

PROFICIENCIES

Hard Skills	**Programming**	**Research oriented**	**Graphics**	**Utilities**
Field Sampling	MATLAB	QGIS	Adobe Photoshop	MS Office
Laboratory Analysis	Python	ArcGIS	Illustrator	Google Workspace
Questionnaire surveys	IBM SPSS	Delft 3D	InDesign	
Lab Teaching	R			
Student Assessment				

POSTER PRESENTATIONS

Presentation 1: Integration of Multi-Criteria Decision Analysis and GIS for Aquaculture Site Suitability in Hatiya Upazila, Noakhali, Bangladesh (Abstract Published in Conference Book)

Venue: 3rd International Conference on Sustainable Fisheries (ICSF) 2025, Faculty of Fisheries, Sylhet Agricultural University, Bangladesh.

Date: 27–28 September, 2025.

Presentation 2: Reviving Coastal Vitality: Unraveling Mangrove Reforestation Effects on Fisheries Biodiversity in Noakhali (Abstract Published in Conference Book)

Venue: 1st International Scientific Conference on Sustainable Aquaculture and Fisheries in Chattogram Veterinary and Animal Sciences University (CVASU), Chattogram, Bangladesh.

Date: 29-30 April, 2025.

Presentation 3: Flood Susceptibility Mapping in Noakhali, Bangladesh Using GIS-Based Multi-Criteria Decision Analysis (MCDA) and The Analytical Hierarchy Process (AHP)

Venue: 1st International Seminar on Blue Economy: Unlocking the Potentials of the Ocean for Sustainable Development of Bangladesh in Bangladesh Maritime University, Senaprangan, Matikata MP Check Post, Dhaka Cantonment in Dhaka, Bangladesh.

Date: 21 April, 2025.

Presentation 4: Phytoplankton responses to extreme weather: Effects in the coastal canal of Noakhali, Bangladesh. (Abstract Published in Conference Book)

Venue: 10th International Conference on Water and Flood Management-ICWFM 2025, Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh.

Date: 22-24 February, 2025.

Presentation 5: Coastal Erosion and Accretion Analysis Using Remote Sensing and GIS: A Case Study of Southern Part of Hatiya Island, Bangladesh.

Venue: World Ocean Day Program 2024, Oceanography Cultural Club, Noakhali Science And Technology University, Bangladesh.

Date: 10 June, 2024.

Presentation 6: Response of Phytoplankton Towards Cyclone in the Tropical Coastal Canal of Bangladesh.

Venue: 1st International Seminar on Climate Change And Environmental Sustainability, Noakhali Science And Technology University, Bangladesh.

Date: 30 April, 2024.

Presenation 7: Evaluating The Impact of Diverse Fertilizers on Plankton Abundance and Vannamei Shrimp Growth Rates in Aquaculture.

Venue: 2nd Comilla University Science Club National Science Festival 2024, Comilla University, Bangladesh.

Date: 24 February, 2024.

Presentation 8: Habitat Assessment of Migratory Birds for Conservation: A Systematic Approach by Monitoring Plankton Distribution in Noakhali, Bangladesh.

Venue: Electronics and Electrical Engineering Day 2024, Electronics and Electrical Engineering Department Association, Noakhali Science And Technology University, Bangladesh.

Date: 31 January, 2024.

AWARDS & HONORS

- University Merit Scholarship (awarded for all 4 semesters, 2024–2025, for outstanding academic performance), Noakhali Science and Technology University (NSTU), Bangladesh
- Best Poster Presentation Award at the 3rd International Conference on Sustainable Fisheries (ICSF) 2025, Faculty of Fisheries, Sylhet Agricultural University, Bangladesh.
- Best Poster Presenter Award in 2nd Comilla University Science Club National Science Festival 2024, Comilla University, Bangladesh.
- Won 3rd place in Poster Presentation at Electronics and Electrical Engineering Day 2024, Electronics and Electrical Engineering Department Association, Noakhali Science and Technology University, Bangladesh.

LEADERSHIP

- **Executive Member** at Research And Development Wing, Noakhali Science And Technology University Science Club.
- **Intern at** Ranking Cell, NSTU
- **Campus Ambassador at** Scholarship School BD.
- **Campus Ambassador** at SOI Academy.
- **General member** at NSTU Research Society**.**
- **General Member** at Cholo Paltai Foundation, NSTU.

LANGUAGES

Bangla: Native | English: Professional

REFERENCES

Imtiaj Ahmed Easty
Assistant Professor,
Department of Oceanography
Noakhali Science and Technology University
Noakhali-3814, Bangladesh
Mobile: +8801521249748
Email: imtiaj.ocn@nstu.edu.bd

Md Mesbah Uddin Bhuiyan
Assistant Professor,
Department of Oceanography
Noakhali Science and Technology University,
Noakhali-3814, Bangladesh
Mobile: +8801722362222
Email: mesbah.ocn@nstu.edu.bd