

Tonmoy Sarker

PhD student & Graduate Teaching Assistant
Department of Civil Environment & Construction Engineering
University of Central Florida (UCF)
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Education

- August 2015 – present University of Central Florida
PhD Student
PhD Major: Water Resources Engineering
Department of Civil Environment and Construction Engineering
Advisor: Dr. Kelly Kibler, Assistant Professor, Department of Civil Environment & Construction Engineering
- August 2013 – August 2015 UNESCO IHE Institute of Water Education, Delft, The Netherlands
MSc. in Water Science and Engineering
Specialization: Flood Risk Management
Erasmus Mundus Masters in Flood Risk Management
Advisor: Dr. Henrik Madsen, DHI Denmark
Master's thesis: Model predictive control for flood management: A case study on Ubol Ratana Reservoir, Thailand
- December 2004 – October 2009 Bangladesh University of Engineering & Technology
BSc. in Water Resources Engineering
Department of Water Resources Engineering
Advisor: Prof. Dr. Md. Khorshed Alam
Bachelor thesis: Effect of river contraction on sediment transport near Mongla port in Pussur Sibsa river system.

Experience

- August 2015 – Present Graduate Teaching Assistant
Department of Civil Environment and Construction Engineering
University of Central Florida
- February 2015 – August 2015 Graduate Research Intern
Water Resources Department, DHI Denmark
- 2012-2013 Hydrological Modeler
Hydro-Met Research and Development

Regional Integrated Multi Hazard Early Warning System (RIMES) for Afro-Asian zone, Thailand

2010-2012	Senior Sector Specialist Disaster Environment & Climate Change Program BRAC Bangladesh
2010	Junior Hydrologist (Bangladesh Project) Climate Risk Management Division Asian Disaster Preparedness Center (ADPC), Thailand
2009	Undergraduate Intern River Engineering Division Institute of Water Modelling (IWM), Bangladesh

Awards and Fellowships

2013 - 2015	Erasmus Mundus Category A Scholarship for Master's study
2005 - 2009	Government of Bangladesh Technical Scholarship for Undergraduate study
2009	Fellowship for training on 'River Bank Protection work' by Asian Development Bank and Department of Water Resources Engineering
2011	Fellowship for training on 'Storm surge modelling' by Japan Meteorological authority and Bangladesh Meteorological Department
2012	Fellowship for serving as a resource person in Asia Pacific Youth Forum on Green Economy, AIT and Small Earth Nepal
2012-2013	Fellowship for coordination of National Monsoon Forum of Bangladesh
2012	Fellowship for training on 'Medium Range' flood forecasting in Bangladesh at flood forecasting and warning center
2013	Fellowship for serving as instructor for GIS and Remote Sensing for Bangladesh Inland Water Transport Authority
2014	Fellowship for attending the USA-Netherlands Education Transfer program by Florida Earth Foundation, South Florida Water Management District, Palm Beach Atlantic University and United States Geological Survey

Publications

Journal paper

- A. **Sarker T. (2015)**, ‘Sedimentation processes at the navigation channel of Mongla port on the Pussur-Sibsa river system in Bangladesh.’ European Academic Research Journal, Volume III, Issue: 1, April 2015, pp: 787 – 798.

Conference

- A. **Sarker T.**, Kibler M., Reinhart D. (2015). Concept mapping of food waste management alternatives within the Food-Energy-Water Nexus, World Environmental and Water Resources Congress 2016, ASCE-EWRI, West Palm Beach, May 22-26, 2016.
- B. Hossain S., **Sarker T.**, Arifuzzaman & Hossain A. (2012). Present Flood Forecasting Lead Time and Its Improvement: The Case of Bangladesh. 1st International Conference on Advances in Civil Engineering 2012 (ICACE 2012), Chittagong University of Engineering and Technology.
- C. **Sarker T.**, Hossain S. and Saifuddin A.K.M (2012). Bangladesh natural disaster chronology and trend analysis. 1st International Conference on Advances in Civil Engineering 2012 (ICACE 2012), Chittagong University of Engineering and Technology.

Presentations and seminars

- A. **Sarker T.** (2011). Community based disaster risk reduction. BRAC BLC, Dhaka, Bangladesh
- B. Shrestha S. and **Sarker T.** (2012). Quantification of Water Energy and Carbon Nexus. Asia Pacific Graduates Youth Forum on Green Economy, Kathmandu, Nepal. 25-29 September, 2012.
- C. **Sarker T.**, Fakhruddin SHM, Gautam D.K., Hossain J. and Khan R.H (2013). Operationalize downstream medium range forecast model and dissemination technique. Training program on medium range and season flood forecasting, Flood Forecasting and Warning Center, Bangladesh Water Development Board, 20-21 August 2013.
- D. **Sarker T.** and Bhattacharya B. (2014). Flood Forecasting and warning practice: Examples from Bangladesh. UNESCO IHE Institute of Water Education, July 2014.
- E. Reinhart D., Kibler KM., **Sarker T.**, Bolyard S. and Ninah C (2015). Food Waste: The Food, Energy, and Water Nexus, NSF Workshop Food Energy and Water Systems, World Bank Headquarters, Washington D.C, USA, 27-28 October 2015.

Other information

- A. **Skills:** Hydrological and hydrodynamic modelling tools: HEC packages, DHI Packages, Deltares Packages; STELLA for Ecological Modelling, GIS: ESRI ArcGIS, QGIS; Programming: Python; Mathematical analysis tool: Matlab and R; Operating system: Windows and Linux, Others: Office software, AutoCAD, Water CAD for design, MODFLOW for Groundwater Analysis etc.
- B. **Language:** Bengali (Mother Tongue), English (2nd Language), German

C. Membership:

Erasmus Mundus Student Association

Institute of Engineers-Bangladesh (M-30602)

Student Member, American Association of Civil Engineers (10427267)

Treasurer, IAHR AIRH UCF Chapter

D. Extra-curricular activities: Nature Photography, Travelling