# Shama E. Haque, Ph.D.

Environmental Scientist and Engineer shama.haque@northsouth.edu

#### **EDUCATION**

### Ph.D., Environmental Science and Engineering (Geochemistry)

2007

The University of Texas at Arlington, USA

• Thesis: Hydrogeochemical evolution of arsenic along groundwater flow paths: linking aqueous and solid phase arsenic speciation

B.S., Civil Engineering 1995

The University of Texas at Austin, USA

#### **EMPLOYMENT HISTORY**

Associate Professor 2018-Date

Department of Civil and Environmental Engineering, North South University, Dhaka, Bangladesh

- Responsible for teaching Solid and Hazardous Waste Management Engineering, Environmental Chemistry, Inorganic Chemistry and Engineering Research courses.
- Involved in research on climate change impacts on the environment, construction and demolition waste management, industrial wastewater management, and hydro-geochemistry research involving the fate and transport of contaminants in sediments, surface water and groundwater resources.

Assistant Professor 2016-2018

Department of Civil and Environmental Engineering, North South University, Dhaka, Bangladesh

• Responsible for teaching Environmental Chemistry, Inorganic Chemistry, Environmental Science and Engineering Research courses.

Lecturer 2011-2012

Department of Earth and Environmental Sciences, Douglas College, New Westminster, BC, Canada

• Responsible for teaching introductory Earth History and Physical Geology courses.

Lecturer 2011-2011

Department of Earth and Ocean Sciences, University of British Columbia, Vancouver, BC, Canada

Course administrator for Earth Science for Engineers course.

### Postdoctoral Research Fellow

2009-2010

Department of Earth and Ocean Sciences, University of British Columbia, Vancouver, BC, Canada

- Involved in a multidisciplinary oil sands mining (Suncor) project that aims to understand the impact of
  process-affected water ingress on metal speciation, redox state, and mobilization. Work involved
  performing detailed mineralogical analyses of sediments, managing project, controlling budget, providing
  work updates to supervisor, presenting findings in conferences, writing scientific journal articles.
- Involved in a biofuel biodegradation study that aimed to understand the fate of generated gases in the subsurface. Responsibilities included managing the project, developing and controlling budget, setting up experiment, planning, organizing and implementing field trips, analyzing data, and mentoring a student.

### **Environmental Scientist/Geochemist in Training**

2008

Amec Earth and Environmental Limited, Saskatoon, SK, Canada

• Participated in hydrocarbon contaminated site investigation projects. Worked involved collecting sediments and groundwater samples for analysis, preparing environmental monitoring reports.

#### Postdoctoral Research Fellow

2007

Department of Geological Sciences, University of Saskatchewan, Saskatoon, SK, Canada

- Involved in a study aiming to identify a geologic fault. Responsibilities included collecting sediment samples, geochemical data analysis/interpretation and determination of distribution of elements of concern.
- Participated in a Uranium mine tailings project (Cameco). Performed initial research on U analysis in tailings samples using asymmetrical flow field-flow fractionation method.

### **Graduate Research and Teaching Assistant**

2003-2007

Department of Earth & Environmental Sciences, The University of Texas of Arlington, Arlington, TX, USA

- Research assistant involved in a multidisciplinary project investigating the evolution of arsenic (As) concentrations and speciation in groundwaters. Responsible for developing a conceptual model of As mobility and speciation along groundwater flow paths based on the field and laboratory studies, planning, organizing and implementing field trips, collecting sediment and groundwater samples for analyses, managing laboratory and training incoming students, writing proposals, reports and scientific journal articles.
- Research assistant involved in a study of surface water quality of the Trinity River, Texas. Responsibilities included collecting groundwater samples and measuring geochemical parameters.
- Teaching assistant for Earth Systems laboratory course. Topics covered: plate tectonics, the formation of different rock types, geologic time, the deep earth, surface geology. Responsible for giving lectures, grading exams and leading student field trips to the Arbuckle Mountains, OK.

# Assistant Civil Engineer 1996-2000

Bangladesh Consultants Limited, Dhaka, Bangladesh

 Involved in multidisciplinary projects including the feasibility study of Road Bridge over the Ganges River (Paksey), and pre-feasibility and feasibility study of bridge over the Meghna River (Bhairab). Responsible for conducting traffic and environmental surveys, assisting in bridge approach road design, and preparing proposals and progress reports.

Student Intern 1995

Bangladesh Consultants Limited, Dhaka, Bangladesh

• Assisted in routine environmental and traffic surveys, and in preparing proposals.

## **PUBLICATIONS**

#### **Published Papers**

 Nazmun, N., Haque, M.S., Haque, S.E. (2024) Groundwater Conservation, and Recycling and Reuse of Textile Wastewater in a Denim Industry of Bangladesh. Water Resources Industry. <a href="https://doi.org/10.1016/j.wri.2024.100249">https://doi.org/10.1016/j.wri.2024.100249</a>

- 2. **Haque, S.E.,** Nahar, N., Haque, M.S. (2024). A study on the waste generation rates and recycling potential for the construction and demolition waste in Dhaka, Bangladesh. Environmental Monitoring and Assessment, 196, 183. <a href="https://doi.org/10.1007/s10661-024-12329-3">https://doi.org/10.1007/s10661-024-12329-3</a>
- 3. **Haque, S.E.,** Nahar, N., Chowdhury, N.N., Sayanno, T.K., Haque, M.S. (2024). Geomorphological changes of river Surma due to climate change. International Journal of Energy and Water Resources. https://doi.org/10.1007/s42108-023-00275-8
- 4. **Haque, S.E.** (2023). The Effects of Climate Variability on Florida's Major Water Resources. Sustainability, *15*, 11364. https://doi.org/10.3390/su151411364
- 5. **Haque, S.E.**, Nahar, N. (2023). Bangladesh: Climate Change Issues, Mitigation and Adaptation in the Water Sector, ACS ES&T Water. <a href="https://doi.org/10.1021/acsestwater.2c00450">https://doi.org/10.1021/acsestwater.2c00450</a>
- 6. **Haque, S.E.,** Shahriar, M.M., Nahar, N., Haque, M.S. (2022). Impact of Brick Kiln Emissions on Soil Quality: A Case Study of Ashulia Brick Kiln Cluster, Bangladesh. Environmental Challenges, 2022-10. <u>DOI:</u> 10.1016/j.envc.2022.10064
- 7. Gazi-Khan, L., **Haque, S.E.** (2022). A review of the current status of water quality and eutrophication in Dhaka's water bodies. International Journal of Students' Research in Technology & Management, 10, 2, 01-09. https://doi.org/10.18510/ijsrtm.2022.1021
- 8. **Haque, S.E.** (2021). How effective are existing phosphorus management strategies in mitigating surface water quality problems in the U.S.? Sustainability, 13, 6565. <a href="https://doi.org/10.3390/su13126565">https://doi.org/10.3390/su13126565</a>
- 9. **Haque S.E.**, Nahar, N., Chowdhury, S., Sakib, A.S., Saif, S., Hasan, S., Gomes, A.S., Nezum, S.T. (2020). Impacts of the Partial Relocation of Hazaribagh tanneries on the Environment and Human Health: Focus on Children and Vulnerable Population. International Journal of Students' Research in Technology & Management. <a href="https://doi.org/10.18510/ijsrtm.2020.841">https://doi.org/10.18510/ijsrtm.2020.841</a>
- 10. Holden, A.A., **Haque**, **S.E.**, Mayer, K.U., Ulrich, A.C. (2013). Biogeochemical processes controlling the mobility of major ions and trace metals in aquitard sediments beneath an oil sand tailing pond: Laboratory studies and reactive transport modeling. Journal of Contaminant Hydrology. <u>DOI: 10.1016/j.jconhyd.2013.04.006</u>
- 11. Willis, S., **Haque, S.**, Johannesson, K. (2011). Arsenic and antimony in groundwater flow systems: A comparative study. *Aquatic Geochemistry*. DOI: 10.1007/s10498-011-9131-6.
- 12. Holden, A., Tompkins, T., **Haque**, S., Perez, L., Sutherland, H., Bowron, M., Biggar, K., Donahue, R., Mendoza, C., Martin, J., Mayer, K.U., Baker, J., Sego, D., Ulrich A. (2010). Fate and transport of process-affected water in out-of-pit talings ponds in the oil sands industry in Canada. Geotechnical News, 29(1): 53-57.
- 13. **Haque**, **S.,** Tang, J., Johannesson, K. (2008). Evaluating mobilization and transport of arsenic in sediments and groundwaters of Aquia aquifer, Maryland, USA. Journal of Contaminant Hydrology, 99: 68-84. DOI: 10.1016/j.jconhyd.2008.03.003
- 14. **Haque, S.,** Tang, J., Bounds, W., Burdige, D., Johannesson, K. (2007). Geochemistry of the Great Dismal Swamp, Virginia, USA: Possible Organic Matter Controls. Aquatic Geochemistry, 13: 289-308. DOI:10.1007/s10498-007-9021-0
- 15. Basu, R., **Haque**, **S.**, Tang, J., Ji, J., Johannesson, K. (2007). Evolution of selenium concentrations and speciation in groundwater flow systems: Upper Floridan (Florida) and Carrizo Sand (Texas) aquifers. Chemical Geology, 246: 147-169. DOI: 10.1016/j.chemgeo.2007.09.010
- 16. **Haque**, **S.**, Johannesson, K. (2006). Arsenic concentrations and speciation along a groundwater flow path: The Carrizo Sand aquifer, Texas, USA. Chemical Geology, 228: 57-71. DOI:10.1016/j.chemgeo.2005.11.019
- 17. **Haque**, **S.,** Johannesson, K. (2006). Concentrations and speciation of arsenic along a groundwater flow-path in the Upper Floridan aquifer, Florida, USA. Environmental Geology, 50: 219-228. DOI:10.1007/s10498-011-9131-6

## **Book Chapters**

- 1. **Haque, S.E.,** Rafi, T.R. (2024). Is Biomass Energy a Boon or Bane for Society: A Comprehensive Analysis. In: Srivastav, A.L., Bhardwaj, A.K., Kumar, M. (eds) Valorization of Biomass Wastes for Environmental Sustainability. Springer, Cham. <a href="https://doi.org/10.1007/978-3-031-52485-1">https://doi.org/10.1007/978-3-031-52485-1</a> 1
- 2. **Haque, S.E.,** Gazi-khan, L., Rashid, H. (2023). Climate Change Mitigation and Adaptation Strategies, the Environment, and Impacts of the COVID-19 Pandemic: A Review of the Literature in Role of Green Chemistry in Ecosystem Restoration to Achieve Environmental Sustainability. Elsevier, UK. <a href="https://doi.org/10.1016/B978-0-443-15291-7.00006-7">https://doi.org/10.1016/B978-0-443-15291-7.00006-7</a>
- 3. **Haque, S.E.** (2023). Historical Perspectives on Climate Change and its Negative Impacts on the Nature. Visualization Techniques for Climate Change with Machine Learning and Artificial Intelligence. Elsevier, UK. <a href="https://www.elsevier.com/books/visualization-techniques-for-climate-change-with-machine-learning-and-artificial-intelligence/srivastav/978-0-323-99714-0">https://www.elsevier.com/books/visualization-techniques-for-climate-change-with-machine-learning-and-artificial-intelligence/srivastav/978-0-323-99714-0</a>
- 4. **Haque, S.E.** (2022). Urban Water Pollution by Heavy Metals, Microplastics and Organic Contaminants in Urban Water Crisis and Management Strategies for Sustainable Development. Elsevier, UK. <a href="https://doi.org/10.1016/B978-0-323-91838-1.00001-4">https://doi.org/10.1016/B978-0-323-91838-1.00001-4</a>
- **5. Haque, S.E.**, Nahar, N. (2021). The Partial Relocation of Hazaribagh Leather Processing Industries A Critical Overview of Recent Environmental and Public Health Concerns. Disaster, Environment and Health. Published by the Institute of Disaster Management and Vulnerable Studies, University of Dhaka.
- 6. **Haque, S.E.** (2020). Hydrogeochemical Characterization of Groundwater Quality in the States of Texas and Florida in Global Groundwater: Source, Scarcity, Sustainability, Security, and Solutions. Elsevier, USA. DOI:10.1016/B978-0-12-818172-0.00021-9
- 7. **Haque, S.E.** (2020). Groundwater Quality in the Megacity Dhaka, Bangladesh: Assessment and Environmental Impact in Groundwater Quality: Assessment and Environmental Impact. Nova Science Publishing, New York. <a href="https://novapublishers.com/shop/groundwater-quality-assessment-and-environmental-impact/">https://novapublishers.com/shop/groundwater-quality-assessment-and-environmental-impact/</a>
- 8. **Haque, S.E.** (2018). An Overview of Groundwater in Bangladesh, in: Mukherjee, A. (Ed.), Groundwater of South Asia. Springer Publishing Company, Singapore. https://doi.org/10.1007/978-981-10-3889-1 13

### Short Paper, Proceedings of International Conference, Encyclopedia Entries

- 1. **Haque, S.E.** (2023) Climate-Change Impact on Florida's Water Resources. Encyclopedia. Available online: https://encyclopedia.pub/entry/47695
- 2. Gazi-Khan, L., Haque, M.S., Nahar, N., **Haque, S.E.** (2022). Wastewater Recycling of a Bangladeshi Denim Factory: A Case Study. Paper ID: 001 WasteSafe, 8<sup>th</sup> International Conference on Integrated Solid Waste & Faecal Sludge Management. Khulna University of Engineering & Technology, Bangladesh; Bauhaus University Weimar, Germany; University of Padova, Italy; International Waste Working Group.
- 3. Nayeem, S.U., Rashid, H., Habib, M.S., **Haque, S.E.**, Nahar, N. (2022). Identification of construction and demolition waste generation rates and recycling and reuse potential: A case of Dhaka City. Paper ID: 1279, International Conference on Advances in Civil Engineering 2022.
- 4. **Haque, S.E.,** Shahriar, M.M., Nahar, N., Sakib, A.S., Saif, A., Gomes, A.S., Hasan, A.S., Nezum, S.T., Mahmud, M.H., Ray, T.K., Rashid, H. (2022). Impact of Ashulia brick kilns' emissions on heavy metals concentrations (cadmium, chromium and nickle) in the neighboring soil environment. Proceedings of International Conference on Research & Innovation in Civil Engineering. Paper ID 82. South University, Chittagong, Bangladesh.
- 5. Holden, A.A., **Haque, S.E.**, Donahue R.B., Ulrich, A.C., (2010). Leaching of trace elements from a clay till aquitard by seepage from an oil sands tailings facility. Proceedings of the 7th International Groundwater Quality Conference. Switzerland. pp. 330-333.

### **Presentations and Abstracts**

1. Gazi-Khan, L., Haque, M.S., Nahar, N., **Haque, S.E.** (2023). Wastewater Recycling of a Bangladeshi Denim Factory: A Case Study. 8<sup>th</sup> International Conference on Integrated Solid Waste & Faecal Sludge Management,

- to be held on next 25 to 26 February 2023 organized by Khulna University of Engineering & Technology, Bangladesh; Bauhaus University Weimar, Germany; University of Padova, Italy; International Waste Working Group.
- Chowdhury, N.N., Sayanno, T.K., Das, A.R., Ahmed, T., Saad, H.M., Haque, S.E., Nahar, N. (2023). Climate Change Induced Flood Disasters in Sunamganj. 16<sup>th</sup> UIU-International Conference on Sustainable Development, Bangladesh.
- 3. Chowdhury, N.N., Sayanno, T.K., Das, A.R., Saad, H.M., **Haque, S.E.**, Nahar, N. (2023). Possible Impacts of Climate Change-Induced Flash Flood on Sunamganj. UBC WEST Conference: Tapping into Water Sustainability. Vancouver, BC, Canada.
- Chowdhury, N.N., Sayanno, T.K., Das, A.R., Saad, H.M., Haque, S.E., Nahar, N. (2023). A sustainable solution to mitigate climate change induced flash flood disasters in Sunamganj, Bangladesh. 9th International Conference on Water and Flood Management (ICWFM). 14 - 16 October, 2023. Bangladesh University of Engineering and Technology (BUET), Bangladesh.
- 5. Rafiq, M.S., Mahmod, A., Mim, F.A., Zayan, M.M. Ahmad, M.F., Nahar, N., **Haque, S.E.** (2023). Assessment of Different Rainwater Management Approaches for a Textile Industry Located in Narayanganj, Bangladesh. 16<sup>th</sup> UIU-International Conference on Sustainable Development, Bangladesh.
- 6. Habib, T., Rashid, H., **Haque, S.E.**, Nahar, N., Haque, M.S. (2023). Ecological Footprint of the Textile Sector of Bangladesh. 16<sup>th</sup> UIU-International Conference on Sustainable Development, Bangladesh.
- 7. Gazi-Khan, L., As-salek, M.Z.A., Wriddhi, S.S., **Haque, S.E.,** Nahar, N. (2023). "Household Waste Separation and Public Attitude: A Case Study of Dhaka City. 9th Asian Undergraduate Research Symposium (AURS9). The International Academic Forum (IAFOR), Singapore.
- 8. Rashid, H., Gazi-Khan, L., Rafi, T.R., Razin, M.M., Nahar, N, **Haque, S.E.** (2023). Challenges of Water Security and Sanitation in the Kutupalong Refugee Camp, Bangladesh: A Literature Based Study. 2023 WEST Conference "Tapping into Water Sustainability". 1416 June 2023, University of British Columbia, Vancouver, BC, Canada.
- 9. Nayeem, S.U., Rashid, H., Habib, T., Haque, M.S., **Haque, S.E.**, Nahar, N. (2022). Identification of construction and demolition waste generation rates and recycling and reuse potential: A case of Dhaka City. 6th International Conference on Advances in Civil Engineering 2022 (ICACE 2022), 21-23 December 2022, CUET, Chittagong.
- 10. Habib, T., Rashid, H., Nayeem, S.U., **Haque, S.E.,** Nahar, N. (2022). The Linkage between Improper Construction and Demolition Waste Management and Surface Water Pollution: A Case Study of Dhaka City, Bangladesh. 2022 WEST Conference: Resiliency in Every Drop. Vancouver, BC, Canada.
- 11. Rafiq, M.S., Mahmood, A., Zayan, M.M., Mim, F.A., Ahmad, F., Nahar, N., **Haque, S.E.** (2022). Assessment of Different Rainwater Management Approaches for a Textile Industry Located in Narayanganj, Bangladesh. 2022 WEST Conference: Resiliency in Every Drop. Vancouver, BC, Canada.
- 12. Rashid, H., Gazi-Khan, L., **Haque, S.E.** (2022). Impact of land use and urbanization activities on freshwater eutrophication: a case study of megacity Dhaka. The Regional Conference in Civil Engineering & Sustainable Development Goals in Higher Education Institution 2021. Universiti Teknologi Malaysia, Malaysia.
- 13. **Haque, S.E.,** Shahriar, M.M., Nahar, N., Sakib, A.S., Saif, A., Gomes, A.S., Hasan, S., Nezum, S.T., Mahmud, M.H., Ray, T.K., Rashid, H. (2022). Impact of Ashulia brick kiln's emissions on heavy metal concentrations (cadmium, chromium and nickel) in the neighboring soil environment. ICRICE Conference Proceedings, Southern University Bangladesh, Chattogram, Bangladesh.
- 14. Gomes, A.L., Saif, A., Hasan, S., **Haque, S.E.**, Nahar, N. (2021). Impact of Covid-19 Pandemic on Waste Management: A Case Study of Dhaka City in Bangladesh. The 6<sup>th</sup> Asian Undergraduate Research Symposium, The International Academic Forum, Tokyo, Japan.
- 15. **Haque, S.E.,** Nahar, N. Chowdhury, S., Sakib A.S., Saif, A., Hasan, S. Gomes, A.S., Nezum, S.T. (2021). Evaluation of the effect of partial relocation of Hazaribagh leather industry: focus on the surrounding environment and public health. ICWFM-2021 Conference, Dhaka, Bangladesh.
- 16. **Haque, S.E.,** Nahar, N., Gomes A.S., Hasan S., Saif, A., Sakib, A.S., Nezum, S.T. (2019). The Impacts of Partial Relocation of Hazaribagh Leather Processing Industries on the Environment and Human Health: Focus on Children and Vulnerable Population. 2019 International Symposium on Environment, Disaster and Health,

- 'Health at Risk in the World of Degraded Environment and Disaster.' The Institute of Disaster Management and Vulnerability Studies, University of Dhaka, Bangladesh.
- 17. Nahar, N., **Haque, S.E.**, Hossain, M.O., Aktar, F. (2019). Assessment of Water Supply and Sanitation Condition of Uttara Lake Slum of Dhaka City. 2019 International Symposium on Environment, Disaster and Health, 'Health at Risk in the World of Degraded Environment and Disaster.' The Institute of Disaster Management and Vulnerability Studies, University of Dhaka, Bangladesh.
- 18. F. Aktar, **S. E. Haque.** (2018). Impact of Urbanization on Water Quality of Uttara Lake, Dhaka, 3<sup>rd</sup> Student Conference on Science and Engineering, Dhaka University, Dhaka, Bangladesh.
- Kone, M., Haque, S., Dlusskaya, E., Ulrich, A.C., Mayer, K.U. (2011). "Geochemical Processes Mediating the Distribution and Mobilization of Major Ions and Trace Metals in the Wood Creek Sand Channel: A Laboratory Column Study". Proceedings of the Geohydro 2011 Conference, pp. 2244-2250 Quebec City, Quebec, Canada, August 28-31.
- 20. **Haque, S.,** Holden, A., Tompkins, T., Mayer, A.C., Ulrich, K., Barker, J. (2010). Biogeochemical impacts of oil sands process water on aguifer and aguitard materials, Goldschmidt Conference, USA.
- 21. **Haque**, **S.**, Tompkins, T., Holden, A., Mayer, K.U., Ulrich, A., Barker, J. 2010. Evaluation of trace element mobility in a sandy aquifer of the Athabasca oil sands, Alberta, GeoCanada Conference Abstracts, Canada.
- 22. **Haque**, **S.**, Tompkins, T., Holden, A., Mayer, K.U., Ulrich, A., Barker, J. 2009. Distribution of metals and metalloids in aquifers impacted by the ingress of process-affected water from oil sands tailings. Geological Society of America (GSA), 41: 327, USA.
- 23. Hund, S., **Haque, S.**, Jones, K, Ulrich, K.U. 2009. Gas generation in sand columns contaminated with small volume releases of ethanol. GSA, 41: 653, USA.
- 24. Tompkins, T., Barker, J., Holden, S., Ulrich, A., Martin, J., Perez, A., **Haque, S.**, Mayer, K.U., Vincent-Lambert, W. 2009. Natural gradient tracer tests to investigate the fate and migration of oil sands process-affected water in a sand aquifer. Gussow Geoscience Conference, Canada.
- 25. Mayer, K.U., **Haque**, **S**., Hund, S., Jones, K. 2009. Examination of influences of gas generation and transport on LNAPL site evolution implications for natural attenuation and groundwater remediation. University Consortium for Field-Focused Groundwater Contamination Research, Annual Meeting, Canada.
- 26. **Haque, S.** Johannesson, K. 2006. Speciation and distribution of arsenic in the Aquia aquifer, Maryland. GSA, 38: 321, USA.
- 27. **Haque, S.** Johannesson, K. 2005. Speciation and distribution of arsenic along a groundwater flow path in the Upper Floridan aquifer, Florida, USA. GSA, 37: 171, USA.
- 28. Johannesson, K., **Haque**, **S.** 2005. Impact of dissolved organic matter on inorganic arsenic speciation: evidence from a blackwater swamp, GSA, 37: 248, USA.
- 29. **Haque, S.** Johannesson, K. 2004. Concentrations and speciation of arsenic along a groundwater flow path in the Carrizo Sand aquifer, Texas, USA. GSA, 36: 28, USA.
- 30. **Haque**, **S.**, M. Smith, Tang, J., Johannesson, K. 2003. Arsenic concentrations and speciation along groundwater flow paths: the Carrizo Sand and Floridan aquifers, Texas and Florida, USA. GSA, 35: 48, USA.
- 31. Smith, M., **Haque**, S., Tang, J., Johannesson, K. 2003. Chromium along groundwater flow paths: the Carrizo Sand and Floridan aquifers, Texas and Florida, USA. GSA, 35: 564, USA.

#### **PROFESSIONAL ACTIVITIES**

• 2017-Date: Associate Editor, Journal of Groundwater for Sustainable Development (Elsevier, Netherlands)

### Referee for

- Chemical Geology
- Applied Geochemistry
- Geochimica et Cosmochimica Acta
- Springer Publishing Company

- Journal of Environmental Management
- International Journal of Soil, Sediment and Water: Documenting the Cutting Edge of Environmental Stewardship

#### **ACADEMIC ACTIVITIES AT NORTH SOUTH UNIVERSITY**

### Undergraduate Research Advisee:

Nafisa N. Chowdhury, Arup R. Das, H.M. Saad, Tamjid Ahmed, Tarsiba K. Sayanno, Abeer I. Arka, Zahid I. Khan, Lameesa Gazi-Khan, Md. Zawad Amin As-salek, Sumaiya Sakisgib Wriddhi, Fahad Chowdhury, Md. Fayyaz Ahmed, Ms. Samin Yasar, Habiba Rashid, Lameesa Gazi-Khan, Shafayet U. Nayeem, Tahsin Habib, Sahil Rafiq, Farzana Mim, Ali Sadman Sakib, Ahsan Saif, Samiha Hasan, Alice S. Gomes, Sadia C. Nezum, Hosna Mahmud, Tamal K. Ray, Farhana Aktar

#### • Committee Member:

- o Scientific/Research Review Committee of the School of Engineering and Physical Sciences
- Board of Accreditation for Engineering and Technical Education (of The Institute of Engineers,
   Bangladesh) accreditation process of Civil Engineering and Environmental Engineering Program
- Civil and Environmental Engineering Curriculum Committee
- Environmental Engineering Course Content Update Committee

### Event Organizer:

- 2019: Presentation titled "Potable Water Supply in Rural Bangladesh Alternative Technological Options", DCEE, NSU
- 2018: The Female Face of Civil Engineering, DCEE, NSU
- o 2017: CIVIL FEST, Seminar co-organizer, DCEE, NSU Newsletter
- o 2016- 2017: Department of Civil and Environmental Engineering Newsletter

# **RESEARCH FUNDING**

- 2023-2024: Haque, S.E. (PI), Nazmun, N. (Co-PI), Riffat, R. (Co-PI). Evaluating the Present Condition of Multi-Purpose Cyclone Shelters and Their Limitations in Cox's Bazar, Bangladesh, for Improving Community Resilience. Fund: 5,00, 000 BDT
- 2023-2024: Nazmun, N. (PI), Haque, S.E. (Co-PI). Investigating the household waste management chain from source (generation) to end (disposal): Case Study Dhaka City. Fund: 5,00, 000 BDT
- 2022-2023: **Haque, S.E.** (PI), Nazmun, N. (Co-PI). Recycling potential of Construction and Demolition Waste: Challenges and Opportunities in Greater Dhaka area. Fund: 5,00, 000 BDT
- 2021-2022: **Haque, S.E.** (PI), Nazmun, N. (Co-PI). Recycling Potential of Construction and Demolition Waste: Challenges and Opportunities in Dhaka City. Fund: 4,00,000 BDT
- 2021-2022: Nazmun, N. (PI), **Haque, S.E.** (Co-PI). Water Management in Textile Industries of Bangladesh: Reuse and Recycle. Fund: 5,00,000 BDT
- 2019-2021: **Haque, S.E.** (PI), Minhaz M. Shahriar (Co-PI), Nazmun, N. (Co-PI). Brick Kilns' Emission on the Neighbouring Environment's Soil Quality. Funding agency: North South University; Fund: 5,00,000 BDT
- 2018-2019 Project: **Haque, S.E.** (PI), Nazmun, N. (Co-PI), Chowdhury, S. (Co-PI). The Impacts of Partial Relocation of Hazaribagh Leather Processing Industries on the Environment and Human Health: Focus on Children and Vulnerable Population. Funding agency: North South University; Fund: 3,50,000 BDT

#### **AWARDS AND HONORS**

- 2007 University Scholar, The University of Texas at Arlington (UTA)
- 2007 College of Science Academic Excellence Award, UTA
- 2006 Outstanding Doctoral Student Award, UTA
- 2006 University Scholar, UTA
- 2005-2007 STEM Doctoral Research Assistant Fellowship, UTA
- 2005 Research Award for Excellence in Research, UTA
- 2005 Teaching Assistant Award for Excellence in Laboratory Instruction, UTA
- 2005 Dean's Excellence Scholarship Award, UTA
- 2004-2007 Rudolf Hermanns Graduate Fellowship, UTA
- 2003-2007 Phi Beta Delta, International Scholar Honor Society, USA
- 2002-2004 Graduate Deans Scholarship, UTA
- 1997 Selected for Commonwealth Scholarship, UK
- 1994 National Honor List, USA
- 1993-present Chi Epsilon, Civil Engineering Honor Society, USA
- 1992-1993 Dean's Honor List, University of Texas at Austin

#### OTHER MENTIONS IN NEWSPAPER AND BULLETIN

- Naznin, M., 2019. News article in The Daily Star titled "How Five Stem Women Shattered the Glass Ceiling".
   International Women's Day Special, 08 March 2019. <a href="https://www.thedailystar.net/supplements/international-womens-day-2019/news/how-fivestem-women-shattered-the-glass-ceiling-1712161">https://www.thedailystar.net/supplements/international-womens-day-2019/news/how-fivestem-women-shattered-the-glass-ceiling-1712161</a>
- The Daily Star, 2019. News article titled "The female faces of civil engineering at NSU", Bulletin Board, 06
   November 2018. <a href="https://www.thedailystar.net/shout/bulletin-board/news/the-female-faces-civil-engineeringnsu-1656988">https://www.thedailystar.net/shout/bulletin-board/news/the-female-faces-civil-engineeringnsu-1656988</a>.
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