

SAAD ABD AR RAFIE

University of Tennessee, Knoxville
Department of Civil and Environmental Engineering
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EDUCATION:

University of Tennessee, Knoxville

Doctoral student, Civil and Environmental Engineering

Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

Bachelor of Science in Civil Engineering (August, 2016)

Major: Environmental Engineering, Minor: Structural Engineering

RESEARCH AND WORK EXPERIENCE:

Graduate Research Assistant (August 2017 – Present)

Mentor: Terry Hazen Ph.D.

University of Tennessee, Knoxville, TN

Research Associate (November, 2016 – July, 2017)

Center for Climate Change and Environmental Research (C3ER),

BRAC University, Dhaka, Bangladesh

- Analyzed RCLimDex generated indices and assessed the risk, vulnerability and integrated risk for the climate affected regions
- Assessed the feasibility and need for community-Based Flood Resilience Innovations in Bangladesh and policy implications of multilateral transboundary water resources agreements
- Prepared project and design feasibility reports and proposals focused on engineered solutions to facilitate adaptation initiatives in the coastal and climate affected regions

Environmental Engineer (September, 2016 – October, 2016)

Kingsley Engineering Services Company, Dhaka, Bangladesh

- Checking designs of effluent treatment plants and sewage treatment plants including multi module sewage treatment facilities.
- Detailed documentation of projects along with reconnaissance studies and mapping
- Design of UASB based Effluent Treatment System for Cotton Knit-Dyeing Factory
- Site assessment (before and after) Implementation and coordinating plant installation

Undergraduate Research Assistant (May 2016 - January, 2017)

Bureau of Research Testing and Consultancy,

Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

- Air quality monitoring at cement sheet factories for safety evaluation
- Reviewed industrial application, risks and prospects of chrysotile asbestos in Bangladesh.

AWARDS, PUBLICATIONS, AND PRESENTATIONS

Awards:

- **Tennessee Fellowship for Graduate Excellence** (August, 2017 – Present)
The University of Tennessee, Knoxville, TN
- **University Technical Scholarship** (February, 2011 – August, 2016)
Bangladesh University of Engineering and Technology, Dhaka
- **The Duke of Edinburgh's Award : Bronze Level** (2014)
The Duke of Edinburgh's Award: Bangladesh Chapter, Dhaka

- **Bangladesh Youth Climate Fellowship** (April, 2013)
Journeys for Climate Justice, Victoria, Australia
- **The Daily Star Award** for Outstanding Academic Achievement (2010)
The Daily Star and Pearson Edexcel, Dhaka

Conference Publications:

- **Saad. A. A. Rafie**, N. Haider, M.N. Islam, A.B.M. Badruzzaman (2016), "Assessing the Energy Values of Sewage Sludge from Pagla Sewage Treatment Plant". BUET-ANWAR ISPAT 1st Bangladesh Civil Engineering SUMMIT 2016, BUET, Dhaka, Bangladesh.
- S. Hossain, A. T. Sarkar, **Saad. A. A. Rafie** and S. H. Rahat, (2014) "Waste Management Models (WMM) and Their Application to Sustainable Waste Management in a Mega City like Dhaka" ([Link](#)).
- S. H. Rahat, A. T. Sarkar, **Saad. A. A. Rafie**, S. Hossain (2014), "Prospects Of Diaper Disposal And Its Environmental Impacts On Populated Urban Area Like Dhaka City" ([Link](#))

Presentation:

- **2nd International Conference on Advances in Civil Engineering (ICACE)**
Presenter, 26-28 December 2014, Chittagong, Bangladesh
"Prospects Of Diaper Disposal And Its Environmental Impacts On Populated Urban Area Like Dhaka City"
Saiful Haque Rahat, Anika Tabassum Sarkar, Saad Abd Ar Rafie, Shahadat Hossain

LEADERSHIP EXPERIENCE:

Volunteer Coordinator (January, 2013 – August, 2016),
Bangladesh Youth Movement for Climate

- Recruited, communicated with and managed volunteers for events organized by the BYMC
- Part of the core team associated with organizational decision making

SKILLS:

Lab: Calorimetry, Elemental Analysis using XRF Spectroscopy and Combustion Analysis, Gravimetry, Basic Interpretation of low and High resolution Hydrocarbon NMR Spectra, Optical Microscopy and Titrimetry.

Field: Sediment and Wastewater Sampling, Surveying, Air Sampling, Snowball Sampling, Participatory Rural Appraisal, Focus Group Discussions, Key informant interviews (semi-structured, unstructured), Textual analysis, Participant observation, EIA Drafting, Field Report Documentation.

Computational: Proficient in Microsoft Word, Power Point, Excel, Sway, Access, Project, Publisher, Visio, AutoCAD, Adobe Photoshop, Illustrator and Premiere Pro, CorelDraw and Prezi. Intermediate in EPANET and ArcMap. Basic Proficiency in MATLAB and SQL, C++, PCSWMM, ArcSWAT, HEC-GeoHMS, RClmDex, NVivo, Stata, Origin.

Languages: Bilingual in English and Bengali.

PROFESSIONAL ORGANIZATION MEMBERSHIP:

Associate Member (July, 2017 – Present)
Membership No. A-19010

The Institution of Engineers, Bangladesh