

Curriculum Vitae of Md. Reaz A. Mullick

1. Personal details

Full name	Md. Reaz Akter Mullick
Nationality	Bangladeshi
Date & Place of birth	19/09/1975 at Khulna, Bangladesh
Sex	Male
Present address	Professor, Dept. of Civil Engineering Chittagong University of Engineering & Technology Chittagong – 4349, Bangladesh E-mail: reazmullick@cuet.ac.bd Cell phone: +88-01726-579-679
Permanent address	40, Sarkar Para Road, Tutpara, Khulna 9100, Bangladesh

2. Academic Qualification

January 2008 – January 2012	Doctor of Philosophy in Water Engineering & Management, : Asian Institute of Technology (AIT), Thailand. Dissertation title: <i>Optimal allocation of water based on economic and environmental criteria: Cases from Bangladesh and Indonesia</i> (Medium of instruction English)
October 2003 – September 2005	M. Sc. in Environmental Sanitation : Center for Environmental Sanitation & Technology, University of Gent, Belgium Obtained with Great Distinction and 78.25% Marks. Thesis undertaken: <i>Low cost treatment of municipal solid waste in Khulna City, Bangladesh.</i> (Medium of instruction English)
June 1993 – June 1997	B. Sc. in Civil Engineering : Bangladesh University of Engineering and Technology (BUET)
Exam held on 2000	Dhaka, Bangladesh, Obtained CGPA 3.56 in scale of 4.00. Thesis undertaken: <i>Arsenic Removal – Performance Evaluation of Nanofilter.</i> (Medium of instruction English)

3. Short course/Training

Completed diploma on University Teaching Qualification (UTQ) organized by UNESCO-IHE, the Netherlands and CUET, Bangladesh.

Attended short course training on Urban Flood Management at UNESCO-IHE Institute for Water Education, The Netherlands, 22 April – 12 May 2013.

4. Awards/Distinctions

Jan'08 to Dec'11:	Norwegian Ministry of Foreign Affairs (NMFA) Scholarship to pursue Doctoral Study at AIT, Thailand.
Sep'03 to Oct'05:	Belgian Technical Co-operation (BTC) Scholarship for the M. Sc. program at University of Gent, Belgium
Jan'96 to Jun'00:	University merit scholarship from BUET for academic and extracurricular excellence.

5. Language Fluency

Language	Speak	Read & Write
Bengali	Mother tongue	Mother tongue
English	Good	Excellent

6. Employment

Duration	Position
Dec'16 to Date	Professor, Dept. of Civil Engineering, Chittagong University of Engineering & Technology (CUET), Bangladesh. Responsibilities include conducting theory and practical courses from Water Resources and Environmental Engineering division and supervise undergraduate and post graduate thesis/research. Taught courses include Water supply and treatment, Water supply and Sanitation, Environmental management, Fluid Mechanics and Hydrology. Carry out water and environmental engineering related consultancies that is done under Bureau of Research Testing and Consultation (BRTC), CUET
Mar'15 to : Nov'16	Associate Professor, Department of Civil engineering, CUET.
Jan'07 to : Feb'15	Assistant Professor, Department of Civil engineering, CUET.
Apr'01 to : Dec'06	Lecturer in the Department of Civil Engineering, CUET.

7. Member in academic and Professional Bodies

Life Fellow (F-12540), Institution of Engineers, Bangladesh (IEB)

Member of the AIT Alumni Association (AITAA)

Member of the Academic Council, CUET

8. Area of Specialization

Integrated Water Resources Management, Watershed Hydrology, Hydrology and Water Resources Modeling, Water Supply System, Irrigation and Drainage Engineering, Environmental Engineering and Management and sustainable development

9. Task Performed

A. Teaching Undergraduate courses

CE – 261: Fluid Mechanics

CE – 262 Fluid Mechanics Sessional (Practical)

CE – 363 Hydrology

CE – 403 Project Planning and Management

Post Graduate courses

CE – 6404 Water Resources System

CE – 6401 Water Res Planning, Economics and Management

DEE – 7501 Challenges in Environmental Engineering

B. Student Research Supervision (Post Graduate)

- i. September 2018 – Md. Panjarul Haque (Optimization of Water Resources in the Karnafuli Irrigation Project Considering Climate Change) Committee Chair
- ii. September 2018 – Ashoke Kumar Biswas (Assessment of Freshwater Vulnerability of the Karnaphuli River due to Environmental Changes) Committee Chair
- iii. November 2018 – Md. Torikul Alam (Flood Hazard Modeling and Runoff Quality Assessment in Selected Areas of Chittagong City) Committee Member
- iv. November 2018 – Ahad Hasan Tanim (Storm surge modeling in the northern Bay of Bengal) Committee Member

10. Additional Duties & Responsibilities

- i. Chairman, Center for River, Harbor and Landslide Research, CUET from July 2017 to July 2019.
- ii. Chairman, Central Purchase Committee, CUET from 15th May 2016 to Date.
- iii. Provost, Sufia Kamal Hall, CUET from 4 Oct 2017 to Date.
- iv. Head, Dept. of Civil and Water Resources Engineering, CUET from Aug 2015 to Aug 2017.
- v. Member, Tender Opening Committee (for procurement of works and Physical services), CUET from 01-08-2013 to Date.
- vi. Test-in-Charge, BRTC, Civil Engineering Department, CUET from 1st July 2002 – 31st August 2003 & 1st April 2014 to Date.
- vii. Assistant Provost, Q.K. Hall, CUET from 9-11-2006 to 07-02-2007.
- viii. Shahid Tareq Huda Hall, CUET from 01-11-2011 to 31-10-2013.
- ix. Sufia Kamal Hall, CUET from 14-07-2014 to 15-11-2015.
- x. Member, Central purchase committee from 12-08-2002 to 12-08-2003, CUET

11. Publications

A. Papers in peer reviewed journals

1. **Mullick, M. R. A.**, Tanim, A.H., Islam, S.M.S. (2019) Coastal vulnerability analysis of Bangladesh coast using fuzzy logic based geospatial techniques. *Ocean & Coast. Management*. 174, 154–169. <https://doi.org/10.1016/j.ocecoaman.2019.03.010>
2. **Mullick, M. R. A.**, Nur, R. M., Alam, J. M., Islam, K. M. A. 2019. Observed trends in temperature and rainfall in Bangladesh using prewhitening approach. *Global and Planetary Change* 172: 104-113. Publisher: Elsevier.
3. **Mullick, M. R. A.**, Babel, M. S., Yudianto, D., Prasad, K. C., Perret, S. R., Triweko, R. W., Wahid, S. M. 2015. Optimal system operation of the drops cascading Konto system, Indonesia. *Journal of Advanced Water Engineering and Research*. Publisher: Taylor & Francis. Doi: <http://dx.doi.org/10.1080/23249676.2015.1033657>
4. **Mullick, M. R. A.**, Perret S. R. & Babel, M. S. 2013. Benefit functions for instream water uses – a case of Teesta River, Bangladesh. *Journal of Advanced Water Engineering and Research* 1(2): 118 – 128. Publisher: Taylor & Francis.
5. Alam M. J. & **Mullick, M. R. A.** 2014. Climate change effects upon massive land and housing development: case of Dhaka, Bangladesh. *International Journal of Climate Change Strategies and Management*. 6 (3), 315 – 331. Publisher Emerald

6. **Mullick, M. R. A.**, Babel, M. S. & Perret S. R. 2013. Marginal benefit based optimal water allocation: case of Teesta River, Bangladesh. *Water Policy*, 15(6): 126-146. Publisher: IWA.
7. Babel, M. S., Chien, N. D., **Mullick, M. R. A.**, Nanduri, U. V. 2012. Operation of Hydropower System considering Environmental Flow Requirements. *Hydroenvironment Research*, 6(1):63-73. Publisher: Elsevier.
8. **Mullick, M. R. A.**, Khattak, M. S. & Huq, Zia-ul. 2012. Considering environmental flow for water resources management in South Asia: Current status and challenges. *Journal of Engineering & Applied Sciences*, 31(1): 37 – 44. Publisher: University of Engineering and Technology, Peshawar.
9. **Mullick, M. R. A.**, Babel, M. S. & Perret S. R. 2011. Discharge-based economic valuation of irrigation water: evidence from the Teesta River, Bangladesh. *Irrigation and Drainage*, 60(4): 481-492. Publisher: Wiley-InterScience
10. Pal, S. K. & **Mullick, M. R. A.** 2011. Climate change consequences on hydrology: a pilot study from Bhola district, Bangladesh, *International Journal of Hydrological Science and Technology*, 1(3/4): 260 – 271. Publisher: Inderscience.

B. Book Chapter

1. **Mullick, M. R. A.**, Babel, M. S. & Perret, S. R. 2009. Managing the competing water demands from offstream & instream users – a conceptual framework. In Blöschl, G., Van De Giesen, N., Muralidharan, D., Ren, L., Seyler, F., Sharma, U., & Vrba, J. (eds.) (2009). *Improving Integrated Surface and Groundwater Resources Management in a Vulnerable and Changing World*. LAHS publication no. 330, pp 327 – 333. ISBN 978-1-907161-01-8, 382 + x pp http://iahs.info/redbooks/a330/iahs_330_0327.pdf

C. Papers in refereed conference/congress/symposium/forum proceedings

1. Islam, S.M.S., Tanim, A.H., Mullick, M.R.A., (2019) Coastline Vulnerability Assessment of Bangladesh, using Gornitz Method. International Conference on Water and Flood Management (ICWFM), BUET, 70-71, 2-4 March 2019
2. Islam, S.M.S., Tanim, A.H., Mullick, M.R.A., (2019) Land Use and Land Cover Classification of Coastal Districts of Bangladesh in a 10m Resolution of Sentinel-2 Satellite Image. International Conference on Planning, Architecture and Civil Engineering, RUET, 9 - 11 February 2019
3. Mullick M. R. A., R. K. Dhar¹ & M. Hossain, (2018) Seasonal Weather Prediction In Bangladesh Using Sst Indices. Proceedings in CD ROM of the 4th International Conference on Advances in Civil Engineering 2018 (ICACE 2018) 19 –21 December 2018, CUET, Chittagong, Bangladesh
4. Mullick, M. R. A., Islam, Ashraful. 2018. “Changing pattern of the shoreline geometry as observed in Chittagong district”, Proceedings in CD ROM of the International Conference on Civil Engineering and Sustainable Development 2018, 09-11 February 2018, KUET, Khulna, Bangladesh
5. Tanim, A. H. and Mullick, M. R. A. 2017. “Application of Synthetic Aperture Radar Imagery for Inundation Mapping: a Case of Sylhet Flood Event 2017”, International Conference on Disaster Risk Mitigation, BUET, Paper Id. CDG 039, 23-24 September, 2017.

6. Rahman, M. M., Saem, A. A. & Mullick, M. R. A. 2016. "Spatial explicit assessment of water footprint for rice production in Bangladesh" Proceedings in CD ROM of the 3rd International Conference on Advances in Civil Engineering 2016 (ICACE 2016), 21 – 23 December 2016 CUET, Chittagong, Bangladesh.
7. Barua, S, Mullick, M. R. A. & Barua, A. 2016. "Renewable water resources and an overall water demand availability analysis for Bangladesh", Proceedings in CD ROM of the International Conference on Civil Engineering and Sustainable Development 2016, 12-14 February 2016, KUET, KhuIna, Bangladesh
8. Mullick, M. R. A., Anannya, M. M. & Ahmed H. M. E. 2014. "Cost of Irrigation Water in Bangladesh: A Study from Chittagong and Rangpur District" Proceedings in CD ROM of the International Conference on Civil Engineering and Sustainable Development 2014, 14-16 February 2014, KUET, KhuIna, Bangladesh
9. Khan, A.K.M. Thohidul, Alam., Mullick, M. R. A., 2013. "All Waste One Solution: A Model for Rural Bangladesh," Proceedings of the Waste Safe 2013, International Conference on Solid Waste Management in the Developing Countries 10-12 February 2013, KUET, KhuIna, Bangladesh
10. Mullick, M. R. A., Perret, S. R. & Babel, M. S. 2012. Economic Implications of Meeting Environmental Flow Requirements to In- and Off-stream Water Users: The Case of Teesta River, Bangladesh. Paper presented in 63rd IEC Meeting of the International Commission on Irrigation and Drainage (ICID), June 25-26, Adelaide, Australia.
11. Mullick, M. R. A., Babel, M. S. & Perret, S. R. 2010. Hydro-economic modeling for optimal water allocation among in- and off-stream uses in the Teesta River, Bangladesh. Proceedings of 5th APHW Conference on Hydrology Regime and Water Resources Management in the Context of Climate Change, November 8 – 10, 2010, Hanoi, Vietnam, pp 329 – 339.
12. Mullick, M. R. A., Babel, M. S. & Perret, S. R. 2010. Incorporating discharge-based marginal values of in- and off-stream water uses in optimal water allocation – a case study from Bangladesh. Presented in the Workshop on Cooperation on the Ganges: Barriers, Myths, and Opportunities, November 13 – 14, 2010, National University of Singapore, Singapore.
13. Mullick, M. R. A., Babel, M. S. & Perret, S. R. 2010. Flow characteristics and environmental flow requirements for the Teesta River, Bangladesh. In the Proceedings of International Conference on Environmental Aspects of Bangladesh, University of Kitakishu, Japan, pp.159 – 162.
14. Mullick, M. R. A., Perret, S. R. & Babel, M. S. 2009. Instream water use – how much value does it carry? Presented in the 12th River Symposium, September 21 – 24, 2009, Brisbane, Australia.
15. Mullick, M. R. A. & Babel, M. S. 2009. Environmental Flow in Water Resources Management: Status in South Asia. In ICUS Report 37, the proceedings of 2nd Joint Student Seminar on Civil Infrastructure, July 6, 2009 AIT, Thailand, pp 287 – 296.
16. Mullick, M. R. A. & Alam M. J. 2009. Unplanned Housing Projects Development and Potential Climate Change: Synergistic Effects on Dhaka's Urban Flood. In the Proceedings of International Conference on Climate Change Impacts and Adaptation Strategies for Bangladesh, February 18-19, 2009, Dhaka Bangladesh/pp. 245-253.

17. Pal, S. K. & Mullick, M. R. A. 2009. Climate change impact on coastal hydrology, a case study from Bangladesh. In the proceedings of International Conference on Climate Change Impacts and Adaptation Strategies for Bangladesh, February 18-19, 2009, Dhaka Bangladesh/pp. 237-244.
18. Rahman, M. M., Mullick, M. R. A. & Rahman, M. H. 2001. "Arsenic removal by nanofilter technology for the rural areas of Bangladesh" International Conference on Mechanical Engineering, December 26-28,2001, Dhaka, Bangladesh /pp. II 43-46.

12. Research grant and sponsored project

- i. Directorate of Research and Extension, CUET project, "Variation and Historical Change of Temperature and Rainfall over Bangladesh" May 2014 – November 2015).
- ii. Directorate of Research and Extension, CUET project, Detection of Bangladesh Coastline Change due to Climate Change and Sea Level Rise' (June 2016 – June 2018).
- iii. Directorate of Research and Extension, CUET project, 'Multi Criteria Based Analysis of Coastal Flood Hazard' (November 2017 – February 2019).
- iv. Directorate of Research and Extension, CUET project, 'Remote Sensing Based Rainfall Characterization: Spatial Analysis and Temporal Trend' (Ongoing)
- v. Directorate of Research and Extension, CUET project, 'Quantitative Analysis on Absorption of Toxic Minerals in Soil and lands from the Barapukuria Coal Mining Drainage' (ongoing).
- vi. Directorate of Research and Extension, CUET project, 'Hydraulic Capacity Investigation of Chittagong City Drainage System' (ongoing).
- vii. Directorate of Research and Extension, CUET project, 'Hydrodynamic Modelling for Flash Flood Forecasting in the Surma-Kushiyara River System of Bangladesh' (ongoing).
- viii. UNESCO-IHE, Netherland. UPaRF Category-III project, 'Optimization of water allocation between offstream and instream competing demands (OWATER)'. (October '09 – September '10) (25,000 Euro)
- ix. NICHE Project, 'Capacity Development of Higher Education on IWRM at CUET' funded by NUFFIC and implemented by CUET and UNESCO-IHE, Wageningen University, the Netherlands and AIT, Thailand (October 2011 – April 2016)(800,000 Euro)
- x. Higher Education Quality Enhancement Project (HEQEP), 'Development and/or Improvement of the Teaching and Research Laboratories with State-of-the-art Scientific Equipment to Conduct Innovative Teaching and Research' funded by the World Bank and implemented by CUET and UGC, Bangladesh (January 2012 – December 2013) (BDT 4,14,57,000)


13. Attendance and presentation in Training/Seminar/Workshop

- i. Attended and presented Research Methodology in the Inception Workshop of the Project "Optimization of water allocation between offstream and instream competing demands (OWATER)" September 27-28, 2009, Malang, Indonesia.
- ii. Attended the "Review Workshop on Vulnerability Assessment of Freshwater Resources in South and Southeast Asia" organized by AIT & UNEP, September 12 – 14, 2007, AIT, Thailand.

- iii. Coordinated the “Bio-Sand Filter Program Implementer Workshop” Organized by CUET, University of Victoria, Canada & Centre for Affordable Water & Sanitation Technology, Canada, February 12 – 16, 2006, CUET, Bangladesh.
- iv. Attended the “International Symposium on Wetland pollutant Dynamics and Control (WETPOL)” September 4 – 8, 2005, University of Gent, Belgium.

14. Consultancy Services

- i. April 2001 to date Consultant, Bureau of Research, Testing and Consultation, Department of Civil Engineering, CUET
- ii. 2015 Member of the Consulting Team Traffic Feasibility Study of the Proposed Highway Expressway between Lalkhan Bazar and Shah Amanat International Airport
- iii. 2013 – 2015 Member of the Consulting Team Structural Retrofitting of Factory Buildings in Chittagong



Signature