

# Curriculum Vitae

**Name** : **AYSHA AKTER**

**Educational Background** :

**PhD** ( Civil & Offshore Engineering) ,Heriot Watt University, United Kingdom. [2007- 2011].  
Thesis title: Modelling of Geobags for River Bank Protection

**M. Eng.** (Water Eng. & Management), Asian Institute of Technology, Thailand [2003 – 2005].  
Thesis title: Modeling of Non-Point Source Pollution in the Mun River Basin, Thailand

**M. Eng.** (Civil & Environment, part time), Bangladesh Univ. of Eng. & Tech. (BUET) [2000 – 2003].  
Thesis title: Water supply, Sanitation and Solid waste Management of selected slums in Dhaka City

**B. Sc. Eng.** (Civil), Khulna Univ. of Eng. & Tech. (KUET) [1995 – 2000].  
Thesis title: Cost-effective analysis of concrete by using different types of coarse aggregates

**Professional Experience** :

1. Head, Department of Civil and Water Resources Engineering, Chittagong University of Engineering and Technology (CUET), Chittagong, Bangladesh, (August 2017 to till date) [As an additional responsibility].
2. Chairman, Center for River, Harbor & Landslide Research, Chittagong University of Engineering and Technology (CUET), Chittagong, Bangladesh, (June 2015 to July 2017) [As an additional responsibility].
3. Professor, Department of Civil Engineering, Chittagong University of Engineering and Technology (CUET), Chittagong-4349, Bangladesh, (2016 to till date).
4. Associate Professor, Department of Civil Engineering, Chittagong University of Engineering and Technology (CUET), Chittagong-4349, Bangladesh, (2014 to 2016).
5. Assistant Professor, Department of Civil Engineering, Chittagong University of Engineering and Technology (CUET), Chittagong-4349, Bangladesh, (2007 -2014).
6. Lecturer, Department of Civil Engineering, CUET, (2005-2007).
7. Assistant Engineer, Integrated Food security Program (IFSP), Local Govt. Engineering Department (LGED), Bangladesh, (2001-2003).
8. Structural Design Engineer, Shahidullah and Associates Ltd., Dhaka, Bangladesh, (2000-2001).

**Professional membership** :

1. Life fellow (F/11036), The Institution of Engineers, Bangladesh.
2. Associate Member (ABCS/3249), Bangladesh Computer Society.

**Scholarships** :

1. James Watt scholarship for conducting *PhD* in Civil & Offshore Engineering, Heriot Watt University, UK.
2. Dutch scholarship for pursuing *Masters* in Water Engineering and Management, Asian Institute of Technology, Thailand.
3. Technical Board of Bangladesh scholarship to pursue *undergraduate study* in the Civil Engineering Department, Khulna University of Engineering & Technology, Bangladesh.

## Research grants :

4. **Potentialities of Flow Restoration in Karnafuli-Halda River (FRKR).** UGC-CUET  
Duration: 2017 – 2019. [Ongoing]

3. **Modeling of Groundwater Lowering in Chittagong (MGLC).** UGC.  
Duration: 2016 – 2017. [Completed]

2. **Predicting Non-Revenue Waters in a Distribution System (PNDS).** UGC-CUET  
Duration: 2014 – 2015. [Completed]

1. Alam M. J., Ali M. H., **Akter A.** and Mullick R. A. Capacity development of higher education on Integrated Water Resource Management at CUET, NICHE-BGD-081; funded by the Netherlands Initiative for Capacity Development in Higher Education (NICHE) (2010-2014.)

## List of Publications :

### (a) Journal Papers

15.	<b>Aysha A.</b> and Tanim A. H. (2018). A modeling approach to establish environmental flow threshold in ungauged semidiurnal tidal river. <i>Journal of Hydrology</i> . 558 (2018) 442–459. <a href="https://doi.org/10.1016/j.jhydrol.2018.01.061">https://doi.org/10.1016/j.jhydrol.2018.01.061</a> .
14.	<b>Akter A.</b> and Mohit S. A. and Chowdhury M. A. H. (2017). Predicting Urban Storm Water-Logging for Chittagong City in Bangladesh. <i>International Journal of Sustainable Built Environment</i> . <a href="http://dx.doi.org/10.1016/j.ijse.2017.01.005">http://dx.doi.org/10.1016/j.ijse.2017.01.005</a>
13.	<b>Aysha A.</b> and Tanim A. H. (2016). Estimating Urban Flood Hazard Zones using SWMM in Chittagong City, <i>Technical Journal River Research Institute</i> , Faridpur, Bangladesh, Vol. 13, No. 01, ISSN 1606-9277; 87-101.
12.	<b>Akter A.</b> and Ahmed S. (2015). Potentiality of Rainwater Harvesting for an Urban Community in Bangladesh. <i>Journal of Hydrology</i> . 09/2015; 528, 84-93. <a href="https://doi.org/10.1016/j.jhydrol.2015.06.017">doi:10.1016/j.jhydrol.2015.06.017</a> <i>ISI Journal Impact Factor for 2014</i> :3.053
11.	<b>Akter A.</b> (2014) Analytical explanation of riverbank failure mechanisms. <i>Technical Journal</i> , River Research Institute, 12(1), 80-91, Faridpur, Bangladesh, ISSN 1606-9277.
10.	<b>Akter A.</b> , Pender G., Wright G., Crapper M. (2013). The performance of a geobag revetment, I: Quasi-physical modeling, <i>ASCE's Journal of Hydraulic Engineering</i> , DOI: 10.1061/(ASCE)HY.1943-7900.0000735.
9.	<b>Akter A.</b> , Crapper M., Pender G., Wright G., Wong W. S. (2013). The performance of a geobag revetment, II: Numerical modelling, <i>ASCE's Journal of Hydraulic Engineering</i> , DOI: 10.1061/(ASCE)HY.1943-7900.0000724
8.	<b>Akter A.</b> and Babel M. S. (2012). Hydrological modeling of the Mun River basin in Thailand. <i>Journal of Hydrology</i> , 452-453:232–246. DOI: 10.1016/j.jhydrol.2012.05.059
7.	<b>Akter A.</b> and Ali M. H. (2012). Environmental flow requirements assessment in the Halda River, Bangladesh. <i>Hydrological Sciences Journal</i> . DOI: 10.1080/02626667.2011.644242
6.	<b>Akter A.</b> , Crapper M., Pender G., Wright G., Wong W. S. (2012). Modelling the failure

	modes in geobag revetments. <i>Water Science and Technology</i> , 65(3): 418-425, DOI: 10.2166/wst.2012.812
5.	<b>Akter A.</b> , Pender G., Wright G., Crapper M. (2011). Predicting the hydrodynamic forces on geobag revetments. <i>Journal of Flood Risk Management</i> , 2011, DOI: 10.1111/j.1753-318X.2011.01117.x.
4.	<b>Akter A.</b> , and Ali M. H., (2011). Arsenic Contamination in Groundwater and Its Proposed Remedial Measures. <i>International Journal of Environmental Science and Technology</i> 8(2), 433-43.
3.	Ali M. H., <b>Akter A.</b> , Uddin M. N., and Hasan A. K. M. Q. (2007). Impact of Karnafuli River Water on Human and Aquatic Lives. <i>Journal of Civil &amp; Environmental Engineering</i> , ISSN: 1996-9066, Chittagong Univ. of Eng. & Technology, Bangladesh, 01(01): 42-51.
2.	<b>Akter A.</b> (2005). Sustainable water management: seeking it for urban slum dwellers in developing countries. <i>Stamford Journal of Civil Engineering</i> ISSN: 1997-0714, Bangladesh, 2(1): 25-32.
1.	<b>Akter A.</b> (2004). Integrated Water Resources Management: A Great Challenge to Bangladesh. <i>Stamford Journal of Civil Engineering</i> , ISSN: 1997-0714, Bangladesh, 1(1):31-38.

**(b) Conference Papers**

28.	Aysha A. and Linkon B. (2018) A Review on Sediment Transport Models of Tidal Rivers. In Proceedings of the 1st National Conference on Water Resources Engineering (NCWRE-2018), 21-22 March, 2018, CUET, Chittagong, Bangladesh. (ISBN: 978-1981910410) pp. 128-132.
29.	Linkon B., <b>Aysha A.</b> and M. Misbah U. M. (2018). Interpolation Methods for Groundwater Lowering prediction. In proceedings of the 4th International Conference on Civil Engineering for Sustainable Development (ICCESD-2018), 9~11 February 2018, KUET, Khulna, Bangladesh, ISBN: 978-984-33-6373-2. pp. 203 - 204.
28.	<b>Aysha A.</b> and Tanim A. H. (2016). Drainage vulnerability analysis for a combined sewerage system using SWMM. In <i>proceedings of the 3rd International Conference on Advances in Civil Engineering 2016 (ICACE 2016)</i> , WRE286, 3rd International Conference of Advances in Civil Engineering (ICACE-2016), 21-23 December, 2016,, Cox's Bazar, Bangladesh, pp. 861-866
27.	<b>Aysha A.</b> and Tanim A. H. (2016). Modeling low flow thresholds of Halda-Karnafuli confluence in Bangladesh. <i>Water Security and Climate Change (WSCC): Challenges and Opportunities in Asia Conference</i> , Nov 29–Dec 01, 2016, Asian Institute of Technology, Thailand.
26.	<b>Akter, A.</b> and Tanim, A., H., (2015), Predicting Urban Floods through Tidal Flow Simulation, 1st National Conference of Earthquake and Disaster (NCEED-2015), 99-104.
25.	Tanim, A.H. and <b>Akter, A.</b> (2015) Modeling of storm induced water logging in the selected parts of Chittagong. <i>International Conference on Recent Innovation in Civil Engineering for Sustainable Development (IICSD-2015)</i> . Department of Civil Engineering, DUET, Gazipur, Bangladesh. Paper ID: WRE-017.
24.	Mohit, S.A., Huq, M.A. and <b>Akter, A.</b> (2014) Prediction of water logging in Chittagong city using hydrological model. In <i>proceedings of the 2nd International Conference on Advances in Civil Engineering 2014 (ICACE 2014)</i> , WRE061, 26 – 28 December 2014, CUET, Chittagong, Bangladesh, pp. 1151-1156.

23.	Mahmud, M. A. and <b>Akter, A.</b> (2014) Non-revenue waters prediction for Khulshi area in Chittagong city. In <i>proceedings of the 2nd International Conference on Advances in Civil Engineering 2014 (ICACE 2014)</i> , WRE011, 26 – 28 December 2014, CUET, Chittagong, Bangladesh, pp. 1007-1013.
22.	<b>Akter, A.</b> (2014) Possibilities of successful coastal flexible revetment technology against riverbank failure. In <i>proceedings of the 2nd International Conference on Civil Engineering for Sustainable Development (ICCESD-2014)</i> , 14~16 February 2014, KUET, Khulna, Bangladesh, ISBN: 978-984-33-6373-2. pp. 614 - 620.
21.	Das, R., Hossen, M. B. and <b>Akter, A.</b> (2014) Predicting Bankline Changes in the Karnafuli River Using ARCGIS. In <i>proceedings of the 2nd International Conference on Civil Engineering for Sustainable Development (ICCESD-2014)</i> , 14~16 February 2014, KUET, Khulna, Bangladesh, ISBN: 978-984-33-6373-2. pp. 551-557.
20.	Ahmed, S., Mohit, S. A. and <b>Akter, A.</b> (2014). A study on water logging reduction in Chittagong city. In <i>proceedings of the 2nd International Conference on Civil Engineering for Sustainable Development (ICCESD-2014)</i> , 14~16 February 2014, KUET, Khulna, Bangladesh, ISBN: 978-984-33-6373-2. pp. 400-406.
19.	Mahmud, M. A. and <b>Akter, A.</b> (2014) Predicting non revenue water through leakage detection in a distribution system. In <i>proceedings of the 2nd International Conference on Civil Engineering for Sustainable Development (ICCESD-2014)</i> , 14~16 February 2014, KUET, Khulna, Bangladesh, ISBN: 978-984-33-6373-2. pp. 145-151.
18.	<b>Akter, A.</b> , Islam, G. M. S., Hossain, S. and Haque, M. (2013). Cost Effective Treatment for Textile Wastewater. <i>WasteSafe 2013 – 3rd International Conference on Solid Waste Management in the Developing Countries</i> , Khulna, Bangladesh. ISBN 978-984-33-7045-7, PI.76 (1-5).
17.	Islam, G. M. S. and <b>Akter, A.</b> (2012). Rice Husk Ash as a Sustainable Construction Material for Bangladesh (Forthcoming). <i>1<sup>st</sup> International Conference on Advances in Civil Engineering 2012 (ICACE 2012)</i> , ASEE 057, CUET, Chittagong, Bangladesh. ISSN:2306-059X.
16.	<b>Akter, A.</b> , Islam, G. M. S. and Hoque, S. (2012). Hydrodynamic Performance Study of Geobags in Revetment. <i>ICACE 2012</i> , WRM029, 12 –14 December 2012, CUET, Bangladesh. ISSN:2306-059X
15.	Ali, S. and <b>Akter, A.</b> (2012). Sea Level Rise (SLR) and its impact in Bangladesh. In <i>Proceeding of the 1st seminar on Climate Change Impact and Adaption (CCIA-2012)</i> , DUET, Bangladesh.
14.	Khan, M. N. N., Haider, M. S. and <b>Akter, A.</b> (2012). Cost effective bank protection for Halda River. In <i>International Conference on Civil Engineering for Sustainable Development (ICCESD-2012)</i> , Khulna University of Engineering & Technology (KUET), Khulna, Bangladesh.
13.	Khan M. N. N., Haider M. S. and <b>Akter A.</b> (2012). Comparative laboratory study on hydraulic performances of sandbags and gabions. In <i>International Conference on Environmental Technology &amp; Construction Engineering for Sustainable Development (ICETCESD-2012)</i> , SUST, Bangladesh.
12.	Islam, G. M. S., Islam, M. M., <b>Akter A.</b> and Islam, M. S. (2011). Green construction material – Bangladesh perspective. <i>International Conference on Mechanical Engineering and Renewable Energy 2011 (ICMERE2011)</i> . Chittagong University of Eng. & Tech. (CUET), Bangladesh.
11.	<b>Akter A.</b> , Pender G., Wright G. and Crapper M. (2011). Geobag for sustainable riverbank protection. <i>International Conference on Mechanical Engineering and Renewable Energy 2011 (ICMERE2011)</i> , Chittagong University of Engineering & Technology (CUET), Bangladesh.

10.	<b>Akter A.</b> , Crapper M., Pender G., Wright G. and Wong W. S. (2011). Failure modes observed in geobag revetment using EDEM. <i>12<sup>th</sup> IWA UK National Young Water Professionals Conference</i> , Edinburgh, UK. pp 24-28.
9.	<b>Akter A.</b> , Pender G., Wright G. and Crapper M. (2010). Modelling the hydrodynamic forces on geobag revetments using CES. <i>First European Congress of the IAHR</i> , Edinburgh, United Kingdom.
8.	Ali M. H., <b>Akter A.</b> and Harun S. (2010). Assessing the Halda River Flow in the Contexts of Flood and Fish Habitat, ID 235, <i>1<sup>st</sup> IWA Malaysia young water professionals conference (IWAYWP2010)</i> , Kuala Lumpur, Malaysia.
7.	<b>Akter A.</b> , Wright G., Crapper M. and Pender G. (2009). Failure Mechanisms in Geobag Structures. <i>4<sup>th</sup> IASME/WSEAS International Conference on Water Resources, Hydraulics and Hydrology (WHH'09)</i> , Cambridge, United Kingdom, pp.: 25- 30.
6.	<b>Akter A.</b> (2006). Impact of Existing Water Management on the Socio-Economic Development of Chandgaon in Chittagong, <i>International Conference on Economic Incentives &amp; Water Demand Management</i> , pp: 96-101.
5.	<b>Akter A.</b> and Babel M. S. (2005). Water quality of Mun River, Thailand, <i>9<sup>th</sup> International Conference on Environmental Science and Technology</i> , Rhodes island, Greece, pp.: A44-A49.
4.	<b>Akter A.</b> and Babel M. S. (2005). Hydrologic Parameters And Land Use Reflection on Water Quality At Mun River, Thailand, <i>First International Conference on Environmentally Sustainable Development – ESDev-2005</i> , Abbottabad, Pakistan. pp. 1045-1053.
3.	<b>Akter A.</b> and Mamtaz R. (2004). Sustainable Development of Water Supply, Sanitation and Waste Management: A Challenge to Dhaka Urban Slum Dwellers in Bangladesh, <i>Third International Symposium on New technologies for urban safety of mega cities in Asia</i> , India, pp: 31-40.
2	<b>Akter A.</b> and Mamtaz R. (2004). Integration of Urban Facilities: A Great Sustainable Remedy to Urban Slum Dwellers in Dhaka (Bangladesh), <i>1<sup>st</sup> KMITL International Conference on Integration of Science &amp; Technology for Sustainable Development</i> , Bangkok, Thailand, Vol. 1, pp. 183-186.
1	Mamtaz R. and <b>Akter A.</b> (2004). Water Supply, Sanitation and Solid Waste Management Situation of Slums in Dhaka City, In <i>Contemporary Environmental Challenges</i> . (ISBN 984-32-1665-2) pp. 147-163.

### (c) Research Books

**Akter A.** and Ali M. H. (2008). Review on Arsenic Contamination in Groundwater of Bangladesh and Proposed Remedial Measures, *Modeling Techniques of Rainfall and River Flow and Groundwater Contamination*, Faculty of Civil Engineering, Universiti Teknologi Malaysia, Chapter 3, pp. 39-61.

### Peer Reviewing

1. River Research and Applications
2. Science of the Total Environment
3. Water Science and Technology
4. Proceedings of ICE - Water Management