*Curriculum Vitae of*

**Dr. Rowshan Mamtaz**

Department of Civil Engineering

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#### Profile

About 26 years of experience in Environmental Engineering and Management. Involved in teaching undergraduate and graduate programs and conducting research works in relevant areas since 1991. Well conversant with the topics such as water and wastewater engineering, drainage system design, low-cost sanitation technologies, waste management and pollution control, environmental impact assessment and sustainable development. Undertook projects in relevant areas for various external clients.

Received Commonwealth Scholarship for PhD Research at the University of Strathclyde in Scotland (1997-2000).Conducted a post-doctoral research work at RMIT University on Selection of a Coagulant for Colour Removal from a Manganese Containing Water (July 2008-09).

#### Present Role

Professor, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET) and

Director, Centre for Environmental and Resource Management (CERM), BUET.

**Academic Qualifications**

* Ph.D. (Civil Engineering), University of Strathclyde, UK, 2000 (Research on “Low cost technology for removal of arsenic from water with particular reference to Bangladesh”)
* M. Sc. Engg. (Civil), Bangladesh University of Engineering and Technology (BUET), Dhaka, 1993 (Research on “ Development of Short Duration Rainfall Equation for design of Urban Drainage Systems in Bangladesh”)
* B.Sc. Engg. (Civil), Bangladesh University of Engineering and Technology (BUET), Dhaka, 1991

**Employment Record and**

**Work Experience**

**Bangladesh University of Engineering and Technology (BUET)**

* **Professor, June 2008 – to Date**
* **Associate Professor, October 2000 – May 2008**
* **Assistant Professor, January 1994 – October 2000**
* **Lecturer, June 1991 – January 1994**

Responsible for teaching and research works on environmental engineering in undergraduate and postgraduate level. Environmental engineering courses included water and wastewater engineering, environmental management and sustainable development, solid waste management and environmental auditing. Also offered laboratory courses on relevant subjects. Supervised research topics included water supply and sanitation practices in urban and rural areas, treatment of tannery wastewater, groundwater pollution from landfill sites and environmental impact assessment.

**Director, Centre for Environmental and Resource Management (CERM), BUET, Bangladesh, December 2014 to Date**

Responsibilities as Director of CERM include developing capacity building to promote environmental research, organizing project oriented training program to professionals or industries and other development agencies and developing linkages with national, regional and international environmental organizations.

**Part-time Academic, UTS, Sydney, August 2011 to March 2014**

Responsible for lecturing in the postgraduate course ‘On-site Water and Wastewater Treatment’ and undergraduate course 'Pollution Control and Waste Management'.

**Post-Doctoral Fellow, RMIT, Melbourne, July 2008 to May 2009**

Conducted a post-doctoral research work at RMIT University, Melbourne on Water Treatment.

**Publications**

**Journal Publications:**

* *S.I. Sharif,* ***R. Mamtaz****, F. Khan.(2017),”****Water Sensitive Appliances: A Solution to Water Crisis in Dhaka, Bangladesh”.*** *International Journal of Science and Research (IJSR), Volume:6, Issue:9, September 2017.*
* *Sarker D, Khan M.K.H, Rahman M.M., Saha S, Mamtaz R. (2015), Reduction of Carbon Emission by using Green Bricks: Bangladesh Perspective, International Journal of Engineering and Trends and Technology (IJETT), Vol. 24, No.1, June 2015.*
* Mamtaz R and Chowdhury M.H. (2008)*, “Environmental Pollution at a Solid Waste Disposal Site”,* Journal of Pollution Research, 27(2), 207-212.
* Mamtaz R and Chowdhury H. (2006)*, “Leaching characteristics of solid waste at an urban solid waste dumping site”,* Journal of Civil Engineering, The Institution of Engineers, Bangladesh, page 71-79, vol.34.
* **Mamtaz R** and Bache D.H.(2001), “*Reduction of arsenic in groundwater by coprecipitation with iron”*, Journal of Water Supply and Technology (AQUA) IWA Publishing, vol 50, no.5, p. 313-324.
* **Mamtaz R** and Bache D.H. (2000), “*Low-cost separation of arsenic from water with special reference to Bangladesh”*, Journal of Chartered Institution of Water and Environmental Management, vol. 14, no. 4, p. 260-269.
* **Mamtaz R**, Rahman M.H. and Rahman M.M. (1996), “*Solar desalination plants to drinking water supply in Bangladesh”*, Journal of Indian Association for Environmental Management (IAEM), vol. 23, no. 2, p. 65-70.
* Rahman M.H, **Mamtaz R**, and Alam M.J.B. (1995), “*Frequency distribution for rainfall data and estimation of short duration rainfall depth for different return periods in Banglades*h”, Journal of Water Supply Research Technology (AQUA), UK, vol. 44, no. 5, p. 240-244.
* Rahman M.H, **Mamtaz R.** (1995), “*Intensity-duration-frequency relationships for short duration rainfall and a design chart for determination of pipe sizes in roof drainage systems in Bangladesh”*, Journal of Indian Water Works Association (IWWA), p. 203-209.
* Rahman M.H, **Mamtaz R**, and Alam M.J.B. (1995), “*Estimation of design rainfall for urban storm water drainage works ─ a Bangladesh experience”*, Journal of Indian Water Works Association (IWWA), p. 41-45.

**Conference Publications:**

* Rahman M.S. & Mamtaz R. (2017), 'Modeling of Groundwater Resources of Dhaka City', Proceedings of 14th Global Engineering & Technology Conference, 29-30 December, 2017, Dhaka, ISBN-978-1-925488-60-9
* Wahab S.T., **Mamtaz R**. & Islam M.M. (2016), "*Applicability of Water Sensitive Urban Design (WSUD) in Dhaka City*, 3rd International Conference on Civil Engineering for Sustainable Development (ICCESD), 12-14 February, 2016, Khulna, Bangladesh, p. 7-8.
* Hagare P, Reedy N &**Mamtaz R** (2014), "*Urban Stormwater Harvesting Methods and Their Application*" , International Multi Conference on Innovations in Engineering and Technology (IMICET), International Conference on Civil Engineering (ICCE), Bangalore, India, August 21-23, 2014, p. 79-87.
* **Mamtaz, R**., Khaled, S. Amin, S. & Moazzem, S. (2012),*Heavy Metal Contamination in Soiland Crop of Farmlands Adjacent to Matuail Landfill Site*. 1st InternationalConference on Advances in Civil Engineering 2012 (ICACE 2012), AEE 006, 12-14December 2012, CUET, Chittagong, Bangladesh, ISSN: 2306-059X.
* Mahmud S. O. A. and **Mamtaz R.** (2008), “*Chemical Treatment Options for Tannery Wastewater*”, 2nd International Conference on Chemical Engineering (ICChE), Dhaka, Bangladesh.
* **Mamtaz R.** (2007), “*Towards Development of a Standard for Public Toilets for Developing Countries”*, World Toilet Summit 2007, New Delhi.
* **Mamtaz R.** (2006)**, *“****The Challenge to Sustainable Development of Urban Slums with particular reference to Dhaka*”, The 12th International Sustainable Development Research Conference 2006, Hong Kong.
* **Mamtaz R.** (2004), “*Community based approaches to water and environmental sanitation in slums in Dhaka city”*, People – Centred Approaches to Water and Sanitation, 30th WEDC Conference, Lao PDR, p. 652-655.
* Akter A and **Mamtaz R.** (2004), “*Integration of Urban Facilities: A great Sustainable Remedy to Urban Slum Dwellers in Dhaka (Bangladesh)”,* Proc. of the 1st International Conference on Integration of Science and Technology for Sustainable Development, Bangkok, Thailand, vol. 1, p. 183-186.
* **Mamtaz R** and Akter A. (2004), “*Water Supply, sanitation and solid waste management situation of slums in Dhaka city”*, Contemporary Environmental challenges published by Centre for Environmental and Resource Management (CERM), International Training Network (ITN) Centre, BUET Dhaka, WEDC, Institute of Development Engineering, Loughborough University, UK, P.147-162.
* Rahman H., **Mamtaz R.**and Rahman M. H. (2001), “*Solar Desalination: Experience in Bangladesh*”, International Solar Energy Society 2001 Solar World Congress: Bringing Solar Down to Earth, Australia.
* Rahman M.H **Mamtaz R**. and Ferdousi S.A. (1997),”*Pilot solar desalination plants in Bangladesh”,* 23rd WEDC Conference, Durban, South Africa, p. 178-181.
* Sharif.I.S.,Johora.F.T. ,Haque.F. and **Mamtaz.R**. **“Application of Roof Gardening in order to Reduce Room Temperature as well as Energy Consumption Cost in High Rise Buildings of Dhaka City”.***-12th Global Engineering, Science and Technology Conference, 23-24 December 2016, Dhaka, Bangladesh.*

**Funded Research and Consultancy Projects**

* Performance Evaluation of Zero Liquid Discharge Effluent Treatment Plants of Textile Industries in Bangladesh, February- June , 2017
* Roads for Polder Water Management and Flood Protection, December 2016- June 2017.
* Environmental Impact Assessment of Imperial Hospital, Chittagong, Bangladesh, 2016- 2017
* Hydrological and Morphological Study for the proposed Ghior Bridge over the River Dhaleswari at 6 km of Aricha-Ghior-Tangail Road under Manikganj Road Division, Manikganj, Bangladesh, February 2016.
* Environmental Assessment for the construction of 30 km long 20"DN × 1000 psig Pipeline from Sreepur (Gararan) to Joydevpur CGS, Bangladesh, October 2014.
* Exploratory Research on Sustainable Environmental Sanitation in Bangladesh, 2010 (Client: Ministry of Local Government Rural Development and Cooperatives, Bangladesh).
* Impact Evaluation of Urban and Rural Water and Sanitation Projects, Bangladesh, 2008 (Client: Water Partner International (WPI), a US based organization).
* Environmental Assessment of Siddhirganj 300MW Combined Cycle Power Plant, Bangladesh, 2007 (Client: Electricity Generating Company of Bangladesh and the World Bank).
* Environmental Impact Assessment of a Municipal Landfill Site, Bangladesh, 2007 (Client: Dhaka City Corporation funded by JICA).
* Study of Heavy Metal Contamination of Agricultural Land Adjacent to Matuail Dumping Site, Bangladesh, 2007 (Client: Dhaka City Corporation).
* Study of Groundwater Pollution from On Site Sanitation in Bangladesh, 2004 (Client: ITN).
* Development of a Pilot Solar Desalination Plant for the Coastal Areas in Bangladesh, 1996 (Client: WHO).

**Continued Professional Development (CPD)**

* IEMA approved Lead Auditor course on Environmental Management System (ISO 14000) conducted by Det Norske Veritas (DNV), 2007.
* TETT International Course on Global Developments in Urban Drainage Management conducted by DCE, IIT Bombay, 2003.