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I. EDUCATION, PROFESSIONAL REGISTRATION AND CERTIFICATION

University of Minnesota, Civil/Water Resources Engineering, Ph.D., 1991

University of Minnesota, Civil/Water Resources Engineering, M.S., 1987

Tianjin University (China), Civil/Hydraulic Engineering, B.E., 1982

Diplomate, American Academy of Water Resources Engineers, May 2010-Present

P.E., Civil Engineering, State of Minnesota, July 1992 - Present

II. EMPLOYMENT HISTORY

Rutgers University, School of Engineering, Department of Civil and Environmental Engineering, Assistant Professor, Associate Professor, Professor, July 1992-Present.

Lemna Corporation, Research and Development Engineer, April-July 1992.

University of Minnesota, Department of Civil Engineering, St. Anthony Falls Laboratory, Teaching Assistant, Research Assistant, Research Associate, September 1985-April 1992.

III. AREAS OF RESEARCH, TEACHING, AND SERVICE

Urban Stormwater and Flood Management. Inland and Coastal Water Environment Restoration.

Hydraulics, Hydrology and Water Quality. Water Resources and Environmental Engineering.

IV. SELECTED PUBLICATIONS

Gharieh, K., Jafari, M. A., and Guo, Q. (2015). "Investment in hydrogen tri-generation for wastewater treatment plants under uncertainties." *Journal of Power Sources*, Vol. 297, pp. 302-314.

Lian, J., Yao, Y., Ma, C., and Guo, Q. (2014). "Reservoir Operation Rules for Controlling Algal Blooms in a Tributary to the Impoundment of Three Gorges Dam." *Water*, Vol. 6, pp. 3200-3223; doi:10.3390/w6103200.

Walsh, S. P., Rowe, A., and Guo, Q. (2014). "Laboratory Scale Study to Quantify the Effect of Sediment Accumulation on the Hydraulic Conductivity of Pervious Concrete." *Journal of Irrigation and Drainage Engineering*, Vol. 140, Issue 6, DOI: 10.1061/(ASCE)IR.1943-4774.0000733.

Zhao, J., Jin, J., Guo, Q., Liu, L., Chen, Y., and Pan, M. (2014). "Dynamic risk assessment model for flood disaster on a projection pursuit cluster and its application." *Stochastic Environmental Research and Risk Assessment*, Vol. 28, Issue 8, pp. 2175–2183, DOI: 10.1007/s00477-014-0881-8.

Zhao, J., Jin, J., Guo, Q., Chen, Y., Lu, M., and Tinoco, T. (2014). "Forewarning model for water pollution risk based on Bayes theory." *Environmental Science and Pollution Research*, Vol. 21, Issue 4, pp 3073-3081, DOI: 10.1007/s11356-013-2222-8.

Li, Y. and Guo, Q. (2012). "Angular Velocity Formula for Turbulent Vortex Chamber Flows." *Journal of Hydraulic Engineering*, ASCE, Vol. 138, No. 5, 467–470.

- Roseen, R. M., Ballestero, T. P., Fowler, G. D., Guo, Q., and Houle, J. (2011). Sediment Monitoring Bias by Autosampler in Comparison with Whole Volume Sampling for Parking Lot Runoff. *Journal of Irrigation and Drainage Engineering*, ASCE, Vol. 137, No. 4, pp. 251-257.
- Sankararamakrishnan, N. and Guo, Q. (2005). "Chemical Tracers as Indicators of Human Fecal Coliforms at Storm Water Outfalls." *Environment International*, Vol. 31, No. 8, pp. 1133-1140.
- Guo, Q., Fan, C-Y., Raghavan, R., and Field, R. (2004). "Gate and Vacuum Flushing of Sewer Sediment: Laboratory Testing." *Journal of Hydraulic Engineering*, ASCE, Vol.130, No. 5, pp. 463-466.
- Guo, Q. (2002). "Applicability of a Criterion for Onset of River Ice Breakup." *Journal of Hydraulic Engineering*, ASCE, Vol. 128, No. 11, pp. 1023-1026.
- Guo, Q. and Lordi, P. (2000). "Method for Quantifying Freshwater Input and Flushing Time in Estuaries." *Journal of Environmental Engineering*, ASCE, Vol. 126, No. 7, pp. 675-683.
- Suk, N. S., Guo, Q., and Psuty, N. P. (1999). "Suspended Solids Flux at Estuary-Marsh Boundary: A Long-Term Continuous Measurement." *Estuarine, Coastal, and Shelf Science*, Vol. 49, pp. 61-81.
- Guo, Q. (1997). "Increases of Lead and Chromium in Drinking Water from Using Cement-Mortar Lined Pipes: Initial Modeling and Assessment." *Journal of Hazardous Materials*, Vol. 56, pp. 181-213.
- Guo, Q. (1997). "Sediment and Heavy Metal Accumulation in Dry Stormwater Detention Basin." *Journal of Water Resources Planning and Management*, ASCE, Vol. 123, No. 5, pp. 295-301.
- Guo, Q. and Psuty, N. P. (1997). "Flood-Tide Deltaic Wetlands: Detection of their Sequential Spatial Evolution." *Photogrammetric Engineering and Remote Sensing*, Vol. 63, No. 3, 273-280.
- Guo, Q. and Eckert, J. O. (1996). "Heavy Metal Outputs from a Cement Kiln Co-fired with Hazardous Waste Fuels." *Journal of Hazardous Materials*, Vol. 51, pp. 47-65.
- Guo, Q. and Song, C. (1991). "Dropshaft hydrodynamics under transient conditions." *Journal of Hydraulic Engineering*, ASCE, Vol. 117, No. 8, pp. 1042-1055.
- Guo, Q. and Song, C. (1990). "Surging in urban storm drainage systems." *Journal of Hydraulic Engineering*, ASCE, Vol. 116, No. 12, pp. 1523-1537.

V. SELECTED PROJECTS AS PRINCIPAL INVESTIGATOR

- Guo, Q., Burger, J., Hartmen, JM, Fahrenfeld, N., September 2014 to August 2016
Strengthening Marshes Creek through Green and Grey Infrastructure
U.S. Department of Interior through National Fish and Wildlife Foundation, \$2,720,000
- Guo, Q., Miskewitz, R., Kennish, M. J., Lathrop, R. G., Gong, J., Shaw, J. and Bushek, D., July 2013 to August 2014. Strategies for Flood Risk Reduction for Vulnerable Coastal Populations along Hudson River, Hackensack River, Arthur Kill, Barnegat Bay and Delaware Bay. *New Jersey Department of Environmental Protection, \$528,496*
- Guo, Q., February 2010 to January 2012. Automatic Vacuum Flushing Technology for Combined Sewer Solids. *U.S. Environmental Protection Agency via Water Environment Research Foundation, \$100,000*
- Guo, Q., January 2007-November 2012. Stormwater System Monitoring and Evaluation. *NJ Department of Transportation, \$226,000*

VI. SELECTED PROFESSIONAL ACTIVITIES AND SERVICE

- Chair, Task Committee on Guidelines for Certification of Stormwater Manufactured Devices, American Society of Civil Engineers, 2007-Present
- President, Chinese American Water Resources Association, 2012-2013 (President-Elect, 2010-2011)
- Project Steering Committee Member, Stormwater-Borne Solids, Water Environment Research Foundation, 2004-2007