

Michael A. Robinson, Ph.D., P.E., Associate Professor of Civil Engineering
Department of Engineering and Physics, Harding University
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Professional Preparation

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| Ph.D., Civil Engineering, Virginia Polytechnic Institute and State University | 1996 |
| M.S., Environmental Engineering, Virginia Polytechnic Institute and State University | 1990 |
| B.S., Chemical Engineering, West Virginia Institute of Technology | 1985 |

Professional Engineer (Environmental) - Virginia # 0402 024897

Appointments

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| Harding University, Department of Engineering and Physics Associate Professor – Civil Engineering Program Director of Assessment - Engineering | Aug 2020 - present |
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| Rose-Hulman Institute of Technology, Civil Engineering Department, Associate Professor and Director of M.S. Environmental Engineering Program Co-Director Center for Sustainable Development | Aug 2002 to Aug 2020 |
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| Marshall University, College of Information Technology and Engineering, Assistant Professor | Aug 1999 to Aug 2002 |
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| Virginia Department of Environmental Quality, Office of Ground Water Management | Feb 1998 to Jul 1999 |
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| Engineering Consultant – Jalbert Environmental, Norfolk, VA | Jan 1996 to Jan 1998 |
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| Naval Surface Warfare Center, Dahlgren, VA, | Sep 1985 to Jan 1989 |
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Funded Proposals

Lilly Faculty Success Grant - Rose-Hulman Institute of Technology. “Establishment of the Ecological Systems Laboratory To Promote Sustainable Development in Education and Research” Co-authored with Dr. Ella Ingram (ABBE) and Dr. Penney Miller (Chemistry).

Chesapeake Bay Dune Systems: Evolution and Status. Virginia Department of Environmental Quality, Coastal Zone Management Program. (Research Contract - \$12,000)

Analysis and Exploitation of Geographical Information Systems. West Virginia Department of Transportation and Appalachian Transportation Institute. (\$100,000) (Co- Principal Investigator)

Establishment of pre-construction baseline data as a control for the evaluation of the long-term success of a mitigated constructed wetland site. West Virginia Department of Transportation and Appalachian Transportation Institute. (\$104,000) (Principal Investigator)

Groundwater Nitrogen Movement and Distribution of Discharge in a Coastal Plain Watershed. Environmental Protection Agency, Chesapeake Bay Program. (\$45,000) (Co-Principal Investigator)

A Screening Model for Contaminant Transport in Groundwater/Surface Water Systems. New Jersey Department of Environmental Protection and Energy, Division of Science and Research. (\$53,775) (Co-Principal Investigator)

Publications

Robinson, M., R. Houghtalen, C. Marr, A. Rogacs, and A. Garcia. 2007. Improving Public Safety at Low-Head Dams. *CE News* February 2007 p. 24 – 29. (Underlined authors are undergraduate students participating in Research Experience for Undergraduates, Rose-Hulman Institute of Technology)

Harris, S.A., E.R. Billmeyer, and M.A. Robinson. 2006. Evaluation of repeated measurements of radon-222 concentrations in well water sampled from bedrock aquifers of the Piedmont near Richmond, Virginia, USA: Effects of lithology and well characteristics. *Environmental Research*, 101 (2006) p. 323-333.

Robinson, M.A. and W. R. Reay. 2002. Ground Water Flow Analysis of a Mid-Atlantic Outer Coastal Plain Watershed, Virginia, U.S.A. *Ground Water*, 40 (2) p.123-131.

Robinson, M.A. and D.L. Gallagher. 1999. A Model of Ground Water Discharge from an Unconfined Coastal Aquifer. *Ground Water*, 37 (1) p. 80-87.

Robinson, M.A., D.L. Gallagher, and W.G. Reay. 1998. Field Observations of Tidal and Seasonal Variations in Ground Water Discharge to Estuarine Surface Water. *Ground Water Monitoring and Remediation*, Winter, pp. 83-92.

Conference Publications / Presentations

“Water Quality Monitoring: Opportunities for Interdisciplinary Education and Research”, Robinson, M., E. Ingram, P. Miller. 2008 National Water Quality Monitoring Conference, Atlantic City, New Jersey, May 18 - 22, 2008.

“Analysis of the Biological Function and Water Quality Adequacy of a Constructed Wetland”, Hofmann, B. et al., 2008 Ocean Sciences Meeting, Orlando, FL, March 2 – 7, 2008 (Student Poster Session). (Underlined authors is an undergraduate student at Rose-Hulman Institute of Technology)

“Increasing Impact and Reducing Challenges of Aquatic Science Education at the Undergraduate Level”, E. Ingram, P. Miller, M. Robinson, 2008 Ocean Sciences Meeting, Orlando, FL, March 2 – 7, 2008.

“Educating Undergraduate Engineering Students on Sustainability: Current Status and a Body of Knowledge”, Robinson, M., ASEE IN/IL Section Meeting, Terre Haute, IN. April 3 -5, 2008.

“Biostimulation of the Activated Sludge Process,”. Ndro, T. and M. Robinson, Indiana Water Environment Association (IWEA) 2007 Annual Conference. Indianapolis, Indiana, December 11-15, 2007.

“Water, water, everywhere, Nor any drop to drink: Transformations towards global sustainable access to safe drinking water”. Robinson, M., 2007 Humanities and Technology Conference, Rose-Hulman Institute of Technology, Terre Haute, Indiana. October 4 – 6, 2007.

“An Aspirational Vision of Civil Engineering in 2025: The BOK and Future Directions for Civil Engineering Curricula.”, R. Welch, M. Robinson, C. Glagola, and J. Nelson. Proceedings of the American Society for Engineering Education Annual Conference & Exposition. Honolulu, HI, June 2007.

“Anaerobic Digestion - Process Theory”. Robinson, M., Annual IWEA Conference. Indianapolis, Indiana. November 13 - 15, 2006.

“ASCE Policy 465: Shaping the Future of Engineering Education. 2006 Illinois-Indiana and North Central Joint Section Conference”. Robinson, M., Indiana University Purdue University Fort Wayne (IPFW) March 31 – April 1, 2006.

Robinson, M.A. and K.G. Sutterer. Designing a Four-Year ASCE BOK Compliant Program Tract. Proceedings of the 2005 American Society for Engineering Education Annual Conference & Exposition. Portland, Oregon. June 12-15, 2005.

Anaerobic Digestion - Process Theory. IWEA Operations and Maintenance Seminar, Indianapolis, Indiana. April 12, 2005.

Houghtalen, R.J. and M.A. Robinson. Classical Solutions are Like Classical Music: Both Pass the Test of Time. Proceedings of the 2004 American Society for Engineering Education Annual Conference & Exposition. Salt Lake City, Utah. June 20-23, 2004.

Robinson, M.A. and K.G. Sutterer. The ASCE BOK – A Case Study of the Evaluation and Design of a BOK Curriculum. Proceedings of the 2004 American Society for Engineering Education Annual Conference & Exposition. Salt Lake City, Utah. June 20-23, 2004.

Robinson, M.A. and K.G. Sutterer. Integrating Sustainability into Civil Engineering Curricula. Proceedings of the 2003 American Society for Engineering Education Annual Conference & Exposition, Nashville, Tennessee. June 22-25, 2003.

Pierson, W., B. Dulin, M. Robinson. Growing the Pool of Engineers: Experiences in Hand-On Learning at a Summer Engineering Academy. American Society for Engineering Education Annual Conference and Exposition. June 16-19, 2002.

Gallagher, D.L., J.W. Wynn, W.G. Reay, M.A. Robinson. A Geographic Information System Analysis of Submarine Groundwater Discharge on the Eastern Shore of Virginia. First International Conference on Saltwater Intrusion and Coastal Aquifers- Monitoring, Modeling, and Management. Essaouira, Morocco, April 23-25, 2001.

Robinson, M.A. and W.R. Reay. 1999. *Ground Water Flow and Nitrogen Quality within an Outer Mid-Atlantic Coastal Plain Watershed*. Final Project Report - Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, Richmond, VA.

Gallagher, D.L., Robinson, M. and Reay, W. 1998. Modeling Submarine Ground Water Discharge to Estuarine Waters. Annual Water Resources Conference of the American Water Resources Association. Point Clear, Alabama. Nov 16-19, 1998.

Robinson, M.A., D.L. Gallagher, and W.G. Reay. 1996. Field and Modeling Studies of Submarine Ground Water Discharge to Tidal Estuarine Waters. Proceedings of Second Eastern Shore Natural Resources Symposium. Kiptopeke, VA. Oct. 31 - Nov. 2, 1996.

Reay, William G., M.A. Robinson, and C.A. Lunsford. 1996. Ground Water Contributions to Coastal Waters of Virginia's Eastern Shore: Identification of High-Risk Discharge Regions and Remediation Strategies. Proceedings of Watershed '96. Baltimore, MD. June 8-12, 1996, pp. 308-311.

Robinson, M. Field and Modeling Studies of Submarine Ground Water Discharge to Tidal Estuarine Waters. Second Eastern Shore Natural Resources Symposium, Kiptopeke, VA, October 31 - November 2, 1996,

Robinson, M. Modeling Ground Water Discharge to Estuarine Waters ASCE/CSCE Conference on Environmental Engineering, Pittsburgh, PA July 23-26, 1995, Poster Session.

Ludwig, D.D., A.M. Dietrich, J.H. Sherrard, M.A. Robinson, S.H. Chong. 1990. *Effectiveness of Reverse Osmosis in Removing Dissolved Organic Compounds and Inorganic Anions and Heavy Metals from Contaminated Water Sources*. Final Project Report - U.S. Army Belvoir R,D&E Center.

Robinson, M. Removal of Groundwater Contaminants from Groundwater by Reverse Osmosis. Presentation at the Southeast Regional American Chemical Society Meeting, Winston-Salem, North Carolina, October 10, 1989.

Robinson, M. Removal of Groundwater Contaminants from Groundwater by Reverse Osmosis. Presentation at Virginia Section American Water Works Association, Norfolk, Virginia, October 26, 1989.

Graduate Thesis Advised

Tinashe Ndoro, M.S. Chemical Engineering, The Impact of a Commercially Available Biostimulant on the Activated Sludge Process. February 19, 2007.

Dong Yan Mu, M.S. Environmental Engineering, Determining the Impact of Aeration Temperature on Performance of an Activated Sludge Process. June 21, 2006.

Matthew Whitaker, M.S. Environmental Engineering, Performance Analysis and Marketing of a Vertical Filter Wetland Wastewater Treatment System. November 13, 2005.

Professional Workshops Developed

ASCE ExCEED Teaching Workshop, July 13 – 18, 2008, University of Arkansas, Fayetteville, Arkansas

Ground Water Hydrology Workshop. Center for Environmental Studies, Virginia Commonwealth University, Richmond, VA June 10-11, 1999.

Applications of Hydrological Principles: Introduction to Ground Water-Surface Water Interactions Workshop. Center for Environmental Studies, Virginia Commonwealth University, Richmond, VA May 27-28, 1997 and June 9-10, 1998.

Professional Affiliations

American Water Works Association,
Water Environment Federation
American Society of Civil Engineers

- Curricula Committee of the ASCE Task Committee on Academic Prerequisites for Professional Practice (TCAP3)
- Faculty-Industry Interaction Committee

Association of Environmental Engineering and Science Professors - Student Services Committee