CHRISTOPHER MARTINEAU MILLER

EDUCATION

Ph.D. in Civil and Environmental Engineering, The University of Iowa, 1995
M.S. in Civil and Environmental Engineering, The University of Iowa, 1992
B.S. in Civil and Environmental Engineering, The University of Iowa, 1990

PROFESSIONAL REGISTRATION

Professional Engineer (License#62882) - Ohio

EXPERIENCE

Associate Professor *August 2001 to Present*
Assistant Professor *August 1995 to August 2001*
The University of Akron, Dept. of Civil Engineering

Undergraduate teaching in environmental engineering-hydraulic engineering-water resources and statics, with graduate courses in data analytics, water quality modeling and management, chemical oxidation processes, aquatic chemistry, and environmental organic chemistry. College of Engineering ABET Coordinator and former Civil Engineering ABET Coordinator (2007-2013). Primary research activity in drinking water projects involving source water management, field sampling, data analysis, treatment plant process optimization, hydraulic modeling, water quality modeling, and regulatory compliance assistance. Recent projects also include innovative and collaborative efforts to develop comprehensive transportation maintenance management and sustainability strategies.

Chief Technical Officer and Business Owner *February 2012 to Present*
Fontus Blue, Inc.

Fontus Blue Inc. is a trusted resource and industry leader assisting drinking water treatment plants to provide high quality water to their customers in a cost-effective manner. The Decision Blue™ software platform is a proprietary supplier of advanced water quality data analysis, monitoring, and optimization of source water quality and chemical dose targets for water treatment plants to achieve desired water quality objectives.

Consultant, Expert Witness, and Business Owner *October 1997 to Present*
Envital Ltd.

Engineering consulting support for hydraulic-hydrologic-environmental expert witness case work, and projects for international consulting companies, private companies, and governments in New Zealand, Australia, South Korea, Netherlands, and Germany. Other experiences include polymer development for a private company, grout development for the Idaho National Environmental Engineering Laboratory, and technology evaluation for the U.S. Army.

Construction Engineer *August 1986 to February 1999*
U.S. Army Reserve, 416th Engineer Support Group

Member of the Akron, Ohio engineering team responsible for environmental and facilities assessment of Reserve Center facilities in Ohio. Work also included design projects and construction/environmental management assistance. Previous Army Reserve duty included bridge, building, and road construction projects in Indiana, Michigan, Minnesota, Honduras, Guatemala, and Panama.

HONORS AND AWARDS

- American Association of State Highway and Transportation Officials (AASHTO) High Value Research Award for "Evaluation of EPOKE Bulk Spreader for Winter Maintenance," 2015
- College of Engineering Outstanding Teacher – University of Akron, 2003 and 2012
- Faculty Adviser to Ridgeway Award winner for the best ASCE Student Chapter in the United States (out of 281 chapters) – University of Akron, 2013.
- National Academy of Inventors - University of Akron Patent Chapter, 2011
- Wendell LaDue Civil Engineer – American Society of Civil Engineers, 2008
- The Army Commendation Medal – Department of the Army, 1998
- Raymond C. Firestone Research Initiation Fellowship - University of Akron, 1996
- The Army Achievement Medal – Department of the Army, 1995
- Neil B. Fisher Environmental Engineering Fellowship - University of Iowa, 1991

PATENTS AND RELEVANT PUBLICATIONS

1. Kennedy, M., Gandomi, A., and C. Miller (2015). "Coagulation modeling using artificial neural networks to predict both turbidity and DOM-PARAFAC component removal," *Journal of Environmental Chemical Engineering*, 3(4):2829-2838.
2. N. Sanchez, Skeriotis, A., and C. Miller (2014). "A PARAFAC-Based Long-Term Assessment of DOM in a Multi-Coagulant Drinking Water Treatment Scheme," *Environmental Science and Technology*, 48(3): 1582-1591.
3. N. Sanchez, Skeriotis, A., and C. Miller (2013). "Assessment of Dissolved Organic Matter Fluorescence PARAFAC Components Before and After Coagulation-Filtration in a Full Scale Water Treatment Plant," *Water Research*, 47: 1679-1690.
4. N. Sanchez, Skeriotis, A., and C. Miller (2013) – "Managing Quarterly DBP Stress in Ohio," *Journal AWWA*, 105(10): 28-34.
5. Johnstone, D., Miller, C., and N. Sanchez (2009). "Parallel Factor Analysis of Excitation-Emission Matrices to Assess Drinking Water DBP Formation During a Peak Formation Period," *Environmental Engineering Science*, 26(10): 1551-1559.
6. Johnstone, D. and C. M. Miller (2009). "Fluorescence Excitation-Emission Matrix Regional Transformation and Chlorine Consumption to Predict THM and HAA Formation," *Environmental Engineering Science*, 26(7): 1163-1170.
7. Sasowsky, I. D., C. M. Miller, and A. M. Foos (2006). "Method for removing metals from aqueous solutions using mixed lithic materials." U.S. Patent No. 6,984,328.
8. Miller, C. M. (2004). "Catalytic fixed bed reactor systems for the destruction of contaminants in water by hydrogen peroxide and ozone." U.S. Patent No. 6,767,472. 27.
9. I. D. Sasowsky, A. Foos, and C. M. Miller (2000). "Lithic Controls on the Removal of Metals and Remediation of Acidic Mine Drainage," *Water Research*, 34(10):2742-2746.
10. C. M. Miller and R. L. Valentine (1998). "Catalytic fixed bed reactor systems for the destruction of contaminants in water by hydrogen peroxide." U.S. Patent No. 5,817,240.

PROFESSIONAL MEMBERSHIP

American Water Works Association (AWWA), Member
American Society of Civil Engineers (ASCE), Associate Member
National Academy of Inventors (NAI), Member
American Geophysical Union (AGU), Member
Sigma Xi Scientific Research Society, Member