Curriculum Vitae for James R. Mihelcic, PhD, BCEEM

Samuel L. and Julia M. Flom Professor

Director, Peace Corps Master's International Program in Civil & Environmental Engineering
Director, EPA National Research Center for Reinventing Aging Infrastructure for Nutrient Management
Department of Civil & Environmental Engineering
University of South Florida

Department of Civil and Environmental Engineering University of South Florida 4202 East Fowler Avenue, ENB 118 Tampa, Florida 33620 phone: 813-974-9896; email: jm41@usf.edu

Professional Preparation

PhD Civil Engineering, Carnegie Mellon University, 1988 MS Civil Engineering, Carnegie Mellon University, 1985 BS Environmental Engineering, Pennsylvania State University, 1981

Honors & Notable Appointments, Service, and Awards

2016 Fellow with Water Environment Federation (WEF)

2016 Fellow with Association of Environmental Engineering & Science Professors (AEESP)

- 2016 Advisor to Matthew Verbyla (PhD student), winner of AAEES Wesley Eckenfelder Graduate Awarded from the American Academy of Environmental Engineers and Scientists (AAEES) for best paper that contributes to wastewater management
- 2015 Distinguished Service Award, American Academy of Environmental Engineers & Scientists
- 2015 University of South Florida Global Achievement Award 2014 University of South Florida College of Engineering Outstanding Research Achievement Award
- 2014 University of South Florida Outstanding Research Achievement Award
- 2013-2016 Association of Environmental Engineering & Science Professors (AEESP) Foundation Board
- 2014 Advisor to Ileana Wald (undergraduate researcher), winner in the Ecology Division for her presentation at the National Science Foundation's Emerging Researchers National Conference in STEM.
- 2012 Advisor to Sarah Ness (MS graduate student), winner of the William Brewster Snow Award from the American Academy of Environmental Engineers and Scientists (AAEES) as best M.S. graduate students in the U.S.
- 2011 Montgomery-Watson-Harza Consulting Engineers AEESP Master's Thesis Award, 2nd place: "The Impact of Tank Material on Water Quality in Household Water Storage Systems in Cochabamba, Bolivia," Cynthia A. Schafer, Advised by James R. Mihelcic, University of South Florida.
- 2010-2016 U.S. Environmental Protection Agency Chartered Science Advisory Board (appointed by U.S. EPA Administrator)
- 2010-2015 American Academy of Environmental Engineers & Scientists Board of Trustees (member Executive, Education, and Awards Committee)
- 2008 Board Certified Member of the American Academy of Environmental Engineers
- 2008 Best Paper Award, Environmental Engineering Division, American Society for Engineering Education
- 2008 Environmental Engineering Faculty Award, Society for Environmental Engineering, Michigan Technological University
- 2007-2013 U.S. Environmental Protection Agency Science Advisory Board Environmental

Engineering Committee

2007-2008 President, Association of Environmental Engineering & Science Professors

2006-2007 President Elect, Association of Environmental Engineering & Science Professors

2005-2006, Vice President, Association of Environmental Engineering & Science Professors

2004-2008 Board of Directors, Association of Environmental Engineering & Science Professors

2006 Environmental Engineering Best Department Faculty Award, Society for Environmental Engineering, Michigan Technological University

2003 Visiting Erskine Fellow, University of Canterbury, Christchurch, New Zealand

2002 Association of Environmental Engineering & Science Professors-Wiley Interscience Award for Outstanding Contributions to Environmental Engineering & Science Education

1998 Howard E. Hill Outstanding Faculty of the Year Award

1991 Finalist for the Michigan Tech Distinguished Teaching Award

1991 National Science Foundation Research Initiation Award

1988 Engineering Science-Association of Environmental Engineering & Science Professors Doctoral Thesis Award

1988 American Association for the Advancement of Science-U.S. Environmental Protection Agency Environmental Science and Engineering Fellow

1986 Graduate Student Award in Environmental Chemistry, American Chemical Society, Division of Environmental Chemistry

1980 Elected to Chi Epsilon, Civil Engineering Honor Society

Employment

Professor (8/08-present) Department of Civil and Environmental Engineering,

Samuel L. and Julia M. Flom Professor

State of Florida 21st Century World Class Scholar University of South Florida

Director (8/08-present) Master's International Program, University of South Florida

Courtesy Faculty Associate (12/08-present), Center for Urban Transportation Research (CUTR),

University of South Florida, Associate (5/2009-present), School for Global Sustainability,

Courtesy Faculty Associate School of Public Health (8/09-present),

Professor (9/00-8/08) Department of Civil and Environmental Engineering, Michigan Tech

Director (97-present) Master's International (U.S. Peace Corps) Program, Michigan Tech

Co-Director (5/2003-5/2007) Sustainable Futures Institute, Michigan Tech

Executive Board (7/07-present) D80 Center for Engineering Development for Humanity

Adjunct Doctoral Faculty (9/1/04 -8/30/09) Southern University and A&M College

Associate Professor (9/95-9/00) Department of Civil and Environmental Engrg., Michigan Tech

Assistant Professor, (9/89-9/95) Department of Civil and Environmental Engrg., Michigan Tech

Environmental Engineer (9/88-9/89) Solid and Hazardous Waste Engineering Division,

ABB Environmental, Inc., Portland, ME

AAAS/EPA Engineering Fellow, (6/88-9/88) Office of Underground Storage Tanks,

US Environmental Protection Agency, Washington, DC

Research Assistant, (9/83-5/88) Department of Civil Engineering, Carnegie Mellon University Supervising Engineering, (7/81-6/83) Water, Wastewater, and Utilities, LTV Steel Corporation

Professional Affiliations & Relevant Service

Association of Environmental Engineering & Science Professors

Member (Foundation Board of Directors) Member and past chair (Nominations Committee), past member and chair of Student Services Committee, past member of Publications Committee, past member of Board of

Directors and past President. Lead author of white paper titled "AEESP and Global Sustainable

Development: Achieving the Millennium Development Goals"

Organized and lead workshop on AEESP Education and Research Conference Workshop: *Implementing an International Sustainable Development Initiative* (July 29, 2007)

American Society for Engineering Education

American Academy of Environmental Engineers & Scientists (member, Board of Trustees, Executive

Committee, Awards Committee (leader of committee that evaluates several academic awards)

Florida Water Environment Association

Water Environment Federation

WateReuse Foundation Project Advisory Committee (10/06-5/2010)

Low-Cost Treatment Technologies for Small-Scale Water Reclamation Plants

Water Environment Federation (10/09) Co-Directed workshop titled "Managing Wastewater as a Renewable

Resource: A Socio-Technological Framework and Assessment Technique," WEFTEC, Orlando, Florida.

Guest Editor, Environmental Science & Technology Special Issue on "World's Water" (2008)

Contributor: UNESCO Report, Engineering: Issues and Challenges for Development (2010)

Author: UNESCO Book: Sanitation and Disease, Health Aspects of Excreta and Wastewater Management

Past Member of Editorial Board, Chemosphere

Editor of

Teaching & Research Interests

Dr. Mihelcic is internationally recognized for leading efforts to integrate concepts of sustainability into research, education, engineering practice, specifically for management of water, sanitation, and other environmental services. He is the lead author of the first journal article that made the case for a new meta-discipline of sustainability science and engineering (*Environmental Science & Technology*, 37(23):5314-5324, 2003). He is also an internationally known for training engineers and conducting research in the area of sustainable development and global water, sanitation, and hygiene (WASH) to help achieve the U.N. Sustainable Development Goals. This includes creating and directing a graduate partnership with the U.S. Peace Corps since 1987 that allows engineering students to improve their global competency with 2+ years of training and service in the Peace Corps.

Recent Teaching Experience at the University of South Florida

ENV6510 Sustainable Development Engineering, ENV6666 Aquatic Chemistry, PHC 6301 Water Pollution and Treatment, CGN6933 Context Sensitive Implementation of Synergistic Water-Energy-Nutrient Systems, CGN 6933 Environmental Research Interdisciplinary Colloquium, CGN6933 Environmental & Water Resources Engineering Graduate Seminar, ENV 4001 Environmental Systems Engineering, ENV 4004 Environmental Engineering Laboratory, CGN 4122 Professionalism and Ethics in Engineering

Textbooks

- 1. Mihelcic, J.R., J.B. Zimmerman, *Environmental Engineering: Fundamentals, Sustainability, Design*, 2nd Edition, John Wiley & Sons, 656 pages, 2014.
- 2. Mihelcic, J.R., J.B. Zimmerman, *Environmental Engineering: Fundamentals, Sustainability, Design*, 1st Edition, John Wiley & Sons, 2010. (translated into Portuguese, Spanish)
- 3. Mihelcic, J.R., E.A. Myre, L.M. Fry, L.D. Phillips, B.D. Barkdoll. *Field Guide in Environmental Engineering for Development Workers: Water, Sanitation, Indoor Air*, American Society of Civil Engineers (ASCE) Press, Reston, VA, 2009.
- 4. Mihelcic, J.R. Fundamentals of Environmental Engineering, 335 pages, John Wiley & Sons, Inc. New York, 1999.

5. Mihelcic, J.R. Fundamentos de Ingenieria Ambiental, 384 pages, Limusa Wiley, Balderas, Mexico, 2001.

Published Software

Biofilter™: Biofilter Model Software, Authors: J.C. Crittenden, H. Hautakangas, H. Li, J.R. Mihelcic, E. Oman, Michigan Technological University, National Center for Clean Industrial and Treatment Technologies Environmental Technologies Design Option Tool, Version 1.1 released, April, 2002. See www.sfi.mtu.edu under "tools and training."

Web-Based Encyclopedia Insert

Mihelcic, J.R. "Sustainable Futures" in The Encyclopedia of Earth (http://www.eoearth.org). The Encyclopedia of Earth seeks to become the world's most authoritative electronic source of information about the environments of Earth and their interactions with society. It is written and governed by scientists, educators, and professionals working in a unique collaborative environment, with oversight from a distinguished International Advisory Board.

Recent Reports

Mihelcic, J.R., Zhang, Q., Hokanson, D.R., Cornejo, P.K., Santana, M.V., Rocha, A.M., Ness, S.J. Feasibility Study on Model Development to Estimate and Minimize Greenhouse Gas Concentrations and Carbon Footprint of Water Reuse and Desalination Facilities, 118 pgs, WateReuse Foundation, Alexandria, VA.

Schweitzer, R., C. Pezon, A. Pinjari, C. Fonseca, J.R. Mihelcic, Household expenditure on water Service: Financial and economic expenditures of rural and peri-urban households across socio-economic classes and seasons in Burkina Faso, Working Paper 7, 53 pages, IRC International Water and Sanitation Centre, September, 2013.

Dr. Mihelcic is a contributor to *Engineering: Issues and Challenges for Development*, United Nations Educational, Scientific, and Cultural Organization (UNESCO), Paris, France, 2010.

Journal Articles & Book Chapters (161 published journal articles, book chapters, conference proceedings, and peer reviewed reports)

Peer Reviewed Journal Articles

- 1. MacCarthy, M, Carpenter, J., Mihelcic, J.R. "Low-cost water-lifting from groundwater sources: a comparison of the EMAS Pump with the Rope Pump," *Hydrogeology Journal*, accepted, 2017.
- 2. Naughton, C.C., Zhang, Q., Mihelcic, J.R. (2017). Modeling Energy and Environmental Impacts of Traditional and Improved Shea Butter Production in West Africa for Food Security. *Science of the Total Environment*, 576: 284-291.
- 3. Zhang. Q., Prouty, C., Zimmerman, J.B., Mihelcic, J.R., More than Target 6.3: A Systems Approach to Rethinking Sustainable Development Goals in a Resource-Scarce World, *Engineering*, accepted, 2016.
- 4. Trimmer, J.T., Nakyanjo, N., Ssekubugu, R., Sklar, M., Mihelcic, J.R., Ergas, S.J. Estimation of Ascaris lumbricoides egg inactivation by free ammonia treatment of ash-amended UDDT vault products using stored urine in Uganda, *Journal of Water, Sanitation and Hygiene for Development*, 6 (2) 259-268, 2016.

- 5. Trimmer, J.T., Nakyanjo, N., Ssekubugu, R., Sklar, M., Mihelcic, J.R., Ergas, S.J. Assessing the promotion of urine-diverting dry toilets through school-based demonstration facilities in Kalisizo, Uganda, *Journal of Water, Sanitation and Hygiene for Development*, 6(2):276-28, 2016.
- 6. Ouedraogo, F.R., Zhang, J., Cornejo, P.K., Zhang, Q., Mihelcic, J.R., Tejada-Martinez, A.E. "Impact of sludge layer geometry on the hydraulic performance of a waste stabilization pond, *Water Research*, 99:253-262.
- 7. Mihelcic, J.R., Naughton, C.C., Verbyla, M.E., Zhang, Q., Oakley, S.M., Schweitzer, R.W., Wells, E.C., and Whiteford, L.M. (2016). The Grandest Challenge of All: The Role of Environmental Engineering to Achieve Sustainability in the World's Developing Regions. *Environmental Engineering Science*, in press. DOI: 10.1089/ees.2015.0334
- 8. Cornejo, P.K., Zhang, Q., Mihelcic, J.R. "How Does Scale of Implementation Impact the Environmental Sustainability of Wastewater Treatment Integrated with Resource Recovery?" *Environmental Science & Technology*, 2016, 50(13):6680-6689, 2016.
- 9. Verbyla, M.E., Symonds, E.M., Kafle, R.C., Cairns, M.C., Iriarte, M., Guzmán, M., Coronado, O., Breitbart, M., Ledo, C., Mihelcic, J.R. "Managing Microbial Risks from Indirect Wastewater Reuse for Irrigation in Urbanizing Watersheds," *Environmental Science & Technology*, 2016, 50(13):6803–6813, 2016.
- 10. Manser, N.D., Wang, M., Ergas, S.J., Mihelcic, J.R., Mulder, A., van de Vossenberg, J., van Lier, J.B., van der Steen, P. "Biological Nitrogen Removal in a Photosequencing Batch Reactor with an Algal-Nitrifying Bacterial Consortium and Anammox Granules," *Environmental Science & Technology Letters*, 3(4):175–179, 2016.
- 11. Mellor, J.E. Levy, K., Zimmerman, J.B., Elliott, M., Bartram, J., Carlton, E. Clasen, T., Dillingham, R., , Eisenberg, J., Guerrant, R. Lantagne, D., Mihelcic, J.R., Nelson, K. "Planning for climate change: the need for mechanistic systems-based approaches to study climate change impacts on diarrheal diseases," *Science of the Total Environment*, 548-549:82-90, 2016.
- 12. Verbyla, M.E., Cairns, M.R., Gonzalez, P.A., Whiteford, L.M., Mihelcic,, J.R. "Emerging Challenges for Pathogen Control and Resource Recovery in Natural Wastewater Treatment Systems," *WIRES Water*, John Wiley and Sons, 2(6):701-714, 2015, doi: 10.1002/wat2.1101
- 13. Wells, E.C., Zarger, R.K, Whiteford, L.M, Mihelcic, J.R., Koenig, E.S., Cairns, M.R. "The impacts of tourism development on perceptions and practices of sustainable wastewater management on the Placencia Peninsula, Belize", *Journal of Cleaner Production*, 111(Part B):430-441, 2016.
- 14. Manser, N.D., Mihelcic,, J.R., Ergas, S.J. "Semi-continuous mesophilic anaerobic digester performance under variations in solids retention time and feeding frequency" *Bioresource Technology*, 2015, 10.1016/j.biortech.2015.04.111
- 15. Manser, N.D., Wald, I., Ergas, S.J., Izurieta, R., Mihelcic, J.R. Assessing the Fate of Ascaris suum Ova during Mesophilic Anaerobic Digestion, *"Environmental Science & Technology*, 49, 3128–3135, 2015.

- 16. Akers, D.B., MacCarthy, M.F., Cunningham, J.A., Annis, J., Mihelcic, J.R. "Lead (Pb) Contamination of Self-Supply Groundwater Systems in Coastal Madagascar and Predictions of Blood Lead Levels in Exposed Children," *Environmental Science & Technology* 49(5): 2685–2693, 2015.
- 17. Naughton, C.C, Sissoko, H.T., Mihelcic, J.R., "Assessing Factors that Lead to Usage of Appropriate Technology Handwashing Stations in Mali, West Africa," *Journal of Water, Sanitation and Hygiene for Development*, doi:10.2166/washdev.2015.135, 5(2): 279-288, 2015.
- 18. Naughton, C.C., Lovett, P.N., Mihelcic, J.R. "Land Suitability of Shea (*Vitellaria paradoxa*) Distribution across Sub-Saharan Africa," *Applied Geography*, 58:217-227, 2015.
- 19. Verbyla, M.E., Mihelcic, J.R., "A review of virus removal in wastewater treatment pond systems," *Water Research*, 71:107-124, 2015.
- 20. Manoosingh, C., Mihelcic, J.R., Gunaratne, M. "Improving Energy Efficiency and Environmental Sustainability of Commercial Insulation," *Energy and Environment Research*, 5(1): 63-74, 2015.
- 21. Symonds, E.M., Verbyla, M.E., Kafle, R.C., Lukasik, J.O., Breitbart, M., Mihelcic, J.R. "A case study of enteric virus removal and insights into the associated risk of water reuse for two wastewater treatment pond systems in Bolivia", *Water Research*, 65:257-270, 2014.
- 22. Cornejo, P.K., Santana, M.V.E., Hokanson, D.R., Mihelcic, J.R., Zhang, Q., "Estimating greenhouse gas emissions for water reuse and desalination facilities," *Journal of Water Reuse and Desalination*, 4(4):238-252, 2014.
- 23. Santana, M.V.E., Zhang, Q., Mihelcic, J.R. "Influence of Water Quality on the Embodied Energy of Drinking Water Treatment," *Environmental Science & Technology*, 48, 3084-3091, 2014.
- 24. Held, B.R., Q. Zhang, J.R. Mihelcic, "Analysis of Embodied Human and Materials Energy Associated with Provision of Improved Water through Source and Household Interventions," *Journal of Cleaner Production*, 60(1):83-92, 2013.
- 25. Verbyla, M.W., S.M. Oakley, L.A. Lizima, J. Zhang, M. Iriarte, A.E. Tejada-Martinez, J.R. Mihelcix, "Taenia eggs in a stabilization pond system with poor hydraulics: Concern for human cysticercosis?" *Water Science & Technology*, 68(12):2698-2703, 2013.
- 26. MacCarthy, M.F., Annis, J.E., Mihelcic, J.R. "Unsubsidised Self-Supply in Eastern Madagascar," *Water Alternatives*, 6(3): 424-438, 2013.
- 27. Cornejo, P., Q. Zhang, J.R. Mihelcic, "Quantifying Benefits of Resource Recovery from Sanitation Provision in a Developing World Setting," *Journal of Environmental Management*," 131: 7-15, 2013.
- 28. MacCarthy, M.F., Buckingham, J.W., Mihelcic, J.R. "EMAS Household Water Supply Technologies in Bolivia. Increasing Access to Low-Cost Water Supplies in Rural Areas," *Field Note No. 2013-4, Rural Water Supply Network (RWSN)* Switzerland, 12 pages, 2013. http://www.rural-water-supply.net/fr/ressources/details/518

- 29. Manser, N.D., Mihelcic, J.R. "Integrating the local material of adobe with solar distillation to produce affordable drinking water," *Journal of Sustainable Development*, 6(6), 2013. DOI: 10.5539/jsd.v6n6p48
- 30. Verbyla, M.E., S.M. Oakley, J.R. Mihelcic "Wastewater infrastructure for small cities in an urbanizing world: Integrating the protection of human health and the environment with resource recovery and food security," *Environmental Science & Technology*, 47(8):3598–3605, 2013.
- 31. Schweitzer, R.W., Cunningham, J.A. Mihelcic, J.R. "Hydraulic modeling of clay ceramic water filters for point-of-use water treatment," *Environmental Science & Technology*, 47(1):429–435, 2013.
- 32. Fry, L.M., Watkins, D.W. Reents, N., Rowe, M.D., Mihelcic, J.R. "Climate Change and Development Impacts on the Sustainability of Spring-fed Water Supply Systems in the Alto Beni Region of Bolivia," *Journal Hydrology*, 468–469: 120–129, 2012.
- 33. Schafer, C.A., Mihelcic, J.R. "Impact of Storage Tank Material and Maintenance on Household Water Quality," *Journal American Water Works Association*, 104(9):E521-E529, 2012.
- 34. Wright Wendel, H.E., R.A. Zarger, J.R. Mihelcic, "Accessibility and Usability: Green Space Preferences, Perceptions, and Barriers in a Rapidly Urbanizing City in Latin America," *Landscape and Urban Planning*, 107(3):272-282, 2012.
- 35. Fuchs, V.J., Gierke, J.S., Mihelcic, J.R., "Laboratory investigation of ammonium and nitrate removal in vertical flow regimes in planted and unplanted wetland columns," *Journal of Environmental Engineering*, 138:1227-1230, 2012.
- 36. Mellor, J.E., D.W. Watkins, J.R. Mihelcic, "Rural water usage in East Africa: Does collection effort really impact basic access?" *Waterlines*, 31(3):215-225, 2012.
- 37. Schmidt, M.C., A.M. Rocha, K. Padmanabhan, Y. Shpanskaya, J. Banfield, K. Scott, Mihelcic, J.R., Samatova, N.F. "NIBBS Search for Fast and Accurate Prediction of Phenotype Biased Metabolic Systems," *PLOS Computational Biology*, 8(5): 2012.
- 38. Chen, Z., K. Padmanabhan, A.M. Rocha, Y. Shpanskaya, J.R. Mihelcic, K. Scott, N.F. Samatova, "SPICE: Discovery of Phenotype-Determining Component Interplays," *BMC Systems Biology*, 6:40, doi:10.1186/1752-0509-6-40, 2012.
- 39. Schweitzer, R.W., J.R. Mihelcic, "Sustainability Analysis of Community Managed Water Systems in the Developing World," *Journal of Water, Sanitation and Hygiene for Development*, 2(1):20-30, 2012.
- 40. Aremu, A.S., Sule, B.F., Downs, J., Mihelcic, J.R., "Framework to Determine the Optimal Spatial Location and Number of Municipal Solid Waste Bins in a Developing World Urban Neighborhood," *Journal of Environmental Engineering*, 138:645-653, 2012.
- 41. Schmidt, M.C., A.M. Rocha, K. Padmanabhan, Z. Chen, K. Scott, J.R. Mihelcic, N.F. Samatova, "Efficient α , β -motif finder for identification of phenotype-related functional modules," *BMC Bioinformatics*, 12:440, 2011, doi:10.1186/1471-2105-12-440.

- 42. Hendrix W. ‡, A. M. Rocha‡, K. Padmanabham, A. Choudhary, K. Scott, J. R. Mihelcic, and N. F. Samatova. "DENSE: Efficient and Prior Knowledge-driven Discovery of Phenotype-associated Protein Functional Modules," *BMC Systems Biology*, 5:172, 2011. doi: 10.1186/1752-0509-5-172.
- 43. Mo, W., Q. Zhang, J.R. Mihelcic, D. Hokanson, "Embodied Energy Comparison of Surface Water and Groundwater Supply Options," *Water Research*, 45(17): 5577-5586, 2011.
- 44. Wright Wendel, H.E., J.A. Downs, J.R. Mihelcic, "Assessing Equitable Access to Urban Green Space: The Role of Engineered Water Infrastructure," *Environmental Science & Technology*, 45 (16):728–6734, 2011.
- 45. Owens, E.L., Mihelcic, J.R., Zhang, Q. "Material Flow Analysis to Improve Solid Waste Management in Small Island Developing States," *Journal of Environmental Engineering*, 137(10): 937-944, 2011.
- **46.** Mihelcic, J.R., Fry, L.M., Shaw, R. "Global potential of phosphorus recovery from human urine and feces," *Chemosphere*, 84(6):832-839, 2011.
- 47. Aremu, A.S., Sule, B.F., Downs, J., Mihelcic, J.R., "Trip Time Model for Municipal Solid Waste Collection Applicable to Developing Countries," *Environmental Technology*, 32(15):1749-1754, 2011.
- 48. Fuchs, V.J., J.R. Mihelcic, J.S. Gierke, "Life Cycle Assessment Of Vertical And Horizontal Flow Constructed Wetlands For Wastewater Treatment Considering Nitrogen And Carbon Greenhouse Gas Emissions," Water Research, 45(5):2073-81, 2011.
- 49. Fry, L.M., Cowden, J.R., Watkins, D.W., Clasen, T., Mihelcic, J.R. "Quantifying Health Improvements from Water Quantity Enhancement: An Engineering Perspective Applied to Rainwater Harvesting in West Africa," *Environmental Science & Technology*, 44(24):9535–9541, 2010.
- 50. Mehl, J., D.A. Gibson, R. Izurieta, J. Kaiser, D. Hurtado, J. R. Mihelcic, "Pathogen Destruction and Solids Decomposition in Composting Latrines: Study of Fundamental Mechanisms and User Operation in Rural Panama," *Journal of Water and Health*, 9(1):187-99, 2010.
- 51. Fuchs, V.J. and J.R. Mihelcic, "Analyzing appropriateness in sanitation projects in the Alto Beni Region of Bolivia," *Waterlines*, 30(2): 122-134, 2011.
- 52. Boyle, C., Mudd, G., Mihelcic, J.R., Anastas, P., Collins, T., Culligan, P., Edwards, M., Gabe, J., Gallagher, P., Handy, S., Kao, J., Krumdieck, S., Lyles, L.D., Mason, I., Mcdowall, R., Pearce, A., Riedy, C., Russell, J., Schnoor, J.L., Trotz, M., Venables, R., Zimmerman, J.B., Fuchs, V., Miller, S., Page, S., Reeder-Emery, K. "Delivering Sustainable Infrastructure that Supports the Urban Built Environment," *Environmental Science & Technology*, 44(13): 4836-4840, 2010.
- 53. Post, J.L. and J.R. Mihelcic "Waste Reduction Strategies for Improved Management of Household Solid Waste in Jamaica," *International Journal of Environment and Waste Management*, 6(1/2): 4-24, 2010.
- 54. Mihelcic, J.R. & Trotz, M.A. (2010). Sustainability and the environmental engineer: implications for education, research, and practice," in *Environmental Engineer: Applied Research and Practice*, Vol. I,

- Winter, 2009, in Environmental Engineer, the Magazine of the American Academy of Environmental Engineers, 27-34.
- 55. Guest, J.S., S.J. Skerlos, J.L. Barnard, M.B. Beck, G.T. Daigger, H. Hilger, S.J. Jackson, K. Karvazy, L. Kelly, L. Macpherson, J.R. Mihelcic, A. Pramanik, L. Raskin, M. C. M. van Loosdrecht, D.H. Yeh, N.G. Love, "A New Planning and Design Paradigm to Achieve Sustainable Resource Recovery from Wastewater," *Environmental Science & Technology*, 43, 6126–6130, 2009.
- 56. Muga, H.E., A. Mukherjee, J.R. Mihelcic, M. J. Kueber, "An Integrated Assessment of Continuously Reinforced and Jointed Plane Concrete Pavements," *Journal of Engineering, Design, and Technology*, 7(1): 81-98, 2009.
- 57. Troschinetz, A.M. and J.R. Mihelcic, "Sustainable Recycling of Municipal Solid Waste in Developing Countries," *Waste Management*, 29(2): 915-923, 2009.
- 58. Cowden, J.R., D.W. Watkins, J.R. Mihelcic, "Stochastic Rainfall Modeling in West Africa: Parsimonious Approaches for Domestic Rainwater Harvesting Assessment," *Journal of Hydrology*, 361(1-2):64-77, 2008.
- 59. Wright, H.E., Q. Zhang, J.R. Mihelcic, "Integrating Economic Input-Output Life Cycle Assessment with Risk Assessment for a Screening-Level Analysis," *International Journal of Life Cycle Assessment*, 13(5): 412-420, 2008.
- 60. Muga, H.E., A. Mukherjee, J.R. Mihelcic, "An Integrated Assessment of the Sustainability of Green and Built-up Roofs," *Journal of Green Building*," 3(2):106-127, 2008.
- 61. Zimmerman, J.B., J.R. Mihelcic, J.A. Smith, "Global Stressors on Water Quality and Quantity: Sustainability, Technology Selection, and Governance in a Dynamic World," *Environmental Science & Technology*, 42(4):4247-4254, 2008.
- 62. Fry, L.M., J.R. Mihelcic, D.W. Watkins, "Water and Non-Water-Related Challenges of Achieving Global Sanitation Coverage," *Environmental Science & Technology*, 42(4): 4298-4304, 2008.
- 63. Mihelcic, J.R., K.G. Paterson, L.D. Phillips, Q. Zhang, D.W. Watkins, B. Barkdoll, V.J. Fuchs, L.M. Fry, D.R. Hokanson, Educating Engineers in the Sustainable Futures Model with a Global Perspective," *Civil Engineering and Environmental Systems*, 25(4):255-263, 2008.
- 64. Muga, H.E. and J.R. Mihelcic, "Sustainability of Wastewater Treatment Technologies," *Journal of Environmental Management*, 88: 437-447, 2008.
- 65. McConville, J.R., and J.R. Mihelcic, "Adapting Life Cycle Thinking Tools to Evaluate Project Sustainability in International Water and Sanitation Development Work," *Environmental Engineering Science*, 24(7):937-948, 2007.
- 66. Mihelcic, J.R. J.B. Zimmerman, A. Ramaswami, "Integrating Developed and Developing World Knowledge into Global Discussions and Strategies for Sustainability. Part 1: Science and Technology," *Environmental Science & Technology*, 41(10):3415-3421, 2007.

- 67. Ramaswami, R., J.B. Zimmerman, J.R. Mihelcic, "Integrating Developed and Developing World Knowledge into Global Discussions and Strategies for Sustainability. Part 2: Economics and Governance," *Environmental Science & Technology*, 41(10):3422-3430, 2007.
- 68. Mihelcic, J.R., T.D. Eatmon, Jr., R.A. Harris, H.E. Muga, "Engineering Sustainable Construction Materials for the Developing World: A Meta-discipline Approach to Engineering Education," *International Journal of Engineering Education*, 23(6):1116-11125, 2007.
- 69. Hokanson, D.R., J.R. Mihelcic, L.D. Phillips, "Educating Engineers in the Sustainable Futures Model with a Global Perpective: Education, Research & Diversity Initiatives," *International Journal of Engineering Education*, 23(2):254-265, 2007.
- 70. Troschinetz, A.M., J.R. Mihelcic, K.L. Bradof, "Evolving Engineering Education for the 21st Century, Part 2: Developing Sustainability Indicators for a University Campus," *International Journal of Engineering Education*, 23(2):231-241, 2007.
- 71. Hokanson, D. R., Q. Zhang, J. R. Cowden, A. M. Troschinetz, J. R. Mihelcic, and D. M. Johnson, "Challenges to Implementing Drinking Water Technologies in Developing World Countries," *Environmental Engineer: Applied Research and Practice*, Vol. I, Winter, 2007, in Environmental Engineer, the Magazine of the American Academy of Environmental Engineers, 43(1):31-38, 2007.
- 72. Ahrens, B.T. and J.R. Mihelcic, "Making Wastewater Construction Projects Sustainable in Urban, Rural, and Peri-Urban Areas," *Journal of Engineering for Sustainable Development: Energy, Environment, Health*, 1(1):13-32, 2006.
- 73. Fry, L, J.R. Mihelcic, D.W. Watkins, Jr., "Improving Public Health by Improving Water Supply: Results from Springbox Projects in Cameroon," *Journal of Engineering for Sustainable Development: Energy, Environment, Health*, 1(1):33-42, 2006.
- 74. Mihelcic, J.R., L.D. Phillips, D.W. Watkins, "Integrating a Global Perspective into Engineering Education & Research: Engineering International Sustainable Development," *Environmental Engineering Science*, 23(3):426-438, 2006.
- 75. Mihelcic, J.R. and D.R. Hokanson, "Educational Solutions: For a more Sustainable Future," in *Environmental Solutions*, Eds: NL Nemerow and FJ Agardy, Elsevier, pg. 25-58, 2005.
- 76. Li, H., D.R. Lueking, J.R.Mihelcic, K. Peterson, "Biogeochemical Analysis of Hydrogen Sulfide Removal by a Lava Rock Packed Biofilter," *Water Environment Research*, 77(2):179-186, 2005.
- 77. Martin, Jr., R.W., C.R. Baillod, J.R. Mihelcic, "Low Temperature Inhibition of the Activated Sludge Process by an Industrial Discharge Containing the Azo Dye Acid Black 1," *Water Research*, 39(1):17-28, 2005.
- 78. Baker, J.R., D. Gamberger, J.R. Mihelcic, A. Sabljić "Evaluation of an Artificial Intelligence Based Model to Estimate Chemical Biodegradability," *Molecules*, 9:989-1004, 2004.
- 79. Martin Jr., R.W., J.R. Mihelcic, J.C. Crittenden, "Design and Performance Characterization Strategy

- using Modeling for Biofiltration Control of Odorous Hydrogen Sulfide," *Journal of Air & Waste Management Association*, 54:834-844, 2004.
- 80. Mihelcic, J.R. "Educating Tomorrow's Global Engineer through a Unique Partnership with the U.S. Peace Corps," *Woman Engineer*, 30-33, Fall, 2004.
- 81. Mihelcic, J.R., "Educating the Future's Water Professional," *Water Environment Technology*, 16(9):86-92, 2004.
- 82. Mihelcic, J.R., J.C. Crittenden, M.J. Small, D.R. Shonnard, D.R. Hokanson, Q. Zhang, H. Chen, S.A. Sorby, V.U. James, J.W. Sutherland, J.L. Schnoor, "Sustainability Science and Engineering: Emergence of a New Metadiscipline," *Environmental Science & Technology*, 37(23):5314-5324, 2003.
- **83.** Orr, B.D., J.R. Mihelcic, T.J. Van Dam, "Engineering Help while Getting a Degree," *IEEE Potentials*, 22(2):32-34, 2003.
- 84. Li, H., J.R. Mihelcic, J.C. Crittenden, K.A. Anderson, "Field Measurements and Modeling of a Two-Stage Biofilter that Treats Odorous Sulfur Emissions," *Journal of Environmental Engineering*, 129(8):684-692, 2003.
- 85. Zhang, Q., J.C. Crittenden, D. Shonnard, and J.R. Mihelcic, "Development and Evaluation of an Environmental Multimedia Fate Model CHEMGL for the Great Lakes Region," *Chemosphere*, 50(10):1377-1397, 2003.
- 86. Martin, R.W., H. Li., J.R. Mihelcic, J.C. Crittenden, D.R. Lueking, C.R. Hatch, P. Ball, "Optimization of Biofiltration for Odor Control: Model Verification and Applications," *Water Environment Research*, 74(1):17-27, 2002.
- 87. Li, H., J.C. Crittenden, J.R. Mihelcic, H. Hautakangas, "Optimization of Biofiltration for Odor Control: Model Development and Parameter Sensitivity," *Water Environment Research*, 74(1):5-16, 2002.
- 88. Solomon, B.E. and J.R. Mihelcic, "Standardized Environmental Management Codes & Continuous Environmental Improvements: Insights from the Chemical Industry," *Business Strategy & the Environment*, 10(4):215-224, 2001.
- 89. Baker, J.R., J.R. Mihelcic, A. Sabljić, "Reliable QSAR for Estimating Koc for Persistent Organic Pollutants: Correlation with Molecular Connectivity Indices," *Chemosphere*, 45(2):213-221, 2001.
- 90. Zhang, Q., J.C. Crittenden, J.R. Mihelcic, "Does Simplifying Transport and Exposure Yield Reliable Results? An Analysis of Four Risk Assessment Methods," *Environmental Science & Technology*, 35(6):1282-1288, 2001.
- 91. Baker, J.R., J.R. Mihelcic, E. Shea, "Estimating Koc for Persistent Organic Pollutants: Limitations of Correlations with Kow," *Chemosphere*, 41:813-817, 2000.
- 92. Cusack, C.C. and J.R. Mihelcic, "Copper Toxicity in Sediments of the Torch Lake Great Lakes Area of Concern," *Journal of Great Lakes Research*, 25(4):735-743, 1999.

- 93. McNally, D.L., J.R. Mihelcic, D.R. Lueking, "Biodegradation of Mixtures of Polycyclic Aromatic Hydrocarbons Under Aerobic and Nitrate-Reducing Conditions," *Chemosphere*, 38:1313-1322, 1999.
- 94. Baker, J.R., M.W. Milke, J.R. Mihelcic, "Relationship Between Chemical and Theoretical Oxygen Demand for Specific Classes of Organic Chemicals," *Water Research*, 33(2):327-334, 1999.
- 95. Whitman, B.E., D.R. Lueking, J.R. Mihelcic. "Naphthalene uptake by *Pseudomonas* isolate UPER-1," *Canadian Journal of Microbiology*, 44:1086-1093, 1998.
- 96. McNally, D.L., J.R. Mihelcic, D.R. Lueking, "Biodegradation of 3- and 4-Ring Polycyclic Aromatic Hydrocarbons under Denitrification Conditions," 32(17):2633-2639, *Environmental Science & Technology*, 1998.
- 97. McNally, D.L., J.R. Mihelcic, D.R. Lueking, "Polycyclic Aromatic Hydrocarbon Degrading Microorganisms in Great Lakes' Sediments," *Journal of Great Lakes Research*, 24(2):392-403, 1998.
- 98. Baker, J.R., J.R. Mihelcic, D.C. Luehrs, J.P. Hickey, "Evaluation of Estimation Methods for Organic Carbon Normalized Sorption Coefficients," *Water Environment Research*, 69:136-145, 1997.
- 99. Mihelcic, J.R., A. Pritschow, D.R. Lueking, "Uptake of Dissolved and Oil Phase Organic Chemicals by Bacteria," *Ground Water Monitoring and Remediation*, 15:100-106, 1995.
- 100. Whitman, B.E., J.R. Mihelcic, and D.R. Lueking, "Naphthalene Biosorption in Low and High Sorptive Soil-Water Systems," *Applied Microbiology and Biotechnology*, 43:539-544, 1995.
- 101. Stapleton, J.M., J.R.. Mihelcic, D.R. Lueking, "Sorption and Desorption Kinetics of Pyrene onto a Great Lakes Sediment," *Journal of Great Lakes Research*, 20(3):561-568, 1994.
- 102. Mihelcic, J.R., D.R. Lueking, R. Mitzel, and J.M. Stapleton, "Bioavailability of Sorbed- and Separate-Phase Organic Chemicals," *Biodegradation*, 4:141-153, 1993.
- 103. Harrington, J.R., J.R. Mihelcic, R.N. Lewis, and T.L. Planensic, "FATE: A Computerized Model for Estimating the Fate and Treatability of Hazardous Pollutants in Publicly Owned Treatment Works," *Water Environment and Technology*, 5(3):49-53, 1993.
- 104. Mihelcic, J.R., C.R. Baillod, J.C. Crittenden, and T.N. Rogers, "Estimation of VOC Emissions from Wastewater Facilities by Volatilization and Stripping," *Journal of the Air and Waste Management Association*, 43(1): 97-105, 1993.
- 105. Baillod, C.R. and J.R. Mihelcic, "Baccalaureate Programs in Environmental Engineering: An American Perspective," *Australasian Journal of Engineering Education*, 4(2):137-149, 1993.
- 106. Mihelcic, J.R. and R.G. Luthy, "Sorption and Microbial Degradation of Naphthalene in Soil-Water Suspensions under Denitrification Conditions," *Environmental Science & Technology*, 25(1): 169-177, 1991.

- 107. Mihelcic, J.R., "Modeling the Potential Effect of Additives on Enhancing the Solubility of Aromatic Solutes Contained in Gasoline," *Ground Water Monitoring and Review*, 10(3): 132-137, 1990.
- 108. Mihelcic, J.R. and R.G. Luthy, "Microbial Degradation of Acenaphthene and Naphthalene Under Denitrification Conditions in Soil-Water Systems," *Applied and Environmental Microbiology*, 54(5): 1188-1198, 1988.
- 109. Mihelcic, J.R. and R.G. Luthy, "Microbial Degradation of Polycyclic Aromatic Hydrocarbons Under Various Redox Conditions in Soil-Water Systems," *Applied and Environmental Microbiology*, 54(5): 1182-1187, 1988.
- 110. Mihelcic, J.R. and R.G. Luthy, "Adsorption of Lead and Zinc on Blast Furnace Iron Oxide Solids," *Journal of the Water Pollution Control Federation*, 58(5): 242-249, 1986.

Book and Manual Chapters

- 1. Thayil-Blanchard, J., Mihelcic, J.R. "Chapter 7: Potential of self supply in Uganda's Rakai district: assessing domestic rainwater harvesting storage cost and geographic availability," in *Alternative Water Supply Systems*, (Eds: F. Memon, S. Ward). IWA Publishing, London, UK, January, 2015.
- 2. Fry L.M., Schweitzer R.W., and Mihelcic J.R. "Water, Human Health, and Sustainable Development," In: Ahuja S. (Ed.) Comprehensive Water Quality and Purification, Vol. 4, pp. 299-314. United States of America: Elsevier, 2013.
- 3. Trotz, M.A., Mihelcic, J.R., Dalrymple, O.K., Briley, A., Thomas, K.D., Howard, J.A. "Chapter 2. Water: Foundation for a Sustainable Future" in *The Chemical Element. Chemistry's Contribution to Our Global Future*, J. García-Martínez, E. Serrano (Eds.), Wiley-VCH, 2011.
- 4. Mihelcic, J.R., "The Right Thing to Do: Graduate Education and Research in a Global and Human Context," in *What Is Global Engineering Education For? The Making of International and Global Engineering Educators* (Eds: G.L. Downey and K. Beddoes), Morgan & Claypool Publishers, San Francisco, pg 235-250, 2010.
- 5. Wendel, H. E. W., and Mihelcic, J. R. "Evaluating the Social, Economic, and Environmental Drivers of Urban Brownfields Redevelopment in Santa Cruz, Bolivia," Ecosystems and Sustainable Development VII, C.A. Brebbia and E. Tiezzi (Eds.), in WIT Transactions on Ecology and the Environment, Vol. 122, 2009.
- 6. Zhang, Q., K. Goldstein, J.R. Mihelcic, "Chapter 8: A Review of Life Cycle Assessment Studies on Renewable Energy from Forest Resources," in *Renewable Energy from Forest Resources in the U.S.*, (Editors: B.D. Solomon and V. Luzadis), Routledge, 2008.
- 7. McNally, D.L., J.R. Mihelcic, J.M. Stapleton, "Bioremediation of Contaminated Soil and Groundwater," in Environmental and Ecological Chemistry, Edited by Aleksandar Sabljić, in *Encyclopedia of Life Support Systems (EOLSS)*, Developed under the Auspices of the UNESCO, EOLSS Publishers Co, Oxford, UK, 2003.

- 8. Penn, M.R., J. Pauer, J.R. Mihelcic, "Biochemical Oxygen Demand," in Environmental and Ecological Chemistry, Edited by Aleksandar Sabljić, in *Encyclopedia of Life Support Systems (EOLSS)*, Developed under the Auspices of the UNESCO, EOLSS Publishers Co, Oxford, UK, 2003.
- 9. McNally, D.L. and J.R. Mihelcic, "Petroleum Hydrocarbon Degradation in Soils: Monitoring Cell Growth as a Measure of Performance," In: *AEESP Environmental Engineering Processes Laboratory Manual* (Eds: S.E. Powers, J. Bisogni, J. Burken, K. Pagilla), Association of Environmental Engineering and Science Professors, Champaign IL, 2001.
- 10. Stapleton, J.M. and J.R. Mihelcic, "Darcy's Law and Hydraulic Conductivity," In: *AEESP Environmental Engineering Processes Laboratory Manual* (Eds: S.E. Powers, J. Bisogni, J. Burken, K. Pagilla), Association of Environmental Engineering and Science Professors, Champaign IL, 2001.
- 11. Mihelcic, J.R., McNally, D.L., Lueking, D.R., "Effect of Different Surfactant Concentrations on Naphthalene Biodegradation," in *Surfactant-Enhanced Remediation of Subsurface Contamination: Emerging Technologies* (Eds.) DA Sabatini, RC Knox, JH Harwell, American Chemical Society, Washington, DC, pg. 114-123, 1995.

Peer Reviewed Proceedings & Reports

3.

- 1. Lopez, E., Lynn, T., Peterson, M., Ergas, S., Trotz, M., and Mihelcic, J. (2016) Enhanced Nutrient Management of Stormwater through a Field Demonstration of Nitrogen Removal in a Modified Bioretention System. *World Environmental and Water Resources Congress* 2016: pp. 60-69. doi: 10.1061/9780784479865.007
- 2. Hayman, S.K., Mihelcic, J.R. Evaluation of Appropriate Groundwater Supply Technologies That Increase Access to Sufficient and Improved Water in Rural Coastal Communities in Panama, World Environmental and Water Resources Congress 2016: 319-328. doi: 10.1061/9780784479865.034
- 4. Manser, N., Naughton, C., Prouty, C., Orner, K., Verbyla, M., & Mihelcic, J.R. Improving the Global Competency of Graduate Engineers Through Peace Corps Partnership and Long-Term International Service. Making Value for Society. *Proceedings of the American Society for Engineering Education (ASEE) National Conference*, Washington Convention Center, Seattle, WA, June, 2015.
- 5. Prouty, C., Orner, K., Naughton, C., Manser, N., Verbyla, M., & Mihelcic, J.R. Exploring the Expanding Impact of a Sustainable Development Engineering Course through a Critical Evolutionary Review. Making Value for Society. *Proceedings of the American Society for Engineering Education (ASEE) National Conference*, Washington Convention Center, Seattle, WA, June, 2015.
- 6. Verbyla, M.A, C.C. Naughton, V. Vernaza-Hernandez, A. Feldman, E.C. Wells, M.A. Trotz, J.R. Mihelcic, , "Using Social Media to Create a Global Community of Sustainability-Engaged Students, "

 3rd Annual American Society for Engineering Education, International Forum, Indianapolis, Indiana, June 14, 2014.
- 7. Mihelcic, J.R., Zhang, Q., Hokanson, D.R., Cornejo, P.K., Santana, M.V., Rocha, A.M., Ness, S.J. Feasibility Study on Model Development to Estimate and Minimize Greenhouse Gas Concentrations and Carbon Footprint of Water Reuse and Desalination Facilities, 118 pgs, WateReuse Foundation, Alexandria, VA.

- 8. Schweitzer, R., C. Pezon, A. Pinjari, C. Fonseca, J.R. Mihelcic, Household expenditure on water Service: Financial and economic expenditures of rural and peri-urban households across socio-economic classes and seasons in Burkina Faso, Working Paper 7, 53 pages, IRC International Water and Sanitation Centre, September, 2013.
- 9. Zhang, Q., L. Vanasupa, Mihelcic, J.R., J.B. Zimmerman, Platukyte, S., "Challenges for Integration of Sustainability into Engineering Education," *Proceedings of the 2012 Annual ASEE Conference & Exposition*, San Antonio, TX, June 10-13, 2012.
- 10. Padmanabhan, K., K. Wilson, A. M. Rocha, , K. Wang, J. R. Mihelcic, and N. F. Samatova. "Detecting pathway cross-talks by analyzing conserved functional modules across multiple phenotype-expressing organisms," *IEEE International Conference on Bioinformatics and Biomedicine*, Atlanta, GA, November, 12-15, 2011.
- 11. Wright Wendel, H.E., Downs, J.A., Mihelcic, J.R. Improving Urban Quality of Life by Enhancing Access to Unconventional Green Spaces and Water Infrastructure. *Proceedings 2011 IWA Cities of the Future Conference*, Stockholm, Sweden, May 22-25, 2011.
- 12. Rocha, A. M., W. Hendrix, M. C. Schmidt, J. R. Mihelcic, and N. F. Samatova. "Systems biology approach to discovery of phenotype-specific metabolic processes for engineering bacterial biohydrogen," *Proceedings of the Scientific Discovery through Advanced Computing Program (SciDAC) Conference*, Chattanooga, Tennessee, July 11-15, 2010.
- 13. Naughton, C., Meeks, J., Mihelcic, J.R., "Developing Global Partnerships to Achieve a Sustainable Water Supply: The Peace Corps Master's International Program," *Proceedings of the Second Annual Civil Engineering Conference: International Conference on Sustainable Urban Water Supply in Developing Countries*, University of Ilorin, Ilorin, Nigeria, July 26 28, 2010, Nigeria Society of Engineers Technical Transactions, published by The Nigerian Society of Engineers.
- 14. Shaw, R., Meeks, J., C. Naughton, Mihelcic, J.R., "Sustainable Reuse of Human Urine as a Source of Nitrogen and Phosphorus," *Proceedings of the Second Annual Civil Engineering Conference: International Conference on Sustainable Urban Water Supply in Developing Countries*, University of Ilorin, Ilorin, Nigeria, July 26 28, 2010, Nigeria Society of Engineers Technical Transactions, published by The Nigerian Society of Engineers.
- 15. Rocha, A.M., Hendrix, W., Schmidt, M.C., Mihelcic, J.R., Samatova, N.F., "Systems Biology Approach to Discovery of Phenotype-Specific Metabolic Processes for Engineering Bacterial Bio-Hydrogen," *Proceedings of the Scientific Discovery through Advanced Computing (SciDAC) Workshop 2010*, Oak Ridge, TN, July 11-15 in Chattanooga, TN, July 11-15, 2010.
- 16. Clarke-Sather, A. R., Ballard, M. M., Reents, N., Zhang, Q., Mihelcic, J.R., and J. W. Sutherland, "Utilizing Quality Function Deployment for the Environment to Compare the Sustainability Differences between Wastewater Treatment System Designs," 17th CIRP International Conference on Life Cycle Engineering 2010, May 19-21, 2010, Hefei, China.
- 17. Aremu, A.S., J.R. Mihelcic, B.F. Sule, "Time and Motion Analysis of Municipal Solid Waste Collection

- Operation in Ilorin, Nigeria," *Proceedings of the Twenty-Fifth International Conference on Solid Waste Technology and Management*, Philadelphia, PA, March 14-17, 2010.
- 18. Fry, L.M., D. Watkins, J.R. Mihelcic, N. Reents, "Sustainability of gravity-fed water systems in Alto Beni, Bolivia: Preparing for Change," *Proceedings 2010 World Environmental & Water Resources Congress*," Providence, Rhode Island, May 16-20, 2010.
- 19. Zhang, Q., L. Vanasupa, J.B. Zimmerman, J.R. Mihelcic, "Development and Dissemination of Learning Suites for Sustainability Integration in Engineering Education," *Proceedings of the 2010 Annual ASEE Conference & Exposition*, Louisville, KY, June 20-23, 2010.
- 20. Muga, H.E., J.R. Mihelcic, N. Reents, G. Gemio, S. Morales, "Performance of Lagoon Wastewater Treatment System in Sapecho, Bolivia," *Proceedings of WEFTEC 2009, The 82nd Annual Water Environment Federation Technical Exhibition and Conference*, Orlando, Florida, October 10-14, 2009.
- 21. Mo, W., Q. Zhang, J.R. Mihelcic, D. Hokanson, "Embodied Energy Model on Water Supply Systems in Great Lakes Region," *Proceedings of WEFTEC 2009, The 82nd Annual Water Environment Federation Technical Exhibition and Conference*, Orlando, Florida, October 10-14, 2009.
- 22. Trotz, M.A., Muga, H.E., Phillips, L.D., Yeh, D., Stuart, A., Mihelcic, J.R., "Non-traditional University Partners that Facilitate Service Learning, Undergraduate and Graduate Research for Sustainable Development," *Proceedings of the 2009 Annual ASEE Conference & Exposition*, Austin, TX, June 14-17, 2009.
- 23. Trotz, M.A., Muga, H.E., L.D. Phillips, D. Yeh, D., A. Stuart, J.R. Mihelcic, "Non-traditional University Research Partners that Facilitate Service Learning and Graduate Research for Sustainable Development," *Proceedings* 2009 World Environmental & Water Resources Congress," Kansas City, MO, May 17-21, 2009.
- 24. Muga, H.E., Mihelcic, J.R., N.W. Reents, Morales, S., Gemio, G., Ballard, M., Fuchs, V.J., Hanson, C.M., Johnson, E.M, Hoyt, A.M., "Treatment Performance of Wastewater Lagoons in South Yungas Province of Bolivia," *Proceedings* 2009 World Environmental & Water Resources Congress," Kansas City, MO, May 17-21, 2009.
- 25. Ocwieja, S. and J.R. Mihelcic, "Life Cycle Approach for Evaluating Sanitation Projects: Case Study: Biogas Latrine," Proceedings of 34th WEDC International Conference, Water, Sanitation and Hygiene: Sustainable Development and Multisectoral Approaches, Addis Ababa, Ethiopia, May 18-22, 2009.
- 26. Fuchs, V.J., L.M. Fry, J.R. Mihelcic, "Delivering Sustainable Waste Infrastructure in an Urbanizing World," *Proceedings of the Third International Conference on Sustainability Engineering and Science*, Auckland, New Zealand, December 9-12, 2008.
- 27. Ballard, M.M., V.J. Fuchs, L.M. Fry, H.E. Wright, J.R. Mihelcic and D.W. Watkins, Jr. "Systems Thinking Applied to Industrial Management of Water Resources," *Proceedings of the Global Conference on Sustainable Product Development and Life Cycle Engineering (Sustainability and Remanufacturing VI, SMR VI)*, Busan, Korea, 29 September to October 1, 2008.

- 28. Zhang, Q., J.B. Zimmerman, J.R. Mihelcic, L.D. Vanasupa, "Civil and Environmental Engineering Education (CEEE) Transformational Change: Tools and Strategies for Sustainability Integration and Assessment in Engineering Education," *Proceedings of the 2008 Annual ASEE Conference & Exposition*, Pittsburgh, PA, June 22-25, 2008.
- 29. Wright, H.E., L.D. Phillips, S. Janczy-Stankevich, J.R. Mihelcic, "International Senior Design: Assessing the Impact on Engineering Students after Graduation," *Proceedings of the 2008 Annual ASEE Conference & Exposition*, Pittsburgh, PA, June 22-25, 2008.
- 30. Ballard, M.M., A.R. Clarke, A. Sather-Knutsen, B.D. Barkdoll, J.R. Mihelcic, "Collaborative International Research: Technology Transfer & Efficiency of Wastewater Treatment Systems in Rural Communities of Bolivia," *Proceedings of the 2008 World Environmental & Water Resources Congress,*" Honolulu, Hawaii, May, 2008.
- 31. Fuchs, V.J. and J.R. Mihelcic, "Engineering Education for International Sustainability: Curriculum Design under the Sustainable Futures Model, *Proceedings of the 2007 ASEE North Midwest Sectional Conference*, Houghton, MI, CD ROM, September 20-22, 2007.
- 32. Fuchs, V.J. J.S. Gierke, J.R. Mihelcic, "Hydraulic Model Comparison of Vertical-Flow Regimes in Constructed Wetlands," *Proceedings of the 80nd Annual Water Environment Federation Conference & Exposition*, San Diego, CA, October 13-17, 2007.
- 33. Zhang, Q., D. Johnson, J.R. Mihelcic, "Interdisciplinary Research for Graduate Education in Sustainability," *Proceedings of the 2007 ASEE North Midwest Sectional Conference*, Houghton, MI, CD ROM, September 20-22, 2007.
- 34. Haapala, K.R., M.J. Hutchins, J.L. Rivera, V. Kumar, A.R. Clarke, T.D. Eatmon, R.A. Harris, M.H. Durfee, J.R. Mihelcic, D.R. Shonnard, and J.W. Sutherland, "Education, Research, and Training Aspects of the Sustainable Futures NSF IGERT Project," *Proceedings of the 2007 ASEE North Midwest Sectional Conference*, Houghton, MI, CD ROM, September 20-22, 2007.
- 35. Cowden, J.R., Mihelcic, J.R., and Watkins, D.W. "Climate Change Impact on Rainwater Harvesting and Health in West Africa Urban Slums," *Proceedings* 3rd *International Conference on Climate and Water*, Helsinki, Finland, September 3-6, 2007.
- 36. McConville, J.R., and J.R. Mihelcic, "Adapting Life Cycle Thinking Tools to Assess Project Sustainability in International Water Development Work," *Proceedings from Engineering Sustainability* 2007, Pittsburgh, PA, April 15-18, 2007.
- 37. Zimmerman, J.B., Mihelcic, J.R., A. Ramaswami, "Integrating Developed and Developing World Knowledge into Global Discussions and Strategies for Sustainability," *Proceedings from Engineering Sustainability* 2007, Pittsburgh, PA, April 15-18, 2007.
- 38. Mihelcic, J.R., K.G. Paterson, L.D. Phillips, Q. Zhang, D.W. Watkins, B. Barkdoll, V.J. Fuchs, D.R. Hokanson, "Educating Engineers in the Sustainable Futures Model with a Global Perspective," *Proceedings from 2nd International Conference on Sustainability Engineering & Science*, Auckland, New Zealand, February 20-23, 2007.

- 39. Cowden, J.R, Mihelcic, J.R., & Watkins, D.W. "Stochastic Rainfall Occurrence Modeling in West Africa," *Proceedings* 2007 World Environmental & Water Resources Congress," Tampa, FL, May 14-16, 2007.
- 40. Cowden, J.R, J.R. Mihelcic, D.W. Watkins "Domestic Rainwater Harvesting Assessment to Improve Water Supply and Health in Africa's Urban Slums," *Proceedings* 2006 World Environmental & Water Resources Congress, Omaha, NE, May 21-25, 2006.
- 41. Paterson, K.G., D.W Watkins, J.R Mihelcic and L.D. Phillips. "International Service Engineering Across Academic Borders," *Proceedings American Society of Engineering Annual Conference & Exposition, June 18-21, Chicago, IL, 2006.*
- 42. Fuchs, V.J. and J.R. Mihelcic, "Engineering Education for International Sustainability: Curriculum Design under the Sustainable Futures Model," *Proceedings of 5th Annual ASEE Global Colloquium on Engrg Educ.*, Rio de Janeiro, Brazil, October 9-12, 2006.
- 43. Fry, L.M. and J.R. Mihelcic, "Integrating a Global Perspective into Graduate Engineering Education & Research," *Proceedings of 5th Annual ASEE Global Colloquium on Engrg Educ.*, Rio de Janeiro, Brazil, October 9-12, 2006.
- 44. Sutherland, J.W. V. Kumar, J.C. Crittenden, M.H. Durfee, J.K. Gershenson, H. Gorman, D.R. Hokanson, N.J. Hutzler, D.J. Michalek, J.R. Mihelcic, D.R. Shonnard, B.D. Solomon, S. Sorby, "An Education Program in Support of a Sustainable Future," *Proceedings of the American Society of Mechanical Engineers* (ASME), 2003.
- 45. Crittenden, J.C., J.R. Mihelcic, Q. Zhang, M.J. Small, J. Schnoor, "Sustainability Science: The Case for a New Metadiscipline," *Proceedings of the AEESP/AAEE Conference on Education and Research*, Toronto, August 10-14, 2002.
- 46. Martin Jr. R.W., C.R. Baillod, J.R. Mihelcic, "Nitrification Inhibition at Low Temperature by the Azo Dye Acid Black 1," *Proceedings of the 75nd Annual Water Environment Federation Conference & Exposition*, September 28-October 2, 2002.
- 47. Li, H., J.R. Mihelcic, J.C. Crittenden, K. Anderson, "Application of a Dynamic Biofiltration Model to a Two-Stage Biofilter that treats Hydrogen Sulfide and Organic Sulfur Compounds," *Proceedings of the 75nd Annual Water Environment Federation Conference & Exposition*, September 28-October 2, 2002.
- 48. Hautakangas, H., J.R. Mihelcic, J.C. Crittenden, E.J. Oman, "Optimization and Modeling of Biofiltration for Odor Control," *Proceedings of the 72nd Annual Water Environment Federation Conference & Exposition*, October 10-13, 1999.
- 49. Baker, J.R. and J.R. Mihelcic, "Development and Evaluation of Models for Predicting Soil/Water Partition Coefficients," *Proceedings of the 67th Annual Water Environment Federation Conference and Exposition*, Water Environment Federation, Volume II, pg 599-610, 1994.
- 50. Baillod, C.R., J.C. Crittenden, J.R. Mihelcic, T.N. Rogers, and C.P.L. Grady, Jr., *Critical Evaluation of the State of Technologies for Predicting the Transport and Fate of Toxic Compounds in Wastewater Facilities*, 157

- pages, Water Environment Federation, Alexandria, VA, 1991.
- 51. Mihelcic, J.R., C.R. Baillod, T.N. Rogers, J.C. Crittenden, "Models for Estimating Stripping and Volatilization of VOCs from Wastewater," Paper 91-92.7, *Air &Waste Management Association*, 84th *Annual Meeting & Exposition*, Vancouver, British Columbia, June 16-21, 1991.
- 52. Mihelcic, J.R. and R.G. Luthy, "The Potential Effects of Sorption Processes on the Microbial Degradation of Hydrophobic Organic Compounds in Soil-Water Suspensions," *Conference on Physicochemical and Biological Detoxification of Hazardous Wastes*, Vol. 2, p. 708-721, Technomic Publishing Company, Inc., Lancaster, PA, 1989.

Presentations & Workshops (since 2003) (speaker/presenter listed in bold)

- 1. **Mihelcic, J.R.** (*invited*) Stories of water quality professionals working to provide clean water, improved sanitation, and hygiene, AAEES/AIDIS/WEF Breakfast, WFTEC, New Orleans, LA, September 26, 2016.
- 2. Lopez, E., Lynn, T., Peterson, M., Ergas, S., Trotz, M., and Mihelcic, J.R. Enhanced Nutrient Management of Stormwater through a Field Demonstration of Nitrogen Removal in a Modified Bioretention System, World Environmental and Water Resources Congress 2016, West Palm Beach, May 22–26, 2016.
- 3. Hayman, S.K., **Mihelcic, J.R.** (*invited*) Evaluation of Appropriate Groundwater Supply Technologies That Increase Access to Sufficient and Improved Water in Rural Coastal Communities in Panama, World Environmental and Water Resources Congress 2016, West Palm Beach, May 22–26, 2016.
- 4. **Mihelcic, J.R.** (*invited plenary*) Biological inspired engineering that makes the world a better place, Annual Conference of the Institute of Biological Engineering, Greenville, South Carolina, April 9, 2016.
- 5. **Mihelcic, J.R.** (*invited*), Engineering Health Improvements for Developing World Communities, Purdue University, April 19, 2016.
- Mihelcic, J.R. (invited) Life cycle thinking to evaluating resource recovery strategies in waste stabilization pond systems, 11th IWA Specialist Group Conference on Ponds Technology for Wastewater Treatment, Leeds, United Kingdom, March 21-23, 2016.
- 7. **Naughton, C.C.,** Deubel, T., Mihelcic, J.R. (2016). The Intersection of Engineering and Anthropology used to Promote Food Security in Sub-Saharan Africa through Shea Butter Process Analysis and Improvement. Oral Presentation, Society for Applied Anthropology: Intersections, Vancouver, CA. March 29-April 2, 2016.
- 8. **Resto, M.**, MacCarthy, M.F., Cherry, J.A., Trout, K.E., Carpenter, J.D., Parker, B.L., Mihelcic, J.R., Manual Drilling in Academic Research and Training: Well Installation and Monitoring, 2015 AWRA Annual Water Resources Conference, Denver, Colorado, November 17, 2015
- 9. **Mihelcic, J.R.** (*invited*) "Sustainable Development Research that Improves the Health of Developing World Communities," Virginia Polytechnic Institute and State University, October 30, 2015.

- 10. **Mihelcic**, **J.R.** (*invited*) "Influence of Water Quality on the Embodied Energy of Drinking Water Treatment," University of Florida, October 16, 2015.
- 11. **Mihelcic, J.R.** (*invited*) "Engineering Research that Improves Health in for Developing World Communities," University of Colorado Boulder, September 25, 2015.
- 12. Naughton, C.C., Zhang, Q., Mihelcic, J.R. "Assessing the food-energy-climate nexus of traditional and improved shea butter processes across sub-Saharan Africa," presented at *Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference*, New Haven, CT, June 14-16, 2015.
- 13. **Lopez, E. V.** Locicero, R.; Ergas, S. J.; Lynn, T. J.; Barton, F.; Mihelcic, J. P.; Trotz, M. A. "How concepts of stormwater and nutrient management can build non-traditional workforce capacity in an urban community.," presented at *Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference*, New Haven, CT, June 14-16, 2015.
- 14. Mihelcic, J.R. Bartacek, J. "Achieving Sustainable Waste to Energy Practices through Knowledge Transfer Between Europe and the Americas." Water and Energy 2015: Opportunities for Energy and Resource Recovery in a Changing World, Water Environmental Federation, Washington, D.C., June 8-10, 2015.
- 15. Cornejo-Warner, P., Mihelcic, J.R., Zhang, Q. "Implications of Implementation Scale on the Environmental Sustainability of Wastewater Treatment with Resource Recovery," Presented at *International Congress on Sustainability Science and Engineering (ICOSSE '15*), Balatonfüred, Hungary, May 26-29,2015.
- 16. **Mihelcic**, **J.R.** (*invited*) "Environmental Engineering Research that Improves Health in Developing World Settings," University of Washington, Seattle, May 8, 2015.
- 17. Naughton, C., Manser, N., Prouty, C., Orner, K., Verbyla, M., & Mihelcic, J.R. (2015, April). Improving the Global Competency of Engineers through the Peace Corps Master's International Program. Preparing Engineers for the Grand Challenges of the Future. Paper presented at the *American Society for Engineering Education (ASEE) Southeastern Section Annual Conference*, University of Florida, Gainesville, FL.
- 18. Orner, K., Prouty, C., Naughton, C., Manser, N., Verbyla, M., & Mihelcic, J.R. (2015, April). Developing Competencies in Sustainable Development Engineering Course. Preparing Engineers for the Grand Challenges of the Future. Paper presented at the *American Society for Engineering Education (ASEE) Southeastern Section Annual Conference*, University of Florida, Gainesville, FL.
- 19. Manser, N., Naughton, C., Prouty, C., Orner, K., Verbyla, M., & Mihelcic, J.R. (2015, June). Improving the Global Competency of Graduate Engineers Through Peace Corps Partnership and Long-Term International Service. Making Value for Society. Paper presented at the *American Society for Engineering Education (ASEE) National Conference*, Washington Convention Center, Seattle, WA.

- 20. **Prouty, C.,** Orner, K., Naughton, C., Manser, N., Verbyla, M., & Mihelcic, J.R. (2015, June). Exploring the Expanding Impact of a Sustainable Development Engineering Course through a Critical Evolutionary Review. Making Value for Society. Paper presented at the *American Society for Engineering Education (ASEE) National Conference*, Washington Convention Center, Seattle, WA.
- 21. Santana, M.V.E., Q. Zhang, J. R. Mihelcic, The Effect of Sprawl and Smart Growth on The Embodied Energy and Carbon Footprint of Water Supply, 2015 Sustainable Water Management Conference, Portland, Oregon, March 15-18, 2015.
- **22. Mihelcic**, **J.R.** (*invited*) "Envisioning a Better World: The Making of Community and Globally Impactful Engineers," University of Southern California, Los Angeles, February 27, 2015.
- 23. **Mihelcic, J.R.** (*invited*) "Envisioning a Better World: The Making of Community and Globally Impactful Engineers," *American Society of Civil Engineers (ASCE) Global Engineering Conference* 2014, Panama City, Panama, October 7 11, 2014.
- **24**. **Mihelcic**, **J.R**. (*invited*) "The Last Taboo: Research Related to the Global Sanitation Crisis," Yale University, New Haven, October 1, 2014.
- 25. Mihelcic, J.R., **Cornejo, P.K.** (*invited*) "The Right Thing to Do: Integrating Graduate Education with Peace Corps Service as a Water-Sanitation Engineer," *Water Environment Federation Technical Exhibition and Conference (WEFTEC)*, New Orleans, LA, Sept. 27 Oct. 1, 2014.
- **26**. **Cornejo, P.K.**, Zhang, Q., Mihelcic, J.R. "How does scale of implementation impact embodied energy and carbon footprint of water reuse systems?", *Water Environment Federation Technical Exhibition and Conference (WEFTEC)*, New Orleans, LA, Sept. 27 Oct. 1, 2014.
- 27. Mihelcic, J.R., Akers, D.B., Orner, K.D., Cunningham, J.A. (*invited*) "Environmental Chemistry Research that Improves Health in Developing World Settings: Assessment of In-line Disinfection of Gravity Flow Water Supply Systems in Panama and Water Derived from Pumps in Madagascar that Contain Lead Components," 248th ACS National Meeting and Exposition, San Francisco, CA, August 10-14, 2014.
- 28. **Butcher, M**., Mihelcic, J.R. "Diffuse release of nutrients from residential lawn management," *Florida Lake Management Society (FLMS) 25th Annual Technical Symposium*, Stuart, FL, June 16-19, 2014.
- 29. **Mihelcic, J.R.** "An overview of the new EPA National Research Center for Reinventing Aging Infrastructure for Nutrient Management (RAINmgt)," *Florida Lake Management Society (FLMS) 25th Annual Technical Symposium*, Stuart, FL, June 16-19, 2014.
- 30. Verbyla, M.A., C.C. Naughton, A. Feldman, J.R. Mihelcic, "Using Social Media to Create a Global Community of Sustainability-Engaged Students," 3rd Annual American Society of Engineering Education, International Forum, Indianapolis, Indiana, June 14, 2014
- **31. Verbyla, M.E.**, Kafle, R.C., Symonds, E.M., Cairns, M.R., Iriarte, M., Mihelcic, J.R. "A quantitative microbial risk assessment for lettuce irrigated with wastewater treated by on-farm bank filtration

- systems in Bolivia", Oral Presentation, 2014 Water Microbiology Conference: Microbial contaminants from watersheds to human exposure, Chapel Hill, North Carolina, May 5-7, 2014.
- 32. **Mihelcic, J.R.** (*invited*) "The Right Thing to Do: International Research Collaborations" Research through International Collaboration workshop, University of Central Florida, Orlando, FL, April 14, 2014
- **33**. **Banks, C., Corbett, A., Mihelcic, J.R**. "The New Frontier in International Collaboration: Tri-lateral and Multi-lateral Partnerships," *NAFSA Annual Conference and Exposition*, San Diego, CA, May 26-30, 2014
- 34. Verbyla, M.E., Symonds, E.M., Lukasik, G., Breitbart, M., Mihelcic, J.R. (2013). Virus removal in full-scale stabilization pond systems treating domestic wastewater. *Water and Health Conference: Where Science Meets Policy*, October 14-18, 2013, Chapel Hill, North Carolina.
- 35. Manser, N.D., N.D. Manser, I. Wald, M.E. Verbyla, S.E. Ergas, J.R. Mihelcic. "Ascaris inactivation under optimal gas-producing anaerobic digestion conditions of agriculture waste," *Water and Health Conference: Where Science Meets Policy*, October 14-18, 2013, Chapel Hill, North Carolina.
- **36**. **Naughton, C.N.**, J.R. Mihelcic. "Monitoring and evaluation of handwashing: assessing appropriate technology handwashing stations in Mali, West Africa," *Water and Health Conference: Where Science Meets Policy*, October 14-18, 2013, Chapel Hill, North Carolina.
- 37. Symonds, E.M., Verbyla, M.E., Lukasik, G., Breitbart, M., & Mihelcic, J.R. (2013) "Virus removal in full-scale stabilization pond systems treating domestic wastewater", Oral Presentation, *Water & Health Conference: Where Science Meets Policy*, October 14-18, 2013, Chapel Hill, North Carolina.
- 38. MacCarthy, M.F., Wahlstrom, M.A., Akers, D.B., Annis, J.E., and J.R. Mihelcic. "Sustainable Household Groundwater Supply: Building Upon Five Decades of Experience in Eastern Madagascar." *International WaTER Conference (Water Technologies for Emerging Regions)*, University of Oklahoma, September 2013.
- 39. Symonds, E.M., Verbyla, M.E., Mihelcic, J.R., Breitbart, M. "Viruses in Wastewater: Exploring Pepper Mild Mottle Virus as a Process Indicator for Enteric Virus Removal," 17th International Symposium on Health-Related Water Microbiology, Santa Catarina, Brazil, September 15-20, 2013.
- 40. **Verbyla, M.E.**, Oakley, S.M., Iriarte, M., Lizima, L.A., Zhang, J., Tejada-Martinez, A.E., Mihelcic, J.R. "The removal of Taenia and Ascaris eggs from waste stabilization ponds and the impact of pond hydraulics," 10th IWA Specialist Group Conference on Ponds Technology: Advances and Innovations in Wastewater Pond Technology, Cartagena, Colombia. August, 19-22, 2013.
- **41. Cornejo, P.K.,** Zhang, Q., Mihelcic, J.R. "Life-cycle assessment of wastewater treatment and resource recovery strategies in a developing world setting," *Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference*, Golden, CO, July 14-16, 2013.
- 42. **MacCarthy, M.F.**, Bryant, C.A., Annis, J.E., Mihelcic, J.R. "Household water provision for developing communities: assessing self supply practices with a social marketing framework," *Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference*, Golden, CO, July 14-16, 2013.

- 43. **Mihelcic, J.R.** (*invited*) "Estimating Greenhouse Gas Emissions and Carbon Footprint from Water Reuse," *Industrial Water Use and Reuse Workshop*, AIChE Institute for Sustainability, San Antonio, Texas, April 30 May 2, 2013.
- 44. **Zhang, Q., Hokanson, D.R.,** Cornejo, P.K., Santana, M.V. "Feasibility Study on Model Development to Estimate and Minimize Greenhouse Gas Concentrations and Carbon Footprint of Water Reuse and Desalination Facilities, 17th Annual Water Reuse & Desalination Research Conference, Phoenix, Arizona, May 6-7, 2013.
- **45**. **Mihelcic, J.R.** (*invited*) "Water Reuse," Water and Sanitation Division of the Inter-American Development Bank, Nassau, Bahamas, April 15 17, 2013.
- **46**. **Santana, M.V.**, Zhang, Q., Mihelcic, J.R. "Effect of Urbanization on the Embodied Energy of Water Treatment in the City of Tampa," **2013 Engineering Sustainability**, April 7-9, Pittsburgh, PA,
- **47**. **Cornejo, P.K.,** Mihelcic, J.M., Hokanson, D.R., Zhang, Q. "Estimating the Carbon Footprint of Water Reuse and Desalination Facilities," poster presentation at 22nd Annual Southwest Florida Water Resources Conference, Fort Meyers, Florida, January 25-26, 2013.
- **48**. **Mihelcic**, **J.R.** (*invited*) "The Last Taboo: Research Related to the Global Sanitation Crisis," University of California-Irvine, November 9, 2012.
- 49. **Mihelcic, J.R.,** (*invited*) "Greening the Gray: Envisioning what our urban-water infrastructure should be" Urban Water Management Distinguished Lecture Series, Colorado School of Mines, November 8, 2012.
- 50. **MacCarthy, M.F.,** Mihelcic, J.R. "Accelerating Self Supply: The Potential of the EMAS Pump in Improving Access to Household Water Supply in Sub-Saharan Africa," 2012 Water and Health Conference: Science, Policy and Innovation, Chapel Hill, NC, October 29 November 2, 2012.
- **51. Mihelcic, J.R.** (*invited*) "Undaunted Courage: Environmental Engineering and the Opening of a New Frontier," *Frontiers in Environmental Engineering Education Conference*, St. Louis, MO, October 18-19, 2012.
- **52**. **Mihelcic**, **J.R.** (*invited*) "Engineering in a Rural Development Context," California State University Chico, October 11, 2012.
- **53**. **Mihelcic**, **J.R.** (*invited*) "The Last Taboo: Research Related to the Global Sanitation Crisis," University of Nevada-Reno, October 5, 2012.
- 54. Cornejo, P.K., Zhang, Q., Mihelcic, J.R. "Embodied Energy and Carbon Footprint of Wastewater Treatment Infrastructure: Water Reuse and Energy Recovery in Rural Bolivia," WEFTEC 2012, The 85nd Annual Water Environment Federation Technical Exhibition and Conference, New Orleans, September 29 October 3, 2012.

- 55. **Mihelcic, J.R.** (*invited*) "The Day After Tomorrow: Changing Our View of Education," Bucknell University, April 12, 2012
- 56. MacCarthy, M.F., J.W. Buckingham, J.R. Mihelcic, "Household Water Supply Technologies for Increasing Access to Domestic Water Supplies in Rural Bolivia," oral presentation at 6th Rural Water Supply Network Forum, Kampala, Uganda, November 29 December 1, 2011.
- 57. Schweitzer, R.W., J.R. Mihelcic, "Sustainability of Community Managed Rural Water Systems in the Developing World," oral presentation at 6th Rural Water Supply Network Forum, Kampala, Uganda, November 29 December 1, 2011.
- 58. Ness, S.J., D. Renzi, R. Schweitzer, S.K. Hayman, D. Peabody, P.K. Cornejo, J.A. Novoa, J. Annis, L. Barrett, and J.R. Mihelcic, Assessment of Four Point-of-Use Water Treatment Filters Designed for Households in Developing Countries," oral presentation at 2011 OU International WaTER Conference, Norman, OK, October 24-25, 2011.
- 59. MacCarthy, M.F., J.D. Carpenter, D.W. Bales, S.M. Dean, J.R. Mihelcic, "Manual Water Well Drilling in Development, Research and Teaching," oral presentation at 2011 OU International WaTER Conference, Norman, OK, October 24-25, 2011.
- 60. **Verbyla, M.,** S. Oakley, J.R. Mihelcic, "The Feasibility of Reusing Wastewater Effluents from Two Stabilization Pond Systems in Bolivia with Different Methods of Primary Treatment," oral presentation at *Water and Health: Where Science Meets Policy Conference*, Chapel Hill, NC, October 4-6, 2011.
- **61. Mihelcic, J.R.** (Panel Chairs: G.D. Downey & K. Beddoes) "What Is Global Engineering Education For? The Making of International Educators," 2011 Frontiers in Education Conference, Rapid City, South Dakota, October 12 15, 2011.
- **62. Mihelcic, J.R.** (*invited*) "The Day After Tomorrow: Changing Our View of Education" Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference. Tampa, FL, July 10-12, 2011.
- **63**. **Fry, L.M.,** J.R. Mihelcic, D.W. Watkins, "Climate Change and Development Impacts on the Sustainability of Spring-Fed Water Supply Systems in the Alto Beni Region of Bolivia," oral presentation at Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference, Tampa, FL, July 10-12, 2011.
- 64. MacCarthy, M.F., J. Carpenter, D. Bales, S. Dean, J.R. Mihelcic, "Manual Drilling of Water Wells: Use in International Development, Academic Research, and Teaching," poster presentation at Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference, Tampa, FL, July 10-12, 2011.
- 65. Schweitzer, R. P.K. Cornejo, S.K., Hayman, D/ Peabody, D. Lantange, J.R. Mihelcic. "A Long-Term Study of Microbial Efficacy and User Acceptability of Two Ceramic Water Filter Designs used in the Dominican Republic," poster presentation at Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference, Tampa, FL, July 10-12, 2011.

- 66. Wright Wendel, H.E., Nachabe, M., Mihelcic, J. R. "Impacts of Spatial and Temporal Scenarios related to Urbanization and Climate on Hydrology in a Rapidly Developing Latin American City," Poster presented at the *Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference*. Tampa, FL, July 10-12, 2011.
- 67. Wright Wendel, H.E., Downs, J.A., Mihelcic, J.R. "Improving Urban Quality of Life by Enhancing Access to Unconventional Green Spaces and Water Infrastructure," Oral presentation at the 2011 IWA Cities of the Future Conference. Stockholm, Sweden, May 22-25, 2011.
- **68**. **Mihelcic**, **J.R.** (*invited*) "The Last Taboo: Research Related to the Global Sanitation Crisis," presentation at Georgia Institute of Technology, Atlanta, GA, February 15, 2011.
- 69. **Pfister, A., Mattus, J.**, Wright Wendel, H.E., Hoyt, A, Mihelcic, J.R. "Investigating the Role of Green Space in Mitigating Negative Impacts of Urbanization in Santa Cruz," Paper presented at the 5th International Conference on Social Science Research. New Orleans, LA, Sept. 23-25, 2010.
- 70. Wright Wendel, H. E., Mihelcic, J.R. (2010). "Urbanization and Green Space Accessibility in the Rapidly Growing Developing World City of Santa Cruz, Bolivia," oral presentation at the *Society for Applied Anthropology Annual Meeting*, Merida, Mexico, March 24-27.
- 71. Rocha, A. M., W. Hendrix, M. C. Schmidt, J. R. Mihelcic, and N. F. Samatova. "Systems biology approach to discovery of phenotype-specific metabolic processes for engineering bacterial biohydrogen," *Scientific Discovery through Advanced Computing Program (SciDAC) Conference*, Chattanooga, Tennessee, July 11-15, 2010.
- **72. Schweitzer, R.W.,** Mihelcic, J.R., Assessing Sustainability of Community-Managed Rural Water Supply Systems, *WEFTEC 2010, The 83nd Annual Water Environment Federation Technical Exhibition and Conference,* New Orleans, LA, October 2-6, 2010.
- 73. Vanasupa, L., Mihelcic, J.R., Rocha, A. "Workshop: Integrating Sustainability into Courses: Principles and Tools to Expand Your Educative Capacity," 2010 Society for Advancement of Chicanos and Native Americans in Science (SACNAS) National Conference, Anaheim, CA, October 2, 2010
- **74. Naughton, C.,** Meeks, J., Mihelcic, J.R., (*invited*) "Developing Global Partnerships to Achieve a Sustainable Water Supply: The Peace Corps Master's International Program," *Second Annual Civil Engineering Conference: International Conference on Sustainable Urban Water Supply in Developing Countries, University of Ilorin, Ilorin, Nigeria, July 26 28, 2010.*
- 75. Shaw, R.., Meeks, J., C. Naughton, Mihelcic, J.R., (*invited*) "Sustainable Reuse of Human Urine as a Source of Nitrogen and Phosphorus," *Second Annual Civil Engineering Conference: International Conference on Sustainable Urban Water Supply in Developing Countries*, University of Ilorin, Ilorin, Nigeria, July 26 28, 2010.
- **76**. **Rocha, A.M.,** Hendrix, W., Schmidt, M.C., Mihelcic, J.R., Samatova, N.F., "Systems Biology Approach to Discovery of Phenotype-Specific Metabolic Processes for Engineering Bacterial Bio-Hydrogen," poster presentation, *Scientific Discovery through Advanced Computing (SciDAC) Workshop 2010*, Oak Ridge, TN, July 11-15 in Chattanooga, TN, July 11-15, 2010

- 77. **Zhang, Q.**, L. Vanasupa, "Development and Dissemination of Learning Suites for Sustainability Integration in Engineering Education," 2010 Annual American Society of Engineering Education (ASEE) Conference & Exposition, Louisville, KY, June 20-23, 2010.
- 78. **Mihelcic**, **J.R.** (*invited*) "Water and Sanitation in the World's Cities: Global Challenges in a Dynamic World," Engineering at the Interface Colloquium," University of Georgia, Athens, GA, January 28, 2010.
- 79. Fry, L.M., D.W. Watkins, J.R. Mihelcic and N. Reents. "Implications of agricultural land use for sustainability of gravity fed water distribution systems relying on natural springs in the Alto Beni Region of Bolivia," American Geophysical Union Fall Meeting 2009. San Francisco, CA, December 14-18, 2009.
- 80. Rowe, M.D., L.M. Fry and J.R. Mihelcic. "Low-Cost Sensor Network for Stream Flow Monitoring in the Alto Beni Region of Bolivia American Geophysical Union Fall Meeting," San Francisco, CA, December 14-18, 2009.
- 81. Fuchs, V.J. and J.R. Mihelcic, "Sanitation Development Technology and Management: What is the appropriate Sanitation Expansion Path from Latrines," University of Oklahoma International WaTER Conference, Norman, OK October 26 27, 2009.
- 82. MacCarthy, M. and J.R. Mihelcic, "Opportunities to Increase Peace Corps' Global Impact in the Water and Sanitation Sector," University of Oklahoma International WaTER Conference, Norman, OK October 26 27, 2009.
- 83. Muga, H.E., J.R. Mihelcic, N. Reents, G. Gemio, Morales, S., "Performance of Lagoon Wastewater Treatment System in Sapecho, Bolivia," *Proceedings of WEFTEC 2009, The 82nd Annual Water Environment Federation Technical Exhibition and Conference*, Orlando, Florida, October 10-14, 2009.
- 84. Mo, W., Q. Zhang, J.R. Mihelcic, D. Hokanson, "Embodied Energy Model on Water Supply Systems in Great Lakes Region," *Proceedings of WEFTEC 2009, The 82nd Annual Water Environment Federation Technical Exhibition and Conference*, Orlando, Florida, October 10-14, 2009.
- 85. **Mihelcic, J.R.** (*invited*) "Educating the Engineer of 2020: Environmental and Societal Impact of Engineering Practice," *Purdue College of Engineering Workshop on Engineer of 2020*, September 22, 2009.
- 86. **Zimmerman, J.B., Q. Zhang, L. Vanasupa, J.R. Mihelcic,** "Integrating Sustainability into Environmental Engineering: Design principles and tools to expand your educative capacity," Workshop at the *Association of Environmental Engineering and Science Professors (AEESP)* 2009 Education and Research Conference, Iowa City, July 26th-29th, 2009.
- 87. Fry, L.M., J.R. Mihelcic, D.W. Watkins, N. Reents, "Assessment of change drivers affecting the sustainability of gravity fed water supply in the Alto Beni watershed of Bolivia," poster presentation, Association of Environmental Engineering and Science Professors (AEESP) 2009 Education and Research Conference, Iowa City, July 26th-29th, 2009.
- 88. Phillips, L.D., D. Magolan, J.R. Mihelcic, "Ch-ch-changes: Next Gen Undergraduate and Graduate

- Education and Research Programs to Meet the Grandest Challenge of All," Association of Environmental Engineering and Science Professors (AEESP) 2009 Education and Research Conference, Iowa City, July 26th-29th, 2009.
- 89. Wright Wendel, H. E., Mihelcic, J. R. "Evaluating the Social, Economic, and Environmental Drivers of Urban Brownfields Redevelopment in Santa Cruz, Bolivia. Paper presented at the *Ecosystems and Sustainable Development VII*, Chianciano Terme, Italy, July 8-10, 2009.
- 90. Mihelcic, J.R. (*invited*), Global and Local Challenges to Engineering for a Sustainable Futures, International Seminar on Sustainable Infrastructure, Universidad del Valle, Cochabamba, Bolivia, June 9, 2009.
- 91. **Ocwieja**, **S.** and J.R. Mihelcic, "Life Cycle Approach for Evaluating Sanitation Projects: Case Study: Biogas Latrine," 34th WEDC International Conference, Water, Sanitation and Hygiene: Sustainable Development and Multisectoral Approaches, Addis Ababa, Ethiopia, May 18-22, 2009.
- 92. Trotz, M.A., **Muga**, **H**.E., Phillips, L.D., Yeh, D., Stuart, A., Mihelcic, J.R. "Non-traditional University Research Partners that Facilitate Service Learning and Graduate Research for Sustainable Development," poster presented at 2009 World Environmental & Water Resources Congress," Kansas City, MO, May 17-21, 2009.
- 93. Muga, H.E., Mihelcic, J.R., N.W. Reents, Morales, S., Ballard, M., Fuchs, V.J., Hanson, C.M., Johnson, E.M., Hoyt, A.M. "Treatment Performance of Wastewater Lagoons in South Yungas Province of Bolivia," 2009 World Environmental & Water Resources Congress," Kansas City, MO, May 17-21, 2009.
- 94. **Mihelcic, J.R.** (*invited*) "Education in a Sustainable & Ethical Context," Center for the Science and Religion's Fourth Fetzer Symposium *Common Ground: Science and Religion in Dialogue for a Sustainable Future*, Columbia University, New York, May 3-4, 2009.
- 95. **Mihelcic, J.R.**, (*invited*) "The Right Thing to Do: Humanitarian and Sustainable Development Engineering," University of Illinois, Champaign-Urbana, April 24, 2009.
- 96. Trotz, M.A., Omisca, E., **J.R. Mihelcic** (*invited*) "The best option? Drinking water treatment or advances in supply and storage," Session on Evaluation of the Sustainability of Drinking Water Technologies: Application in the Developing World," American Chemical Society 237th National Meeting, March 23-26, Salt Lake City, UT, 2009.
- 97. **Mihelcic**, **J.R.** (*invited*) "Sustainability in a Dynamic Global World: Challenges and Opportunities, 2009 International Association for the Exchange of Students for Technical Experience (IAESTE) United States National Conference, Baltimore, MD, February 5-8, 2009.
- 98. **Mihelcic, J.R.** (*invited*) "Global Water Challenges and Solutions," 8th Annual International Studies Schools Association (ISSA) Meeting, Tampa, Florida, January 17-19, 2009.
- 99. Mihelcic, J.R. (*invited*) "Water and Sanitation in the World's Cities: Global Challenges in a Dynamic World," *Third International Conference on Sustainability Engineering and Science*, Auckland, New Zealand, December 9-12, 2008.

- 100. **Fry, L.M.,** J.R. Mihelcic, D.W. Watkins, N. Reents, "Assessment of change drivers affecting the sustainability of gravity fed water supply in the Alto Beni watershed of Bolivia," poster presented at *American Geophysical Union Fall Meeting*, December 15-19, 2008
- 101. **Fuchs, V.J.,** L.M. Fry, J.R. Mihelcic, "Delivering sustainable waste infrastructure in an urbanizing world," *Third International Conference on Sustainability Engineering and Science*, Auckland, New Zealand, December 9-12, 2008.
- 102. **Mihelcic, J.R.** (*invited*), "Developing World Partnerships: Expanding Opportunities for Young Researchers through Community-Based Sustainable Development," *Strategic Initiatives for University Internationalization*, Tokyo, Japan, December 1-7, 2008.
- 103. **Mihelcic, J.R.** (*invited*) "Designing Water & Sanitation Systems in a Dynamic World," presentation to the Tampa Chapter, Florida Water Environment Association, Ybor City, FL, November 13, 2008.
- 104. **Mihelcic, J.R.** (*invited*) "Graduate Serving Learning: Partnerships with the U.S. Peace Corps and Developing World Communities," *Eleventh Annual Colloquium on International Engineering Education*, Newport, RI, November 6-9, 2008.
- 105. Mehl, J., D. J. Kaiser, D. Hurtado, **H.E. Muga**, J.R. Mihelcic, "Pathogen Destruction in Compost Latrines: Technology, Performance, and Impact of Owner Operation," poster presented at *Safe and Sustainable Drinking Water in Developing and Developed Countries: Where Science Meets Policy*, Chapel Hill, NC, November 5-6, 2008.
- 106. **Ballard, M.M.**, V.J. Fuchs, L.M. Fry, H.E. Wright, J.R. Mihelcic and D.W. Watkins, Jr. "Systems Thinking Applied to Industrial Management of Water Resources," *Global Conference on Sustainable Product Development and Life Cycle Engineering (Sustainability and Remanufacturing VI, SMR VI), Busan, Korea, 29 September to October 1, 2008.*
- 107. **Mihelcic, J.R.**, (invited) "The Right Thing to Do: Development of the Master's International Program," *NSF Workshop, Global Education for Engineers: Emergence, Strategies, and the Problem of Scale,*" Washington, D.C., September 5-6, 2008.
- 108. Zhang, Q., J.B. Zimmerman, J.R. Mihelcic, L.D. Vanasupa, "Learning Materials and Teaching Strategies for Sustainability Integration in Engineering Education" *NSF CCLI PI Meeting*, Washington, D.C., August 13-14, 2008.
- 109. **Zhang, Q.,** J.B. Zimmerman, J.R. Mihelcic, L.D. Vanasupa, "Learning Materials and Teaching Strategies for Sustainability Integration in Engineering Education" *12th Annual Green Chemistry and Engineering Conference*, Washington, D.C., June 24-26, 2008.
- **110. Mihelcic, J.R.** (*invited*) "Internationalizing Graduate Engineering Education: A Unique University Partnership with the U.S. Peace Corps and Developing World Communities," *Strategic Initiatives for University Internationalization Symposium*, Washington, D.C., May 22-23, 2008.

- **111. Mayer, A.**, J. Zimmerman, J.R. Mihelcic, S. Olmstead, D. Watkins, Q. Zhang, "Modeling and analyzing the use, efficiency, value, and governance of water in the Great Lakes region through an integrated approach," *Association for Great Lakes Research* 51st *Annual Conference*, Peterborough, Ontario, May 19-23, 2008.
- **112. Zhang**, **Q.**, J.B. Zimmerman, J.R. Mihelcic, L.D. Vanasupa, "Civil and Environmental Engineering Education (CEEE) Transformational Change: Tools and Strategies for Sustainability Integration and Assessment in Engineering Education," 2008 Annual American Society of Engineering Education (ASEE) Conference & Exposition, Pittsburgh, PA, June 22-25, 2008.
- 113. Wright, H.E., L.D. Phillips, S. Janczy-Stankevich, J.R. Mihelcic, "International Senior Design: Assessing the Impact on Engineering Students after Graduation," 2008 Annual American Society of Engineering Education (ASEE) Conference & Exposition, Pittsburgh, PA, June 22-25, 2008.
- 114. **Ballard, M.M.**, A.R. Clarke, A. Sather-Knutsen, B.D. Barkdoll, J.R. Mihelcic "Collaborative International Research: Technology Transfer & Efficiency of Wastewater Treatment Systems in Rural Communities of Bolivia," 2008 World Environmental & Water Resources Congress," Honolulu, Hawaii, May, 2008.
- 115. **Mihelcic, J.R.**, (*invited*) "The Sustainable Revolution: Challenges or Opportunities," North Carolina State University, Raleigh, NC, April 28, 2008.
- 116. **Mihelcic, J.R.**, (*invited*) "The Sustainable Revolution: Challenges or Opportunities," University of South Florida, Tampa, FL, January 28, 2008.
- 117. Cowden, J.R., **D.W. Watkins**, J.R. Mihelcic, and L.M. Fry. "Probabilistic Impact Assessment of Domestic Rainwater Harvesting in Urban Slums: West Africa Case Study," poster presentation at *American Geophysical Union*, San Francisco, December 11-14, 2007.
- 118. **Fry, L.M.,** J.R. Mihelcic, D.W. Watkins, "Meeting the Millennium Development Target for Sanitation: Barriers and Solutions," *American Water Resources Association 43rd Annual Water Resources Conference*, Albuquerque, New Mexico, November 12-15, 2007.
- 119. **Fuchs, V.J.**, J.S. Gierke, J.R. Mihelcic, "Hydraulic Model Comparison of Vertical-Flow Regimes in Constructed Wetlands," 80nd Annual Water Environment Federation Conference & Exposition, October 13-17, 2007.
- 120. **Sather-Knutsen, A.,** Clarke, A., Ballard, M., Mihelcic, J.R. and N. Reents, "Community and the State in Wastewater Management in the Alto Beni Region of Bolivia," *Association of American Geographers Great Plains—Rocky Mountain Annual Meeting*, Denver, Colorado, September 28-29, 2007.
- 121. **Mihelcic, J.R. and J.W. Sutherland** (*invited*), "Sustainable Engineering, Addressing Challenges in Engineering Education," 2007 American Society of Engineering Education (ASEE) North Midwest Section Conference, Houghton, MI, September 21-22, 2007.

- 122. **Fuchs, V.J.** and J.R. Mihelcic, "Engineering Education for International Sustainability: Curriculum Design under the Sustainable Futures Model," 2007 American Society of Engineering Education (ASEE) North Midwest Section Conference, Houghton, MI, September 21-22, 2007.
- **Zhang, Q.**, D. Johnson, J.R. Mihelcic, "Interdisciplinary Research for Graduate Education in Sustainability," 2007 American Society of Engineering Education (ASEE) North Midwest Section Conference, Houghton, MI, September 21-22, 2007.
- 124. **Haapala, K.R.**, M.J. Hutchins, J.L. Rivera, V. Kumar, A.R. Clarke, T.D. Eatmon, R.A. Harris, M.H. Durfee, J.R. Mihelcic, D.R. Shonnard, and J.W. Sutherland, "Educational Aspects of the Sustainable Futures NSF IGERT Project," 2007 American Society of Engineering Education (ASEE) North Midwest Section Conference, Houghton, MI, September 21-22, 2007.
- **Mihelcic, J.R.** (*invited*), "Sustainable Futures IGERT: Transforming the Education DNA of a University," *NSF Workshop: Sustainable Manufacturing V*, Rochester Institute of Technology, Rochester, NY, September 19-21, 2007.
- 126. **Cowden, J.R.**, Mihelcic, J.R., and Watkins, D.W. "Climate Change Impact on Rainwater Harvesting and Health in West Africa Urban Slums," poster presentation at 3rd International Conference on Climate and Water, Helsinki, Finland, September 3-6, 2007.
- **127**. **Zhang**, **Q**., J.R. Mihelcic, D.R. Shonnard, "Simplified Impact Assessment Methods for Green Engineer Design through Chemical Grouping and Parameter Adjustment, *Association of Environmental Engineering & Science Professors (AEESP) Education and Research Conference*, Blacksburg, VA, July 29-31, 2007.
- 128. Mihelcic, J.R. (leader), S. Jones, K.G. Paterson, A. Ramaswami, Julie B. Zimmerman, Angela R. Bielefeldt, "Workshop: Implementing an International Sustainable Development Initiative," Association of Environmental Engineering & Science Professors (AEESP) Education and Research Conference, Blacksburg, VA, July 29-31, 2007.
- 129. Wright, H.E., Q. Zhang, J.R. Mihelcic, "Integrated Life Cycle Impact Assessment for an Emerging Chemical of Concern," *International Society for Industrial Ecology Conference*, University of Toronto, June 17-20, 2007.
- 130. McConville, J.R., and J.R. Mihelcic, "Adapting Life Cycle Thinking Tools to Assess Project Sustainability in International Water Development Work," *Engineering Sustainability* 2007, Pittsburgh, PA, April 15-18, 2007.
- 131. Zimmerman, J.B., **Mihelcic, J.R.,** A. Ramaswami, "Integrating Developed and Developing World Knowledge into Global Discussions and Strategies for Sustainability," *Engineering Sustainability* 2007, Pittsburgh, PA, April 15-18, 2007.
- **Mihelcic, J.R.**, K.G. Paterson, L.D. Phillips, Q. Zhang, D.W. Watkins, B. Barkdoll, V.J. Fuchs, D.R. Hokanson, "Educating Engineers in the Sustainable Futures Model with a Global Perspective," 2nd International Conference on Sustainability Engineering & Science, Auckland, New Zealand, February 20-23, 2007.

- 133. Cowden, J.R., Mihelcic, J.R., & Watkins, D.W., "Stochastic Rainfall Occurrence Modeling in West Africa, poster presentation at 2007 World Environmental & Water Resources Congress," Tampa, FL, May 14-16, 2007.
- 134. Cowden, J.R., Mihelcic, J.R., & Watkins, D.W. "Domestic Rainwater Harvesting Assessment to Improve Water Supply and Health in Africa's Urban Slums" 2006 World Environmental & Water Resources Congress, Omaha, NE, May 21-25, 2006.
- 135. **K. Paterson**, D. Watkins, J. Mihelcic and L. Phillips, "International Service Engineering Across Academic Borders," *American Society of Engineering (ASEE) Annual Conference & Exposition*, June 18-21, Chicago, IL, 2006.
- 136. Fuchs, V.J. and J.R. Mihelcic (*invited*), "Engineering Education for International Sustainability: Curriculum Design under the Sustainable Futures Model," 5th Annual American Society of Engineering Education (ASEE) Global Colloquium on Engineering Education, Rio de Janeiro, Brazil, October 9-12, 2006.
- 137. Fry, L.M. and J.R. Mihelcic, "Integrating a Global Perspective into Graduate Engineering Education & Research," 5th Annual American Society of Engineering Education (ASEE) Global Colloquium on Engineering Education, Rio de Janeiro, Brazil, October 9-12, 2006.
- 138. **Mihelcic, J.R.** (*invited*), "Graduate Engineering Programs in Sustainable Development," Engineers for a Sustainable World - National Conference, Iowa City, IA, September 27-30, 2006.
- 139. **Mihelcic, J.R.** (*invited*), "Where do we go from here in Green Chemistry and Engineering Education?" in National Research Council's *Exploring Opportunities in Green Chemistry and Engineering Education: A Workshop Summary to the Chemical Sciences Roundtable* (Eds: P. Anastas, F. Wood-Black, T. Masciangioli, E. McGowan, L. Ruth), National Academies Press, Washington, D.C. (pg 21-22), 2007. (oral presentation was November 7-8, 2005).
- 140. **Mihelcic, J.R.** (*invited*), "Engineering Sustainable Development: Service, Education, Research," University of Virginia, Charlottesville, VA, March, 2006.
- 141. **Mihelcic, J.R.**, L.A. Phillips, L.M. Fry, "International Sustainable Development Engineering Initiative for Protection and Development of Water Supplies," *National Groundwater Association Summit*, San Antonio, TX, April 24-26, 2006.
- 142. **Fry, L.M.,** J.R. Mihelcic, D.W. Watkins, Jr., "Improving Public Health by Improving Groundwater Supply: Results from Springbox Projects in Cameroon," *National Groundwater Association Summit*, San Antonio, TX, April 24-26, 2006.
- 143. **Mihelcic, J.R.** (*invited talk*), "Engineering Sustainable Development: Service, Education, Research," University of Oklahoma, Norman, OK, April 21, 2006
- 144. **Mihelcic, J.R.** (*invited talk*), "Physical Sciences & Engineering Initiatives: Master's International Program in Civil & Environmental Engineering at Michigan Technological University," *National*

- Academy of Sciences Government University Industry Research Roundtable Council Meeting, National Academy of Sciences, Washington, D.C., June 7, 2005.
- 145. **Mihelcic, J.R.,** "Integrating a Global Perspective into Environmental Engineering Education and Research," *Association of Environmental Engineering & Science Professors (AEESP) Education and Research Conference*, Clarkson University, Potsdam, NY, July 24-26, 2005.
- 146. **Mihelcic, J.R.,** D.R. Hokanson, N.J. Hutzler, Q. Zhang, "How the Environmental Engineer fits into Education and Research Initiatives in Sustainability," *Association of Environmental Engineering & Science Professors (AEESP) Education and Research Conference*, Clarkson University, Potsdam, NY, July 24-26, 2005.
- 147. **Mihelcic, J.R.,** "Environmental Sustainability: Educating Students, Colleagues, and Ourselves," presentation at Sustainability Workshop, *Association of Environmental Engineering & Science Professors* (AEESP) Education and Research Conference, Clarkson University, Potsdam, NY, July 24-26, 2005.
- 148. **Phillips, L.D,** J.R. Mihelcic, M. Paddock "How Academic Programs can be Integrated into EWB-USA Activities" *Engineers Without Borders–USA 2004 National Conference*, September 22-25, 2004, Denver, CO.
- 149. **Mihelcic, J.R.** (*invited*), "Engineering in the Developing World." University of Canterbury, Christchurch, New Zealand, May 27, 2004.
- **Mihelcic, J.R.** (*invited*), "Sustainability Science and Engineering: Emergence of a New Metadiscipline," University of Canterbury, Christchurch, New Zealand, May 7, 2004.
- 151. **Mihelcic, J.R.** (*invited*), "The Emerging Global Water Crisis," University of Colorado-Boulder, Boulder, CO, September 28, 2003.
- 152. **Mihelcic, J.R.,** "Michigan Tech's Master's International Program in Civil and Environmental Engineering: Combining Graduate Education with Peace Corps Service," poster presentation at *Sustainable Resources* 2003, Boulder, Colorado, September 29 to October 4, 2003.
- 153. Zhang, Q., J.C. Crittenden, J.R. Mihelcic, "Integration of Chemical Fate Model and Economic Input Output Life Cycle Assessment for Evaluating Automobile Manufacturing," *International Society for Industrial Ecology Conference*, Ann Arbor, MI, July 1-3, 2003.