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EDUCATION

PhD., Civil and Materials Engineering, University of Illinois at Chicago, 2006
M.E., Civil and Environmental Engineering, Clarkson University, Potsdam, NY 2001
B.S., Chemistry, Denison University, Granville, OH, 2000

APPOINTMENTS

Clemson University, 2006- , Assistant Professor
Department of Environmental Engineering and Earth Sciences

Alcoa, Inc., 2001-2005, Doctoral Resident, Environmental Health and Safety

University of Illinois at Chicago, 2002-2006, Research Assistant

Clarkson University, 2000-2001, Research Assistant

PUBLICATIONS

- Miller, S.A. Landis, A.E.; Theis, T.L.; Environmental Tradeoffs of Bio-based Production
Environmental Science and Technology, 2007, *41*(15), 5176-5182
- Miller, S.A.; Landis, A.E.; Theis, T.L.; Reich, R.A.; A Comparative Life Cycle
Assessment of Soybean Oil and Petroleum Lubricants *Environmental Science and
Technology*, 2007, *41*(11), 4143- 4149
- Landis, A.E.; Miller, S.A., Theis, T.L.; Life Cycle of the Corn-Soybean Agroecosystem for
Bio-based Production *Environmental Science and Technology* 2007; *41*(4), 1457-
1464.
- Miller, S.A.; Landis, A.E.; Theis, T.L.. Using Monte Carlo Simulation to Characterize
Nitrogen Flows in Agroecosystems. *Environmental Science and Technology*
2006,*40*, 2324-2332
- Miller, S.A.; Theis, T.L. Comparison of Life-Cycle Inventory Databases: A case study
using soybean production. *Journal of Industrial Ecology* 2006, *10*(1-2):133-147.
- Korfmacher, K.; Ramos, B.; Miller, S.A. "Chemistry and environmental science:
Investigating soil erosion and deposition in the lab and field", Understanding Place:
GIS and Mapping Across the Curriculum. Ed. Sinton, D.S. and J. Lund. ESRI Press:
Redlands, CA, 2007. 201-210.
- Ramos, B.L.; Miller, S.A.; Korfmacher, K. Implementation of a Geographic Information
System in the Chemistry Curriculum: An Exercise in Integrating Environmental
Analysis and Assessment. *J. Chem. Education*. 2003 *80*, 50-54.

PRESENTATIONS

- Miller, S.A.; Vander Mey, B.; Bornholdt, H.; Creating Recycled Material Landscapes to Promote Environmental Stewardship. National Sustainable Design Expo, US EPA, 2008, Honorable Mention
- Miller, S.A.; Landis, A.E.; Theis, T.L.; Environmental Tradeoffs of Bio-based Production. *Association of Environmental Eng. and Science Professors*, Blacksburg, VA, 2007.
- Miller, S.A.; Landis, A.E.; Theis, T.L.; Characterizing Carbon and Nitrogen Flows of Bio-based Products. *International Society of Industrial Ecology*, Toronto, Canada, 2007.
- Miller, S.A.; Is Bio Always Better? A Discussion of the Tradeoffs of Bio-based Products Using Life Cycle Assessment, invited speaker, *Sustainable Engineering Systems seminar series*, University of Michigan, February 4, 2007.
- Miller, S. A. Questioning the Sustainability of Biofuels, invited speaker, Department of Chemistry and Biochemistry, Denison University, April 11, 2007.
- Miller, S.A.; Landis, A.E.; Theis, T.L. Comparative Life Cycle Assessment of Biolubricants and Mineral Oils. *9th Annual Green Chemistry and Engineering Conference*, Washington D.C., 2005.
- Miller, S. A.; Theis, T. L.; and Reich, R. Environmental Trade-Offs of Bio-based and Petroleum Lubricants. *Society of Tribologists and Lubrication Engineers*, Las Vegas, NV, 2005.
- Miller, S.A.; Environmental Manufacturing: Agriculture Meets Industry, invited speaker, *Civil Engineering Seminar series*, Purdue University. 2005.
- Miller, S.A.; Landis, A.E.; Theis, T.L. Incorporating the Nitrogen Cycle into Agricultural Life Cycle Inventories. *SETAC Meeting*, Portland, OR, 2004.
- Theis, T.L., Miller, S.A.; Landis, A.E.; Seager, T. Toward Defining the Practice of Sustainability Engineering, *2004 Annual Meeting of the American Association for the Advancement of Science*, Seattle, WA, 2004.
- Miller, S.A.; Theis, T.L.; Reich, R.. Biolubricants and Mineral Oils: Comparative Environmental Impacts. *Society of Tribologists and Lubrication Engineers Meeting*, Toronto, Canada, 2004.
- Miller, S. A.; and Theis, T. L. Life Cycle Methods for Evaluation of Bio-based Lubricants. *AIChE Meeting*, San Fransisco, CA, 2003.

Miller, S. A.; and Theis, T. L. Life Cycle Methods for Evaluation of Bio-based Lubricants. *International Society of Industrial Ecology*, Ann Arbor, MI, 2003.

Miller, S. A.; Theis, T. L.; and Reich, R. Environmental Implications of Substituting Bio-lubricants for Mineral Oils in Industrial Applications. *Society of Tribologists and Lubrication Engineers*, New York, 2003.

HONORS AND AWARDS

IGERT Fellow, National Science Foundation, (2001-2005)

Green Campus Council, University Illinois at Chicago (2003-2005)

TEACHING

EES 486/686, Pollution Prevention and Industrial Ecology, F06, F07, F08

ENSP 200, Introduction to Environmental Science, F08

EES 820 Environmental Systems Analysis, S08

EES 806, Environmental Design, F07

EES 861, Environmental Engineering and Earth Science Seminar, F07

MEMBERSHIPS

Member, International Society of Industrial Ecology, ISIE, (2001-)

Member, American Society of Agricultural Engineers, ASAE, (2003-)

Member, Society of Women Engineers, SWE, (2001-)

Member, Association of Environmental Engineering and Science Professors, AEESP (2007-)

PROFESSIONAL ACTIVITIES

South Carolina Bioenergy Research Collaborative (2006-)

South Carolina Biomass Council (2006-)

South Carolina Climate, Energy and Commerce Advisory Committee (CECAC)

Residential, Commercial & Industrial (RCI) Technical Work Group

Technical Advisory Committee, Carbonfund.org (2008-)

Review Panel, North Central Sun Grant, 2007

Reviewer, Environmental Science and Technology (2005-)

Reviewer, International Journal of Life Cycle Assessment (2006-)

Reviewer, Waste Management (2008-)

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