

Sheila Jones Bosch

Education

Doctoral Candidate, Building Technologies, College of Architecture, Georgia Institute of Technology	Present
Master of Science, Life Science, concentration in Environmental Toxicology University of Tennessee, Knoxville	1994
Bachelor of Science, Science Education University of Tennessee	1990

Experience Summary

Georgia Institute of Technology: As a researcher with the Georgia Tech Research Institute, responsible for developing and delivering training modules regarding green materials, indoor environmental quality, specifications, and life cycle assessment as part of an introductory course to sustainable facilities and infrastructure. Contributions also include the initiation of internal and external partnerships to extend SFI capabilities, and identification of new research areas for SFI. Provide technical assistance to building professionals. Currently developing a post-occupancy sustainability toolkit for CA schools to assess the impacts of sustainable strategies regarding thermal comfort, indoor air quality and lighting on both technical building performance and occupant response. Other current research is directed at identifying plausible links between school facilities and occupant outcomes.

Aberdeen Proving Ground: While working as a pollution prevention specialist, responsible for pollution prevention training and outreach, coordinating hazardous materials management procedures, and product substitution on an Army installation, Aberdeen Proving Ground, Maryland. Developed and implemented programs for compliance with federal, state and local requirements, primarily those regarding pollution prevention, affirmative procurement and emergency planning. Developed and administered pollution prevention policies and procedures and formed ad hoc working groups to solve problems associated with the implementation of specific pollution prevention programs. Coordinated the APG Environmentally Preferable Paint Project, an EPA pilot project for environmentally preferable purchasing. This collaborative project included the APG Directorate of Safety, Health and Environment, The Aberdeen Test Center, the U.S. EPA, and Green Seal. It has been cited in several publications as an example of green purchasing. To increase public awareness of pollution prevention, published numerous articles in the *APG News*.

University of Tennessee: Conducted a comparative evaluation of over 50 chemical ranking and scoring systems. Gathered toxicological data on Toxic Release Inventory (TRI) chemicals for a UT-developed chemical ranking and scoring system. Developed models for estimating the acute toxicity of a variety of chemicals to fathead minnows.

Knox County Schools: As a science teacher at Central High School, taught basic and advanced level Biology to students in grades 9 -12, incorporating labs, outdoor activities, service projects, field trips, and guest lecturers. Also sponsored the Beta Club. While at

Carter High School, taught Chemistry and Physics to students in grades 10-12, incorporating labs, creative teaching techniques, and field trips. Also formed and sponsored the Conservation Club.

Employment History

Georgia Institute of Technology Graduate Research Assistant	1999-present
Aberdeen Proving Ground, Maryland Dynamac Inc., Pollution Prevention Specialist	1998-1999
	ORISE, Pollution Prevention Specialist 1995-1998
University of Tennessee, Center for Clean Products and Clean Technologies Graduate Research Assistant	1992-1995
Knox County Schools, Tennessee Central High School, Biology teacher	1991-1992
	Carter High School, Chemistry and Physics teacher 1990-1992

Professional Affiliations, and Special Honors

Construction Specification Institute	2001-present
Council of Educational Facility Planners	2002-present
Georgia Tech Presidential Fellow	1999-present
Georgia Tech Shackelford Fellow	1999-2002

Major Reports and Publications

- Bosch, S.J. and Messadi, T. (2003). "California High Performance Schools Tool Kit". Conference Proceedings: American Solar Energy Society, SOLAR 2003, June 21-26, 2003, Austin, TX.
- Bosch, S.J. and Pearce, A.R. "Sustainability in Public Facilities: An Analysis of Guidance Documents". *Journal of Performance of Constructed Facilities*, 17(1):9 –18.
- Vanegas, J.A., Pearce, A.R. and Bosch, S.J. (2002). "Built Environment Sustainability: An Integrated Approach to Education, Research and Outreach". Presented at Engineering Education in Sustainable Development, October 24 – 25, 2002, Delft, The Netherlands
- Vanegas, J.A., Pearce, A.R. and Bosch, S.J. (2002). "An Engineering Undergraduate/Graduate Course on Sustainable Design and Construction". Presented at Engineering Education in Sustainable Development, October 24 – 25, 2002, Delft, The Netherlands
- Pearce, A.R. and Bosch, S.J. (2002). Sustainable Facilities & Infrastructure Training: Approaches, Findings, and Lessons Learned. Presented at Engineering Education in Sustainable Development, October 24 – 25, 2002, Delft, The Netherlands
- Pearce, A.R., Fischer, C.L.F., Jones, S.L., and Vanegas, J.A. (2000). *Introduction to Sustainable Facilities & Infrastructure*. Training curriculum and workbook.
- Jones, S.L. and Schultz, T.W. (1995). "Quantitative Structure-Activity Relationships for Estimating the No-Observable Effects Concentration in Fathead Minnows (*Pimephales promelas*)". *Quality Assurance: Good Practice, Regulation, and Law*, 4(3), 187-203.
- Swanson, M.B. et.al. (Jones is fifth author) (1997). "A Screening Method for Ranking and

- Scoring Chemicals by Potential Human Health and Environmental Impacts". *Environmental Toxicology and Chemistry* 16(2), 372-383.
- Swanson, M.B., and Socha, A.C., Eds. (1997). *Chemical Ranking and Scoring: Guidelines for Relative Assessments of Chemicals*. Society of Environmental Toxicology and Chemistry (SETAC).
- Davis, G.A. et. al. (Jones is fifth author) (1994). *The Product Side of Pollution Prevention: Evaluating the Potential for Safe Substitutes*. University of Tennessee Center for Clean Products and Clean Technologies, U.S. EPA Risk Reduction Engineering Laboratory, Office of Research and Development, Cincinnati, OH. EPA/600/R-94/178.
- Davis, G.A. et. al. (Jones is seventh author) (1994). *Chemical Hazard Evaluation for Management Strategies: A Method for Ranking and Scoring Chemicals by Potential Human Health and Environmental Impacts*. University of Tennessee, Center for Clean Products and Clean Technologies, U.S. EPA Risk Reduction Engineering Laboratory, Office of Research and Development, Cincinnati, OH. EPA/600/R-94/177.