

Phillip L. Thompson
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Seattle, WA 98122
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206.296.5521

EDUCATION

Ph.D. Environmental Engineering, University of Iowa 1997
M.S. Environmental Engineering, University of Iowa 1992
B.A. Biology, University of Iowa 1990

Dissertation: The Phytoremediation of Munitions (RDX, TNT) Waste at the Iowa Army Ammunition Plant with Hybrid Poplar Trees (Advisor: Jerald Schnoor)

PROFESSIONAL REGISTRATION

Registered Professional Engineer in the State of Washington, License #: 36577
U.S. Green Building Council–LEED Accredited Professional

EXPERIENCE

Department of Civil and Environmental Engineering, Seattle University

Department Chair September 2006 to Present

Associate Professor February 2003 to Present

Assistant Professor August 1997–February 2003

Courses: Principles of Environmental Engineering, Water and Wastewater Engineering, Hazardous Waste Management, Engineering Economy, Engineering Design, Biological Principles for Environmental Engineers, Introduction to Civil & Environmental Engineering

Department of Civil and Environmental Engineering, University of Iowa

Teaching Assistant August 1991–May 1995

Courses Taught: Biological Treatment Processes, Engineering I, Hydrogeology and Groundwater Quality, Environmental Chemistry Laboratory.

Research Assistant

May 1995 –1997. Studied phytoremediation of TNT and RDX wastes by a hybrid poplar tree.

May 1994 –May 1995. Designed pilot–scale fluidized bed for drinking water denitrification.

January 1993 –May 1994. Studied the decomposition of chloramines in model waters.

January 1990 –December 1993. Performed nitrate analysis for a statewide water quality survey.

September 1988 –December 1990. Monitored water quality of local reservoir and river system.

OTHER RELATED EXPERIENCE

Affiliate Faculty, University of Washington. September 1998 to present

Principal, Northwest Engineers, Seattle, Washington. January 2007 to present

Principal, KDD & Associates, Seattle, Washington. May 2001–December 2006

Consultant, Appia Engineering, Seattle, Washington. June 2000–December 2001

Consultant, CH2M Hill. Portland, Oregon. July 1998–June 2000.

Consultant, US Environmental Protection Agency. Athens, GA October 1998–March 1999.

Consultant, Howard R. Green & Associates, Des Moines, Iowa. January–October 1992.
 Technical Reviewer: *Environmental Science and Technology*; *Environmental Toxicology and Chemistry*; *Journal of the American Water Works Association*; *International Journal of Phytoremediation*; Addison, Wesley, Longman Publishers; Center for Health Effects of Environmental Contamination
 Lab Technician, Iowa City Wastewater Treatment Plant, December 1990–December 1991.

GRANTS & AWARDS

Seattle University McGoldrick Fellow, 2011-2012
 Seattle University Global Grants Fund, April 2011
 Seattle University Endowed Mission Fund, March 2011.
 Seattle University Thomas J. Bannan Endowed Chair for Engineering, 2009-2011
 Seattle University Endowed Mission Fund, June 2010.
 National Science Foundation–Course, Curriculum & Laboratory Improvement Phase I, 2009.
 Seattle University Endowed Mission Fund, June 2009.
 Seattle University Provost’s Office, Assessment Projects, June 2009.
 Seattle University Endowed Mission Fund, June 2008.
 National Science Foundation–Course, Curriculum & Laboratory Improvement Phase II, 2007.
 Seattle University Endowed Mission Fund, June 2007.
 Seattle University Endowed Mission Fund, June 2006.
 National Science Foundation–Course, Curriculum & Laboratory Improvement Phase I, 2004.
 Seattle University Summer Faculty Fellowship, 2004.
 National Science Foundation–Research Experience for Undergraduates, 2003.
 National Science Foundation–Major Research Instrumentation, June 2002.
 Seattle University Summer Faculty Fellowship, 2001.
 National Science Foundation–New Century Scholar, August, 1999.
 Seattle University Summer Faculty Fellowship, 1998.
 National Research Council Postdoctoral Fellowship, June 1997–1998 (award declined).
 Iowa Department of Natural Resources Seed Grant, May 1996.
 United States Environmental Protection Agency Fellowship, June 1995–May 1996.
 Neil B. Fisher Environmental Engineering Fellowship, University of Iowa, 1992.

PUBLICATIONS

McCormack, J., Beyerlein, S., Davis, D., Trevisan, M., Lebeau, J., Davis, H., Howe, S., Brackin, P., Thompson, P., Gerlick, R., Khan, J., and Leiffer, P. (2012). “Contextualizing Professionalism in Capstone Projects Using the IDEALS Professional Responsibility Assessment.” *International Journal of Engineering Education*. In Review.

McCormack, J., Beyerlein, S., Brackin, P. Davis, D., Trevisan, M., Davis, H., Gerlick, R., Thompson, P., Howe, S., Leiffer, P. and J. Khan. (2011). “Assessing Professional Skill Development in Capstone Design Courses.” *International Journal of Engineering Education*. Vol. 27, No. 6, 1308-1323.

- Thompson, P., Milonova, S., Reha, M., Mased, F. and Tromble, I. (2011). “Coil Pump Design for a Community Fountain in Zambia.” *International Journal for Service Learning in Engineering: Humanitarian Engineering and Social Entrepreneurship*. Vol. 6, No.1, 33-45.
- Thompson, P. (2011). “Eradicating the Safe Water and Sanitation Crises via Unification” in: Engaging with Environmental Justice: Governance, Education and Citizenship, Cotton, M. and Motta, B. H. eds., *Inter-Disciplinary Press*, Oxford, UK. 163-173.
- Davis, D., Trevisan, M., Davis, Beyerlein, S , Howe, S., Thompson, P., McCormack, J, Brackin, P., Khan, M. (2011). “IDEALS: A Model for Integrating Engineering Design Professional Skills Assessment and Learning.” American Society for Engineering Education, Vancouver, BC.
- Thompson, P. and A. Polebitski (2010). “The Effect of Mycorrhizal Fungi on the Phytoremediation of RDX.” *Environmental Science and Technology*. Vol. 44, No. 3, 1112-1115.
- Thompson, P. (2010). “Economically Sustainable Safe Drinking Water Systems for the Developing World”. *Business and Society Review*. Vol. 115, No. 4, 477-493.
- Davis, D., Trevisan, M., Davis, H., Gerlick, R., McCormack, J., Beyerlein, S., Thompson, P., Howe, S., Leiffer, P. and P. Brackin (2010). “Assessing Team Member Citizenship in Capstone Engineering Design Courses.” *International Journal of Engineering Education*. Vol. 26, No. 4, 771-783.
- Davis, D., Beyerlein, S., Thompson, P., McCormack, J., Harrison, O., Trevisan M., Gerlick, R., and S. Howe (2009). “Assessing Design and Reflective Practice in Capstone Engineering Design Courses.” American Society for Engineering Education, Austin, TX.
- Gerlick, R., Davis, D., Beyerlein, S., McCormack, J., Thompson, P., Harrison, O, and M. Trevisan (2008). “Assessment Structure and Methodology for Design Processes and Products in Engineering Capstone Courses.” American Society for Engineering Education, Pittsburgh, PA.
- Davis, D., Beyerlein, S., Trevisan, M., Harrison, O., Thompson, P., and M. Trevisan (2007). “Assessments for Three Performance Areas in Capstone Engineering Design.” American Society for Engineering Education, Pittsburgh, PA
- Davis, D., Beyerlein, S., Thompson, P., Harrison K., Trevisan, M., and B. Mount (2006). “A Conceptual Model for Capstone Engineering Design Performance and Assessment”, Proceedings of Annual Conference of the American Society for Engineering Education” Chicago, IL.

- Beyerlein, S., Davis, D., Trevisan, M., Thompson, P., and K. Harrison (2006) “Assessment Framework for Capstone Design Courses”, Proceedings of Annual Conference of the American Society for Engineering Education, Chicago, IL.
- Trevisan, M., Davis, D., Beyerlein, S., Thompson, P., and K. Harrison (2006) “A Review of Literature on Assessment Practices in Capstone Engineering Design Courses: Implications for Formative Assessment.” Proceedings of Annual Conference of the American Society for Engineering Education, Chicago, IL.
- Davis, D., Beyerlein, S., Thompson, P., Gentili, K. and L. McKenzie (2003) “How Universal are Capstone Design Course Outcomes?” Proceedings of Annual Conference of the American Society for Engineering Education, Chicago, IL
- Thompson, P. L., D. Moses, K. M. Howe (2003). “Phytoremediation at the Iowa Army Ammunition Plant” in: Phytoremediation: Transformation and Control of Contaminants S. C. McCutcheon and J. L. Schnoor, eds. John Wiley and Sons, Inc., New York.
- Thompson, P. L. (2002). “Designing a Discipline –Specific Introductory Course for Freshmen”. American Society of Engineering Education Annual Conference Proceedings, Montreal, Quebec.
- Davis, D., Trevisan, M., McKenzie, L., Beyerlein, S., Daniels, P., Rutar, T., Thompson, P., and Gentili, K. (2002). “Practices for Quality Implementation of the TIDEE Design Team Readiness Assessment”, American Society of Engineering Education Annual Conference Proceedings, Montreal, Quebec.
- Thompson, P. L. (2001). “Phytoremediation Laboratory” in Environmental Engineering Laboratory Manual, S. Powers, ed. American Society of Environmental Engineering and Science Professors, Potsdam, NY.
- Thompson, P. L., and S. Safferman (2001). “Hardness Removal Laboratory” in Environmental Engineering Laboratory Manual, S. Powers, ed. American Society of Environmental Engineering and Science Professors, Potsdam, NY.
- Burken, J. G., Shanks, J. and P. L. Thompson (2000). “Phytoremediation and Plant Metabolism Explosives and Nitroaromatic Compounds” in: Biodegradation of Nitroaromatic Compounds and Explosives, Spain, J. C., Hughes, J. B. and H. Knackmuss. eds., Plenum, New York. 239 –275.
- Thompson, P. L., Ramer, L. A., Yong, P. and J. L. Schnoor (2000). “Pilot–scale Treatment of TNT –spiked Groundwater by Hybrid Poplars” in: Emerging Technologies in Hazardous Waste Management VIII, Tedder, D. W. and F. G. Pohland eds., Kluwer Academic/Plenum, New York. 109 –118.

- Thompson, P. L., Murphy, D. J., Harmsen, J. and P. Chang. (1999). “Effect of Leachate on Native Grass Species of Eastern Washington,” *Journal of Solid Waste Technology and Management*. Vol. 26, Nos. 3 & 4. 114 –118.
- Thompson, P. L. (1999). “Phytoremediation of Explosives” in Guidelines for Successful Phytoremediation, Jordahl, J. ed., American Institute of Chemical Engineers, New York.
- Thompson, P. L., Ramer, L. A. and J. L. Schnoor (1999). “1,3,5–trinitro–1,3,5 –triazaine (RDX) Translocation in Hybrid Poplar Trees”, *Environmental Toxicology and Chemistry*, Vol. 18, No. 2, 279 –284.
- Thompson, P. L., Ramer, L. A. and J. L. Schnoor (1998). “Uptake and Transformation of TNT by a Poplar Hybrid,” *Environmental Science and Technology*, Vol. 32, No. 7, 975 –980.
- Thompson, P. L. and W. L. Paulson (1998). “Dewaterability of Alum and Ferric Coagulation Sludges,” *Journal of the American Water Works Association*, Vol. 90, No. 4, 164 –170.
- Thompson, P. L., Ramer, L. A., Guffey, A. P., and J. L. Schnoor (1998). “Decreased Transpiration in Poplar Trees Exposed to 2,4,6 –Trinitrotoluene,” *Environmental Toxicology and Chemistry*, Vol. 17, No. 5, 902 –906.

SELECTED PRESENTATIONS

- Thompson, P. L. (2011) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Mill Creek Rotary Club. Seattle, WA, September 14.
- Thompson, P. L. (2011) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Georgetown Rotary Club. Seattle, WA, May 26.
- Thompson, P. L. (2011) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Rotary 5030 District Conference. Portland, OR, April 30.
- Thompson, P. L. (2011) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Rotary 5030 District Conference. Portland, OR, April 29.
- Thompson, P. L. (2011) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to International District Rotary Club. Seattle, WA, April 28.
- Thompson, P. L. (2011) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Emerald City Rotary Club. Seattle, WA, February 1.
- Thompson, P. L. (2011) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Skyline Rotary Club. Seattle, WA, January 17.

- Thompson, P. L. (2010) “Safe Water for Medical Clinics in Haiti: A Community-based Solution”, Invited presentation for State Senator Jeanne Kohl-Welles’ Haiti Benefit. Seattle, WA, December 29.
- Thompson, P. L. (2010) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to University of Iowa Department of Civil Engineering Seminar. Iowa City, IA, November 19.
- Thompson, P. L. (2010) “Sustainable Water and Sanitation for the Developing World”, Invited presentation to Global Washington Annual Conference. Redmond, WA, November 15.
- Thompson, P. L. (2010) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Seattle University Bannan Scholars Lecture. Seattle, WA, October 28.
- Thompson, P. L. (2010) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Massachusetts Institute of Technology Engineers Without Borders. Boston, MA, October 19.
- Thompson, P. L. (2010) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Harvard University Engineers Without Borders. Boston, MA, October 18.
- Thompson, P. L. (2010) “Building Water Partnerships with Rotary and EWB”, Invited presentation to Rotary International Western District Governors Meeting. Bellevue, WA, October 2.
- Thompson, P. L. (2010) “Eradicating the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Seattle University Natural Science Seminar. Seattle, WA, October 1.
- Thompson, P. (2010). “Assessing Professional Development and Teamwork Skills in Using IDEALS”, Seattle University Engineering Faculty Workshop, Seattle, WA, September 15.
- Thompson, P. (2010). “Capturing Carbon and Hearts in Seattle”, Invited presentation to Heriot-Watt University School of the Built Environment. Edinburgh, Scotland. July 15.
- Thompson, P. (2010). “Eradicating the Safe Water and Sanitation Crises via Unification” 9th Global Conference on Environmental Justice and Global Citizenship. Mansfield College, Oxford, UK, July 12.

- Thompson, P., Brackin, P. and J. McCormack (2010). “Workshop: Assessing Professional Development and Teamwork Skills in Senior Capstone Engineering Courses”, Capstone Design Conference, Boulder, CO, June 7.
- Thompson, P. (2010). “Assessing Professional Development and Teamwork Skills in Senior Capstone Engineering Courses”, ABET Workshop, Las Vegas, NV, April 15.
- Thompson, P. (2010). “Safe Water Access for the Developing World”, Invited lecture for Seattle University Course NPLR 492: Voices in Motion: Social Media for Global Justice. Seattle, WA, January 11.
- Thompson, P. L. (2009) “Seattle University’s Engineers Without Borders Program”, Invited presentation to Emerald City Rotary Club. Seattle, WA, July 27.
- Thompson, P. L. (2009) “Economically Sustainable Safe Drinking Water Systems for the Developing World”, Working Collaboratively for Sustainability. Seattle, WA, April 2.
- Thompson, P. L. (2008) “Seattle University’s Engineers Without Borders Program”, Invited plenary address EWB –USA National Conference. Seattle, WA, March 27.
- Thompson, P. L. (2006) “Enhancing Phytoremediation of RDX with Mycorrhizal Fungi”, 23rd Annual Conference on Soil, Sediments and Water. Amherst, MA, October 19.
- Thompson, P. L. (2005) “A New Tool for Testing Anaerobic Digester Stability”, Annual Conference of the Pacific Northwest Clean Water Association. Tacoma, WA, September 29.
- Thompson, P. L. (2004) “Enhancing the Phytoremediation of RDX with Fungi”, Battelle’s Fourth International Conference on the Remediation of Chlorinated and Recalcitrant Compounds. Monterey, California, May 24.
- Thompson, P. L. (2002) “Hybrid Poplar Uptake Kinetics”, Battelle’s Third International Conference on the Remediation of Chlorinated and Recalcitrant Compounds. Monterey, California, May 21.
- Thompson, P. L. (2000). “Phytoremediation of Explosives”, First EPA Conference on Phytoremediation, Invited Speaker, Boston, Massachusetts, May 1.
- Thompson, P. L. (2000). “Phytoremediation of TNT and RDX”, Battelle’s Second International Conference on the Remediation of Chlorinated and Recalcitrant Compounds. Monterey, California, May 23.
- Thompson, P. L. (1999). “Phytoremediation of Explosives Waste”, Northwest Scientific Association Annual Meeting, Tacoma, Washington, March 25.

Thompson, P. L. (1999). “Phytoremediation of Munitions Waste”, Invited Speaker, Department of Forestry. University of Washington, Seattle, Washington, February 27.

Thompson, P. L. (1998). “Phytoremediation of Hazardous Wastes”, Chemical and Hazardous Materials Managers Association, Northwest Chapter, Invited Speaker. Seattle, Washington, December 1.

Thompson, P. L. (1998). “Using Plants to Clean-up Hazardous Wastes”, Special Presentation at Seattle University, Earth Day Celebration, April 22.

Thompson, P. L. and J. L. Schnoor (1997). “Phytoremediation of Munitions (RDX, TNT) Waste by a Hybrid Poplar”, American Chemical Society National Meeting, Division of Environmental Chemistry, San Francisco, California, April 13 –17.

AFFILIATIONS

Member: American Water Works Association, Water Environment Federation, American Chemical Society, American Society of Civil Engineers, American Society of Engineering Education, Association of Environmental Engineering and Science Professors

ACADEMIC SERVICE

American Society of Engineering Education Pacific–NW Section, Awards Chair, 2009–2011

College of Science & Engineering Facilities Planning Committee, Spring 2008–2010

American Society of Engineering Education Pacific–NW Section, Chair, 2007–2009

SU Teagle Steering Committee, Spring 2008–Fall 2009

SU Strategic Planning Committee for Global Engagement, Fall 2008

College of Science & Engineering Personnel Committee, Chair, Fall 2008–Spring 2009

College of Science & Engineering Personnel Committee, Fall 2008–Spring 2008

Lake Washington Technical College Advisory Board, Fall 2004–Spring 2008

Engineers Without Borders, Faculty Advisor, Fall 2005–Present

World Water Partners, Faculty Advisor, Fall 2010–Present

Sustainable University Revolving Fund, Faculty Advisor, Fall 2009–Present

SU Society of Environmental Engineers and Scientists, Faculty Advisor, Fall 1997–Spring 2009

SU Academic Assembly, Fall 1999 –Spring 2004

College of Science & Engineering Newsletter, Editor, Fall 1997–Spring 2008.

College of Science & Engineering Faculty Development Committee, Chair, 1998–2003.

University of Iowa Graduate Student Senate, President, 1993–1995.