

Phillip L. Thompson
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Seattle, Washington 98122
thompson@seattleu.edu

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

Professor September 2012 to Present

Department Chair September 2006–June 2013

Associate Professor September 2003–September 2012

Assistant Professor September 1997–September 2003

Courses: Engineering Economics, Principles of Environmental Engineering, Water and Wastewater Engineering, Hazardous Waste Management, Sustainable Engineering, Engineering Design, Biological Principles for Environmental Engineers, Introduction to Civil & Environmental Engineering, Fluid Mechanics Laboratory, Global Water Supply

Center for Environmental Justice and Sustainability, Seattle University

Founding Director January 2013 to June 2024

Department of Civil and Environmental Engineering, University of Iowa

Teaching Assistant August 1991–May 1995

Courses: 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

Visiting Professor, University of Washington, Civil and Environmental Engineering, Fall 2019

Consultant, Bullitt Foundation, November 2011–Present

Consultant, Bill and Melinda Gates Foundation, January 2012 to August 2012 (Sabbatical)

Affiliate Faculty, University of Washington, September 1998 to Present
 Principal, Northwest Engineers, LLC, 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.
 Lab Technician, Iowa City Wastewater Treatment Plant, December 1990–December 1991.
 Technical Reviewer: *Environmental Science and Technology*; National Science Foundation; *Environmental Toxicology and Chemistry*; *Journal of the American Water Works Association*; *International Journal of Phytoremediation*; *Water Environment Research*; *Journal of Environmental Engineering, Interdisciplinary Environmental Review*

AWARDS & GRANTS

Seattle University McGoldrick Fellowship (Seattle University’s highest faculty honor), 2011
 Seattle University Alumni Association, Distinguished Faculty Award, 2015
 U.S. Fulbright Scholar, Chiang Mai University, Thailand, 2026-2027
 Seattle University College of Science and Engineering Innovation Grant, 2024
 Rotary District 5030 Grant, Thailand Water Pipeline Project, 2023
 Seattle University Provost’s Fellowship, 2022
 Rotary District 5030 Grant, Thailand Water Pipeline Project, 2021
 Rotary District 5030 Grant, Cité Soleil, Haiti Medical Clinic Drinking Water System, 2020
 Rotary District 5030 Grant, Khun Jae, Thailand Library Construction Project, 2019
 Seattle University Summer Faculty Fellowship, 1998, 2001, 2004, 2020
 Seattle University Endowed Mission Fund: 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2017, 2018, 2019, 2020
 Seattle University College of Science and Engineering Summer Research Grant, 2019, 2023
 Environmental Works – Building Energy Study, 2015
 Herrera Environmental Consultants – Stormwater Media Study, 2014
 Leona Helmsley Foundation, Reflection in Engineering Education, 2014
 Bullitt Foundation, Evaluation of Gray Water Treatment System Performance, 2013
 American Society of Engineering Education – Design in Engineering Education, Best Paper, 2012.
 Seattle University Global Grants Fund: 2011, 2012, 2013
 Seattle University Thomas J. Bannan Endowed Chair for Engineering, 2009–2011
 National Science Foundation–Course, Curriculum & Laboratory Improvement Phase I, 2009.
 National Science Foundation–Course, Curriculum & Laboratory Improvement Phase II, 2007.
 National Science Foundation–Course, Curriculum & Laboratory Improvement Phase I, 2004.
 National Science Foundation–Research Experience for Undergraduates, 2003.
 National Science Foundation–Major Research Instrumentation, June 2002.
 National Science Foundation–New Century Scholar, August, 1999.
 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.

SELECTED PUBLICATIONS

- Klinger, P., Lee, J., Thompson, P. (2023). "Arsenic Removal from Drinking Water Using Enhanced Biochar," *SUURJ: Seattle University Undergraduate Research Journal*. Vol. 7, Article 11, 42-54. Available at: <https://scholarworks.seattleu.edu/suurj/vol7/iss1/11>
- Thompson, P. L., Porter, R. L., Stenkamp, J. K. (2022). "Integrated Water Management for a Sustainable Office Building" in T. Younos, J. Lee, T. E. Parece (Eds.). *Resilient Water Management Strategies in Urban Settings*. New York, NY: Springer Publishing.
- Thompson, P. L., Porter, R. L. (2020). "Potable Water for an Office Building from Rainwater Collection", *Journal of the American Water Works Association*, Vol. 112, No. 12, 46 –54.
- Thompson, P. L., Polka, J. D. (2017). "Graywater Treatment for a Commercial Building", *Water Environment Technology*, Vol. 29, No. 12, 52-56.
- Thompson, P. L. (Ed.). (2017). "Environmental Justice and Sustainability" [Special Issue]. *Interdisciplinary Environmental Review*, Vol. 18, Nos. 3 and 4.
- Abraham, S., Shahbazian, A., Dao, K., Tran, H., Thompson, P. (2017). "An Internet of Things (IoT)-based aquaponics facility", IEEE Global Humanitarian Technology Conference, San Jose, CA, October 18.
- Thompson, P. L. (2015). "Graywater Management for an Integrated High Performance Building", National Institute of Building Sciences Best4 Conference, Kansas City, MO, April 13.
- Thompson, P. L. (Ed.). (2015). "Environmental Justice and Sustainability" [Special Issue]. *Interdisciplinary Environmental Review*, Vol. 16, Nos. 2, 3 and 4.
- Marsolek, M. D., Kendall, E., Thompson, P. L., Rutar-Shuman, T. (2014). "Thermal Pretreatment of Algae for Anaerobic Digestion" *Bioresource Technology*, Vol. 151, 373-377.
- Lebeau, J., McCormack, J., Beyerlein, S., Davis, D., Trevisan, M., Leiffer, P., Thompson, P., Davis, H., Howe, S., Brackin, P., Gerlick, R., Khan, J. (2014). "A New Perspective on Impact of the Integrated Design Engineering Assessment and Learning System for Professional Skills." *International Journal of Engineering Education*. Vol. 30, No. 1, 1-12.
- Thompson, P. L., Jiencke, F. W., Reinhart, S. W., Reha, M. E., Byrne, S. S. (2013). "Avoiding Digester Upset." *Water Environment Research*. Vol. 85, No. 4, pp. 327-330.
- 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*. Vol. 28, No. 2, 416-424.

- Thompson, P., Connell, A., Jacobs, D., Kemly, C., Nolan, K. and G. Ongoco. (2012). “Evaluation of Water Treatment Systems for Medical Clinics.” *International Journal for Service Learning in Engineering: Humanitarian Engineering and Social Entrepreneurship*. Vol. 7, No.1, 13-25.
- Trevisan, M., Davis, D., Beyerlein, S., McCormack, J., Thompson, P., Leiffer, P., Davis, H., Howe, S., LeBeau, J, Gerlick, R., Brackin, P., and J. Khan. (2012). Integrated Design Engineering Assessment and Learning System (IDEALS): Piloting Teamwork and Professional Skills Development Instructional Materials. American Society of Engineering Education, San Antonio, TX.
- 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-triazine (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. (2023). “A Strategy for Climate Change Adaptation”, Keynote Speaker, Highline College Climate Justice Week. Des Moines, WA, October 30. (Invited).
- Thompson, P. L. (2023). “Global Impact of Iowa CEE Alumni”, University of Iowa Department of Civil and Environmental Engineering 150th Anniversary Celebration. Iowa City, IA. October 6. (Invited).
- Thompson, P. L. (2023). “Sustainable Universities”, Fukuoka University Symposium on Future Challenges for Global Collaborations for a Carbon Neutral Society. Fukuoka, Japan. September 30. (Invited).
- Thompson, P. L. (2023). “Adapting to Climate Change: Finding Hope in the Tragedy of the Commons”, Fukuoka International School, Fukuoka, Japan. September 29. (Invited).
- Thompson, P. L. (2023). “Water Treatment System Design for Sustainable Buildings” Fukuoka University Engineering Research Seminar, Fukuoka, Japan. September 28. (Invited).
- Thompson, P. L. (2022). “Carbon Footprints for Business” Ignatian Pedagogy for Sustainability Online Fall workshop on Community-Engaged Learning, Xavier University. September 29.

- Thompson, P. L. (2021). “Rainwater-to-Potable Water System Performance for Seattle’s Bullitt Center”, American Rainwater Catchment Systems Association, Virtual Conference, December 1.
- Thompson, P. L. (2021). “Water and Wastewater Treatment System Performance at the Bullitt Center”, Seattle Public Utilities, Shape Our Water Speaker Series, Seattle, WA, August 5.
- Thompson, P. L. (2020). “Aquaponics Systems for Sustainable Agriculture”, Washington and Oregon Higher Education Sustainability Conference, Eugene, OR, March 2.
- Thompson, P. L. (2017). “Aquaponics Systems for Sustainable Agriculture and Technology Education”, 29th Annual Meeting of the Thai Society for Biotechnology and International Conference, Bangkok, Thailand, November 23.
- Thompson, P. L. (2017). “Wetland Treatment of Graywater from a Commercial Building”, 29th Annual Meeting of the Thai Society for Biotechnology and International Conference Bangkok, Thailand, November 24.
- Thompson, P. L. (2017). “Aquaponics for Science and Technology Education”, Aquaponics Association Conference, Portland, OR, November 3.
- Thompson, P. L. (2017). “Engineering Education at a Jesuit University”, Congress of Technology and Innovation in Higher Education, EMGE School of Engineering, Belo Horizonte, Brazil, September 15. (Invited).
- Thompson, P.L. (2017). “Sustainability's Big Ideas: A Model Strategy for Integrating Sustainability Across the Curriculum.” Washington Higher Education Sustainability Conference, Spokane, WA, February 16. (Panel).
- Thompson, P. L. (2015). “Impacts of Sea Level Rise on Wastewater Infrastructure”, 7th Annual Conference on Climate Change: Impacts and Responses., Vancouver, BC, April 11.
- Thompson, P. L. (2015). “Graywater Management for an Integrated High Performance Building”, National Institute of Building Sciences Best4 Conference, Kansas City, MO, April 13.
- Thompson, P. L. (2013). “Ending the Safe Water and Sanitation Crises in the 21st Century”, Invited presentation to Fremont Rotary Club. Seattle, WA, January 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 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. (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.

ACADEMIC SERVICE

Seattle University Academic Assembly, Fall 1999 –Spring 2004, September 2022–June 2024
 College of Science & Engineering *ad hoc* Budget Review Committee, 2021
 College of Science & Engineering *ad hoc* Personnel Committees, 2015, 2016, 2018, 2019, 2022, 2023
 Engineers for a Sustainable World, Faculty Advisor, Fall 2005–Present
 Seattle University Rotaract Club, Faculty Advisor, Fall 2013–Present
 Seattle University Parent’s Weekend Keynote Speaker, October 2014
 Seattle University Mission Day 2014 – Planning Committee and Speaker
 Seattle University Academic Strategic Action Plan Two – 2013-2014, Committee Member
 Middle College High School Advisory Board, 2013 to 2019
 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 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 2006–Spring 2008
 Lake Washington Technical College Advisory Board, Fall 2004–Spring 2008
 SU Society of Environmental Engineers and Scientists, Faculty Advisor, Fall 1997–Spring 2009
 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.

INTERNATIONAL SERVICE

Aquaponics system installation, Belo Horizonte, Brazil 2024.
 Drinking water well installation, Kantene, Senegal, 2024
 Water pipeline construction, Nong Pha Cham and Nam Bo Sa Pae, Thailand, 2024
 17-mile water pipeline construction, Mae Hong Son, Thailand, 2022
 Water and sanitation facilities construction, Uyo, Nigeria, 2022
 School library construction, Khun Jae, Thailand, 2020
 Medical clinic well repair project, Cité Soleil, Haiti, 2020
 Drinking water treatment system installation, Napho, Thailand, 2019
 Drinking water well installation, Gonaive, Haiti, 2018
 Drinking water well installation, Huai Nam Khun, Thailand, 2017
 Drinking water treatment system installation, Kenscoff, Haiti, 2017
 Aquaponics system installation, Manchay, Peru, 2016
 Drinking water treatment system installation, Grand Goaves, Haiti, 2016
 Drinking water treatment system installation, Croix des Bouquets, Haiti, 2016
 Aquaponics system installation, Chiang Mai, Thailand, 2016
 Drinking water system installation, Sakhu, Nepal, 2015
 Drinking water treatment system installation, Port au Prince, Haiti, 2015
 Drinking water treatment system installation, Huai Nam Khun, Thailand, 2015
 Orphanage dormitory construction, Huai San, Thailand, 2013
 Rainwater catchment system installation, Huai Nam Khun, Thailand, 2011
 Drinking water treatment system installation, Saint Marc, Haiti, 2011
 Drinking water treatment system installation, Marchand Dessalines, Haiti, 2011
 Graywater treatment system installation, Tijuana, Mexico, 2010
 Four drinking water treatment system installations, Port au Prince, Haiti, 2010
 Medical clinic drinking water treatment system installation, Huai Nam Khun, Thailand, 2010
 Stormwater diversion system installation, Hagley Gap, Jamaica, 2009
 Waterwheel pump installation, Chirundu, Zambia, 2009
 Footbridge construction, Huai Nam Khun, Thailand, 2008
 Stormwater diversion system installation, Managua, Nicaragua, 2007
 Dormitory drinking water treatment system installation, Huai Nam Khun, Thailand, 2007
 Children’s dormitory construction, Huai Nam Khun, Thailand, 2006