

General Biosketch



Chad T. Jafvert, Ph.D., BCEEM
Lyles Family Professor of Civil Engineering
Lyles School of Civil Engineering, and
Division of Environmental & Ecological Engineering
Purdue University, Hampton Hall
West Lafayette, Indiana, 47907, USA



Chad Jafvert received his Ph.D. from the University of Iowa in 1985 in Civil and Environmental Engineering and was awarded a National Research Council postdoctoral fellowship to work at the U.S. Environmental Protection Agency (EPA), Environmental Research Laboratory in Athens, GA. After one year in that position, he was hired at the same laboratory where he worked until joining the faculty at Purdue in 1991. While at the EPA, he earned a Scientific and Technological Achievement Award. In 2013, he was honored as a visiting professor by the President of Southeast University, Nanjing, China, and again in 2014 he was honored as a distinguished visiting professor by the President of Qinghai Normal University, Xining, China.

His primary research interests are the chemical and physicochemical fate processes of anthropogenic (man-made) substances in natural and engineered environments. He has published widely on octanol-water, soil-water and sediment-water phase distribution processes of organic chemicals, including organic cations and anions. His recent interests include: remediation strategies for contaminated sediments; aquatic photochemistry of pollutants including carbon-based nanomaterials and flame-retardant compounds; real-time continuous water quality monitoring, and drinking water treatment in rural areas of developing countries.

He has supervised 21 completed Ph.D. and 11 thesis M.S. students, has served on the committees of over 70 other students, and has supervised 6 postdoctoral research associates. Eighteen of his former graduate students or postdoctoral associates are faculty members at universities in the U.S., Taiwan, South Korea, Panama, Guam, and China. Google Scholar reports over 5,890 citations of Jafvert's research papers with an h-index of 42. There are 169 published works (journal papers, refereed conference proceedings, etc.) by Jafvert indexed in Web-of-Science.

He teaches water chemistry courses, water quality modeling courses, and over the past several years, a service learning course on drinking water treatment in under-developed areas around the global, with an outcome being the installation of point-of-use slow sand filters in Tanzania, Kenya, Western China, India, and in many rural elementary schools in Colombia. Currently, he is working with a Purdue start-up company (Maji Safi, International) in Eldoret, Kenya, to deliver water treatment systems to schools in Western Kenya. From 2011-2017, Dr. Jafvert taught summer short courses at Southeast University in Nanjing China at both the undergraduate and graduate level. In June 2013, he also participated in teaching a short course at the Technical University of Panama where one of his former Ph.D. students is now the Director of the Center for Hydraulics and Hydrotechnical Investigations (Centro de Investigaciones Hidráulicas e Hidrotécnicas).



For more information about Professor Jafvert's research and teaching, please visit:

<https://engineering.purdue.edu/~jafvert/>

Jafvert's Former Students and Post-Doctoral Associates at Universities

- **Wei Chu** (Ph.D., 1994), Professor, Department of Civil and Structural Engineering, *The Hong Kong Polytechnic University*, Hun Hom Kowloon, Hong Kong, China.
- **Ching Yuan** (Ph.D., 1995), Dean of International Affairs and Professor (Department of Environmental Engineering), *National University of Kaohsiung*, Kaohsiung, Taiwan.

- **Timothy J. Strathmann** (M.S.C.E., 1996), Professor, *Colorado School of Mines*, Golden, CO
- **Chihhao Fan** (Ph.D., 1997), Professor and Department Head, Department of Bioenvironmental Systems Engineering, *National Taiwan University*, Taipei, Taiwan.
- **Jose Fabrega-Duque** (Ph.D., 1999), Director of the Center for Hydraulics and Hydrotechnical Investigations (Centro de Investigaciones Hidráulicas e Hidrotécnicas), Vice Rector for Research, Postgraduate Studies, and Extension, *The Technical University of Panama* (Universidad Tecnológica de Panamá)
- **Juan César Bezares-Cruz** (M.S. 2003), Assistant Professor, Department of Environmental Engineering, Texas A&M, Kingsville, Texas.
- **Seunghun Hyun** (Post-Doc, 2003-2006) Professor, Division of Environmental Science and Ecological Engineering, *Korea University*, Seoul, South Korea
- **Juan César Bezares-Cruz** (M.S. 2003), Assistant Professor, Department of Environmental Engineering, Texas A&M, Kingsville, Texas.
- **Amanda Neinow** (Post-Doc, 2005-2006) Professor, Chemistry Department, *Gustavus Adolphus College*, St. Peter, MN
- **Yong-Sang Kim** (Ph.D., 2008) Assistant Professor, Water and Environmental Research Institute of the Western Pacific, *University of Guam*
- **Wen-Che Hou** (Ph.D., 2009) Associate Professor, Department of Environmental Engineering, *National Cheng Kung University*, Tainan City, Taiwan
- **Heather (Gall) Preisendanz** (Ph.D., 2011) Associate Professor, Department of Agricultural and Biological Engineering, *Pennsylvania State University*, University Park, PA
- **Tengyi Zhu** (Ph.D. student from Southeast University; Visiting Scholar at Purdue from Sept. 2011 to Aug. 2013; Ph.D. Thesis was based on work performed in Jafvert's Lab), Assistant Professor, *Yangzhou University*, Yangzhou China
- **Chia-Ying Chen** (Ph.D., 2010) Associate Professor, Department of Environmental Engineering, *National Chung Hsing University*, Taichung, Taiwan
- **Yingcan Zhao** (Ph.D. 2016) Assistant Professor, Department of Biomedical Engineering, Southern University of Science and Technology (SUSTech), Shenzhen, Guangdong, China
- **Utami Irawati** (Ph.D., 2018) Assistant Professor and department Head, Dept of Chemistry, Faculty of Mathematics and Natural Sciences, *Lambung Mangkurat University*, Banjarbaru, Indonesia
- **Ming Chen** (Ph.D. 2017) Associate Professor, School of Civil Engineering, Southeast University, Nanjing China, since 2020.
- **Julia Wiener** (Ph.D. 2020) (co-advised with Larry Nies) Assistant Professor, Industrial Engineering, University of Valparaiso (Santiago campus), Chile.

Jafvert's Recent Awards

- U.S. EPA Scientific and Technological Achievement Award, Honorable Mention in 2015 (awarded in 2016) for *Innovative Research on Relationships between Properties and Environmental Transformations of Nanomaterials* (as co-author with Richard G. Zepp (EPA), Wen-Che Hou (NRC post-doc at EPA), and Somayeh Beigzadehmilani (Ph.D. Student at Purdue)
- Board Certified Environmental Engineering Member (BCEEM), American Academy of Environmental Engineers and Scientists (AAEES), Certification by Eminence, 2013.
- Fellow, Purdue University Teaching Academy, inducted in 2017.
- Book of Great Teachers, Purdue University, 2018.
- Instructional Excellence Award, based on voting by all seniors in the EEE program, awarded in 2014 and 2017.
- AEESP Outstanding Publication Award (2017), given by Association of Environmental Engineering & Science Professors (AEESP), for the 1992 paper published in *Environmental Science and Technology* 26(3): 557-586.
- Excellence in Environmental Engineering and Science Education (E4) Award. American Academy of Environmental Engineers and Scientists (AAEES) and the Association of Environmental Engineering and Science Professors (AEESP), awarded on April 7, 2022.
- Fellow, Association of Environmental Engineering and Science Professors (AEESP), inducted in 2022.