

## General Biosketch



Chad T. Jafvert, Ph.D., BCEEM  
Professor, Purdue University  
Lyles School of Civil Engineering, and  
Division of Environmental & Ecological Engineering  
Hampton Hall, 550 Stadium Mall Drive  
West Lafayette, Indiana, 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. While at Purdue, he was elected and served as area head of the environmental and hydraulic engineering group in the School of Civil Engineering for two consecutive terms (1996, 1999). 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 18 completed Ph.D. and 10 thesis M.S. students, has served on the committees of over 70 other students, and has supervised 5 postdoctoral research associates. Thirteen of his former graduate students or postdoctoral associates are faculty members at universities in the U.S., Taiwan, South Korea, Panama, Guam, and China.

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/>

## 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), Associate Professor, Department of Bioenvironmental Systems Engineering, **National Taiwan University**, Taipei, Taiwan.
- Jose Fabrega-Duque (Ph.D., 8/99), Director of the Center for Hydraulics and Hydrotechnical Investigations (Centro de Investigaciones Hidráulicas e Hidrotécnicas), Vice Rectory for Research, Postgraduate Studies, and Extension, **The Technical University of Panama** (Universidad Tecnológica de Panamá)
- Seunghun Hyun (Post-Doc, 2003-2006) Assistant Professor, Division of Environmental Science and Ecological Engineering, **Korea University**, Seoul, South Korea
- Amanda Neinow (Post-Doc, 2005-2006) Associate Professor, Chemistry Department, **Gustavus Adolphus College**, St. Peter, MN
- Yong-Sang Kim (Ph.D. 12/08) Guam Hydrologic Survey Research Associate, Water and Environmental Research Institute of the Western Pacific, **University of Guam**
- Wen-Che Hou (Ph.D., 2009) Assistant Professor, Department of Environmental Engineering, **National Cheng Kung University**, Tainan City, Taiwan
- Heather Gall (Ph.D., 2011) Assistant 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) Assistant Professor, Department of Environmental Engineering, **National Chung Hsing University**, Taichung, Taiwan
- Utami Irawati (Ph.D., 2018) Teaching Staff, Dept of Chemistry, Faculty of Mathematics and Natural Sciences, **Lambung Mangkurat University**, Banjarbaru, Indonesia

## 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)
- Fellow, Purdue University Teaching Academy, inducted in 2017. Typically five faculty each year are inducted under the auspices of the Office of the Executive Vice President for Academic Affairs.
- Instructional Excellence Award, given by the Society of Environmental and Ecological Engineers, the official Purdue Student Organization affiliated with the undergraduate EEE program, based on voting by all seniors in the EEE program, awarded in 2014 and 2017.
- AEESP Outstanding Publication Award (2017), given by the Association of Environmental Engineering and Science Professors (AEESP), for the 1992 paper entitled, "Reaction Scheme for the Chloramination of Ammoniacal Water," published in *Environmental Science and Technology* 26(3): 557-586. The purpose of this award is to recognize the authors of a "landmark environmental engineering and science paper that has withstood the test of time and significantly influenced the practice of environmental engineering and science."

Google Scholar reports over 4,000 citations of Jafvert's papers and reports with an h-index of 35 (i.e., 35 publications with 35 or more citations) and i10-index of 67. Web of Science™ reports over 2,800 citations of archival papers authored by C. Jafvert with an h-index of 30. There are 155 published works (journal papers, refereed conference proceedings, etc.) by Jafvert indexed in Web of Science.