

Reactions and Flow in Water Treatment: An Intersection of Environmental Sciences and Engineering



Desmond F. Lawler, Ph.D.
**2007 ESE Distinguished Alumni
Award Recipient**

**W.A. Cunningham Professor of Engineering
Department of Civil, Architectural and
Environmental Engineering
University of Texas at Austin**

**Friday, February 2, 2007
1301 McGavran-Greenberg Hall
2:00-2:50 p.m.
Reception to follow**

Bio:

Lawler is currently the W.A. Cunningham Professor of Engineering in the Department of Civil, Architectural and Environmental Engineering at the University of Texas at Austin.

Lawler received his BS in Civil Engineering from the University of Notre Dame in 1968 and his MS and PhD in Environmental Engineering from UNC in 1975 and 1980, respectively. Immediately upon receiving his degree from UNC he stayed on as an Instructor to work with students. He joined the faculty at the University of Texas at Austin in 1980 and is now the W.A. Cunningham Professor of Engineering and a member of the University's Distinguished Teaching Academy. Previous honors include the A. P. Black Award (1999) for sustained contributions to drinking water research, an AEESP Outstanding Publication Award (2005), and the Presidential Young Investigator Award in 1985. He has published numerous technical articles and reports. Dr. Lawler has received state and national recognition for both his research and teaching. Since 1980, Dr. Lawler has received 12 teaching awards. Along with Dr. Mark Benjamin of the University of Washington, he is currently writing a graduate-level textbook on Physical/Chemical Treatment Processes for Water and Wastewater to be published by McGraw-Hill.

Lawler's research includes both experimental and mathematical approaches to investigate physical and chemical treatment processes for the treatment of drinking water, wastewater, and industrial process water. Much of his work focuses on the removal of particles using modern membrane processes as well as conventional processes such as flocculation (in which many small particles are converted to a few large particles), settling, and granular media filtration (attaching particles to media surfaces). The current focus of his research is on pretreatment for membrane processes, including the improvement of water recovery in desalination by reverse osmosis.