PA Department of Environmental Protection

Emerging Contaminant Forum
RCSOB Auditorium
March 24, 2011

PaDEP will host a forum which will present the conclusions of a multi-faceted 4-year USGS/DEP collaborative study on emerging contaminants as well as information on an ongoing Temple University/DEP research project on methods for removing emerging contaminants from drinking water.
The forum will provide a broad perspective of the current state of affairs regarding the presence of emerging contaminants in PA surface waters, the correlation between ECs and fish health, and the latest technology on tracking of pathogenic organisms to identify markers for fecal source contamination

Speaker Biographies:

Pharmaceutical Compounds, Antibiotics, Hormones and Wastewater Compounds in Pennsylvania Waters 2006-2009 - Dr. Kent Crawford

Kent Crawford is the Water-Quality Specialist for the Pennsylvania Water Science Center of the U.S. Geological Survey. In that role, he is responsible for technical oversight and quality control of the water-quality program. He has over 30 years experience in a variety of water-quality projects including work on fish contaminant studies, ecological assessment of streams, and urban water-quality issues. His current research involves smallmouth bass mortality in the Susquehanna River and occurrence and distribution of emerging contaminants.

Kent's academic training is in aquatic ecology. He received his B.S. from North Carolina State University and both an M.S. and Ph.D. from the Pennsylvania State University.

Biological Evidence for Exposure to Contaminants of Emerging Concern in Pennsylvania. YOY mortality data will be presented - Vicki Blazer

Vicki Blazer, PhD, Fish Pathologist, U.S. Geological Survey
Vicki Blazer is a research scientist with the U.S. Geological Survey's National Fish Health Research Laboratory, Leetown Science Center in Kearneysville, WV. Her current research interests involve understanding fish health and its relationship to ecosystem health, environmental stressors, pathogens and parasites and landuse. Currently these studies are based in the Chesapeake drainage, selected sites in the Great Lakes and on National Wildlife Refuges throughout the Northeast.

Tracking Pathogenic Organisms via Polymerase Chain Reaction (PCR) Methodology - Dr. Joe Duris

Joseph W. Duris, Microbiologist, United States Geological Survey – Michigan Water Science Center. Joseph Duris received his B.S. in Bio-medical Science and his M.S. in Biological Science and Environmental Microbiology from Western Michigan University. He has worked for the U.S. Geological Survey in Lansing, MI for the past 9 years. His research interests include, understanding the effects of human activities on the chemical and microbiological quality of surface water, understanding the structure of communities of commonly measured fecal indicator bacteria, and understanding how the occurrence of bacterial pathogens in water relates to human risk. His particular focus with the USGS in Michigan has been in understanding the fate and transport of bacterial pathogens in streams.

Advanced Treatment of Drinking Water to Remove Trace Emerging Contaminants - Dr. Rominder Suri

Dr. Rominder Suri is the Director of the Water and Environmental Technology (WET) Center – a National Science Foundation Industry/University Cooperative Research Center. The WET Center is between Temple Univ, Arizona State Univ, and Univ. of Arizona. He is also the Director of Pennsylvania Environmental Technologies for Pharmaceutical Industry project funded by the PA Department of Community and Economic Development. Dr. Suri is an Associate Professor of Civil and Environmental Engineering at Temple University. He is a registered professional Environmental Engineer.

He holds a Bachelors degree in Civil Engineering from the Indian Institute of Technology, India (1990); MS in Civil Engineering (1992) and PhD in Environmental Engineering (1995) from Michigan Technological University. He was a faculty member at Villanova University for 14 years, prior to joining Temple University in 2008.

Dr. Suri's teaching interests in environmental engineering include advanced physical/chemical processes, water and wastewater treatment, aquatic chemistry, reactor engineering, and fate and transport of contaminants. His research interests include emerging contaminants, industrial waste treatment, water and wastewater treatment, water quality and advance oxidation processes. Dr. Suri's research group is currently researching on cost and energy efficient waste management technologies. Some of his recent research projects have been in the US, Ireland, Italy, India, Brazil and Canada.

He and his students have received various research awards from professional societies such as Water Environment Federation, Air & Waste Management Association amongst others. He has published numerous papers, and has received research grants from many federal and state agencies and private companies.