

**CEC SCIENCE ADVISORY PANEL**  
**FOR COASTAL & MARINE ECOSYSTEMS IN CALIFORNIA**  
**SCIENCE ADVISORY PANEL MEMBER BIOGRAPHIES**

**CIVIL ENGINEER FAMILIAR WITH THE DESIGN AND CONSTRUCTION OF RECYCLED WATER TREATMENT FACILITIES**

**Dr. Jörg E. Drewes**

Associate Professor and Director  
Advanced Water Technology Center (AQWATEC)  
Environmental Science and Engineering Division  
Colorado School of Mines

Education:

Postdoctoral Fellow, Arizona State University  
Ph.D., Environmental Engineering, Technical University of Berlin, Germany  
Dipl. Ing., Environmental Engineering, Technical University of Berlin, Germany

Dr. Drewes has been actively involved in research in the area of water treatment and non-potable and potable water reuse for more than 16 years. For the last 12 years, Dr. Drewes has been conducting research on indirect potable reuse projects in the State of California, including surface spreading as well as direct injection projects. The main focus of these studies has been the fate and transport of trace organic chemicals in these systems. He has led research as the principal investigator (PI) or Co-PI to better understand the rejection of trace organic chemicals during high-pressure membrane treatment (nanofiltration, reverse osmosis) as well as the fate and transport of micropollutants in soil-aquifer treatment systems. A common theme in all these projects was to identify meaningful trace organic compounds that can serve as indicator compounds for system performance assessments. He has also conducted tailored studies to further develop this concept for multiple treatment processes commonly employed in indirect potable reuse followed by more focused efforts for surface spreading and direct injection projects. This indicator concept has been adopted in the Australian Water Recycling Guidelines for Drinking Water Augmentation in 2008. In addition, he has been involved in several studies addressing the occurrence of emerging contaminants in recycled water and to provide guidance to the water industry regarding occurrence, fate and transport, health effects, analytical methods and communication. Dr. Drewes research group is currently working on developing more predictive tools for the fate of trace organic chemicals in various reuse schemes using quantitative structural property relationships (QSPRs) coupled with process models. Dr. Drewes has published more than 140 journal papers, book contributions, and conference proceedings. He was awarded the 2007 AWWA Rocky Mountain Section Outstanding Research Award, the 2003 Dr. Nevis Cook Excellent in Teaching Award, the Quentin Mees Research Award in 1999, and the Willy-Hager Award in 1997. In 2008, he was appointed to the National Research Council Committee on Water Reuse as an Approach for Meeting Future Water Supply Needs. Since 2007, Dr. Drewes has held a Visiting Professor appointment at the University of New South Wales, Sydney, Australia.