

MORE Science at UTSA

Environment Science and Engineering

Spring 2007 Seminar Series

Where: Loeffler room (3.03.02) in the BioScience Building

When: 4:00 PM – 5:00 PM on March 23, 2007

Snack and drinks will be served

Speaker: Dr. Danny Reible



Dr. Reible completed his PhD in Chemical Engineering at the California Institute of Technology in 1982. In 2004 he joined the [Environmental and Water Resources Group in the Department of Civil, Architectural and Environmental Engineering](#) at the University of Texas after 23 years in the Department of Chemical Engineering at Louisiana State University. He is the Bettie Margaret Smith Chair of Environmental Health Engineering and co-Director of the multi-university Hazardous Substance Research Center/South and Southwest. The focus of the center's activities and Dr. Reible's research is the assessment and remediation of contaminated sediments. He is an advisor for remedial activities at more than a dozen contaminated sediment sites and has taught short courses on approaches to managing contaminated sediments. He has served on a number of National Research Council committees and currently serves on the NRC Board of Environmental Science and Toxicology. He is a Diplomate of the American Academy of Environmental Engineering and in 2005 was elected to the National Academy of Engineering for the "development of widely used approaches for the management of contaminated sediments". He is the author or editor of five books and more than 100 refereed journal articles and chapters in books.

Topic: **Defining the Availability of Contaminants in Sediments**

The definition of exposure and risk to contaminants in sediments depends upon access to those contaminants, the extent to which accessible contaminants are available and the extent to which contaminants accumulate in organisms of interest. This presentation will focus on efforts to understand and quantify these processes through experiments and modeling. Particular focus will be on the in situ assessment of the bioavailability of organic contaminants using solid phase microextraction, and the implications of dynamics of metal speciation for contaminant release. The potential for in-situ voltammetry to assess metal speciation will be discussed. The implications of these processes for the effective management of contaminated sediments will also be identified