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EDUCATION

- Washington State University Civil Engineering B.S. (Summa Cum Laude) 2005
- The University of Texas Environ./WR Engineering M.S. (anticipated) 2007

EXPERIENCE

- Graduate Research Assistant, The University of Texas at Austin 08/05 – present
- Laboratory Researcher, Washington State University 05/05 – 08/05
- Intern, Washington State Department of Natural Resources 05/04 – 08/04
- Wildland Firefighter, United States Forest Service 06/01 – 08/03

SUMMARY OF RESEARCH ACTIVITIES

Focus has included bioavailability assessment, chemical oxidation, and physical hydraulic modeling. Primary current interest is examination of bioaccumulation and trophic transfer of PAHs and PCBs. In this study, solid-phase microextraction (SPME) is being used to measure porewater concentrations in contaminated sediment. Next, bioaccumulation is evaluated by exposing a first-level benthic organism (tubificid oligochaete) to sediment until steady-state concentrations are reached. Finally, the oligochaetes are fed to an invertebrate predator (grass shrimp) to assess trophic transfer of organic contaminants through the food web. Eventually, the results of this research may be linked to human health implications, which could be used to establish priorities for management and remediation of contaminated sediment.

RECENT HONORS AND AWARDS

- 2005 Big Ten Senior (Top Academic Male), Washington State University
- 2005 The Outstanding Senior – College of Engineering, Washington State University
- 2004 The Outstanding Junior – College of Engineering, Washington State University
- 2003 The Outstanding Sophomore – Department of Civil Engineering, Washington State University

RELEVANT PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (ASCE), American Water Works Association (AWWA), Tau Beta Pi Engineering Honor Society

RECENT PROFESSIONAL ACTIVITIES

- President, ASCE Washington State University Student Chapter, 2004
- Captain, Concrete Canoe Team - Washington State University, 2004
- Volunteer, WSU Civil Engineering Undergraduate Advising Committee, 2003 – 2004
- Volunteer, WSU Honor's College Freshman Mentor, 2002 – 2005

RECENT PROFESSIONAL ACTIVITIES

Research Projects

Bioturbation and Bioavailability of Desorption Resistant Contaminants – Research assistant on study assessing contaminant concentration levels in connection to availability and accumulation in benthic organisms. Focus on PAH and PCB contaminants that exhibit desorption-resistant behavior and their effect on tubificid oligochaetes. Funding to date from EPA and the Department Threat Reduction Agency exceeding \$2.5 MM (1998-2006).