

**Agenda - ISEF Workshop**  
**Environmental Forensics: Theory, Applications,**  
**and Case Studies**  
**November 9 – 10, Sheraton, N. Charleston, SC**

**Day One: November 9, 2004**

- 7:30-8:00     **Registration (coffee)**
- 8:00-8:10     **Welcome and Workshop Orientation**  
Paul T. KostECKI, Ph.D., ISEF, Amherst, MA
- 8:10-8:20     **History and Evolution of Environmental Forensics**  
Paul T. KostECKI, Ph.D., ISEF, Amherst, MA
- 8:20-9:00     **Overview of Forensics Data Analysis and Interpretation**  
Robert I. Haddad, Ph.D., Applied Geochemical Strategies, Inc., San Luis Obispo, CA
- 9:00- 9:45     **Overview Forensic Application of Statistical Methods in Environmental Forensic Investigations**  
Shahrokh Rouhani, Ph.D., P.E., NewFields, Inc., Atlanta, GA
- 9:45–10:00    Break
- 10:00-10:45   **Integration of a Groundwater Model, Environmental Tracer and Water-to-Vapor Diffusion Samplers in Assessment of a Hydrocarbon Contaminated Aquifer**  
Clifton C. Casey, Naval Facilities Engineering Command, Southern Division, N. Charleston, SC
- 10:45-11:30   **Applications of ICPMS and Laser Ablation ICPMS in Environmental Forensic Investigations**  
Mohamad Ghazi, Ph.D., ERS Consulting, Inc., Atlanta, GA
- 11:30-12:00   **The Use of Multiple Methods to Fingerprint and Age Date Gasoline Releases**  
Gil Oudijk, Triassic Technologies, Hopewell, NJ
- 12:00-1:15    **Lunch & Presentation: The Effect of Quarrying on the Delaware River: A Farmer's Legal and Technical Perspective**  
Walter Schneiderwind, Ph.D., Schneiderwind Farms in Upper Black Eddy, Pennsylvania and Gil Oudijk, Triassic Technologies, Hopewell, NJ

- 1:15–1:20 **Introduction to Advanced Forensic Topics**  
Robert I. Haddad, Ph.D., Applied Geochemical Strategies, Inc., San Luis Obispo, CA
- 1:20-2:15 **Stable Isotope Analysis in Environmental Forensic Investigations of Groundwater Contamination**  
Neil C. Sturchio, Ph.D., University of Illinois, Chicago, IL
- 2:15-3:15 **Bacterial Community Structure as Indicator of Natural Attenuation**  
Raul J. Cano, Ph.D., Environmental Diagnostics, Inc., San Luis Obispo, CA
- 3:15-3:30 Break
- 3:30-4:15 **Identification of Light-end Petroleum Products In Environmental Samples**  
Yakov Galperin, Ph.D., Battelle Memorial Institute, Moorpark, CA
- 4:15-5:00 **Source Identification of Spilled Petroleum Hydrocarbons Using Isotopic Pattern Recognition**  
Chih-Hsien Sun, Ph.D., Chinese Petroleum Corporation, Miaoli, Taiwan
- 5:00 Adjourn

#### **Day Two: November 10, 2004**

- 8:00-8:15 **Review and Introduction to the Morning Session**  
Robert D. Morrison, Ph.D., DPRA Inc., San Marcos, CA
- 8:15-9:00 **Admissibility of Environmental Forensic Evidence in Court**  
Mark Elliott, Esq., Pillsbury Winthrop LLP, Los Angeles, CA
- 9:00-10:00 **Use of PAHs, Related Biomarkers, the TOC Normalizer, and a Constrained Least-Squares Algorithm to Allocate Hydrocarbon Sources in Coastal Alaskan Sediments**  
Paul Boehm, Ph.D. Exponent, Inc., Natick, MA
- 10:00-10:15 Break
- 10:15-11:15 **Use of GCxGC Techniques in Environmental Forensics: Initial Weathering of the Bouchard 120 Oil Spill**  
Christopher M. Reddy, Ph.D., Woods Hole Oceanographic Institution, Woods Hole, MA

- 11:15-12:00 **PCB, Dioxin, and Furan Fingerprinting: Forensic Applications and Case Studies**  
Glenn Johnson, Ph.D., University of Utah, Salt Lake City, Utah
- 12:00-1:00 Lunch
- 1:00-1:10 **Review and Introduction to the Afternoon Session**  
Paul Boehm, Ph.D., Exponent, Maynard, MA
- 1:10-2:10 **Reverse Modeling For Identifying Contaminant Sources: Overview Of Methods That Work**  
Amvrossios C. Bagtzoglou, Ph.D., University of Connecticut, Storrs, CT
- 2:10-3:15 **Mechanistically Based Bioassays for Risk Assessment of Environmental Contaminants**  
John Gordon, Ph.D., Xenobiotic Detection Systems, Inc., Durham, NC
- 3:15-3:30 Break
- 3:30-4:15 **A Novel Environmental Forensics Tool to Relate NAPL, Soil, and Ground-Water Data by Conversion to a Common Frame of Reference**  
James Reisinger, Ph.D., Integrated Science & Technology, Inc. Marietta, Georgia
- 4:15-5:00 **The Use of Fate and Transport Models to Estimate Timing of Solvent Releases “Who Started It????”**  
Harry D. O'Brien, P.G., ENSR International, Columbia, SC
- 5:00 **Adjourn**