Day One: November 4, 2003

Overview Session:

8:00-8:30  Registration (coffee)

8:30-9:00  Welcome and Workshop Orientation: History and Evolution of Environmental Forensics
Paul T. Kostecki, Ph.D. (Moderator), ISEF, Amherst, MA

9:00-9:30  Overview of Forensic Data Analysis and Interpretation
Robert I. Haddad, Ph.D., Applied Geochemical Strategies, Inc., Arroyo Grande, CA

9:30-10:00 Overview of Historical Environmental Forensic Techniques:
Aerial Photography, Artifact Sampling, Chemical Usage History, Commercial Formulations and Ratios, Scanning Electron Microscope, Microbiological/DNA
Robert D. Morrison, Ph.D., DPRA, Inc., San Marcos, CA

10:00-10:15  Break

10:15-10:55  Geochemical Testing Techniques for Petroleum Hydrocarbons and Other Contaminants: GC, GC/MS, GC-IRMS
Allen Uhler, Ph.D., Battelle Memorial Institute, Duxbury, MA

10:55-11:40  Overview of Application of Statistical Methods
Shahrokh Rouhani, Ph.D., New Fields, Inc., Atlanta, GA

11:40-12:00  Environmental Forensics Application at Department of Defense Sites
Fred E. Goetz, Ph.D., U.S. Navy, NFESC, Port Hueneme, CA

12:00-1:00  Lunch
Focused Presentations:

1:00-2:00  **1,4-Dioxane and Other Solvent Stabilizers in Environmental Forensic Investigations**
Thomas K. Mohr, R.G., Santa Clara Valley Water District, San Jose, CA

2:00-3:00  **Application and Challenges in Groundwater Modeling for Environmental Forensic Investigations**
Brendan M. Harley, Ph.D., CDM International Inc., Cambridge, MA

3:00-3:15  **Break**

3:15-4:15  **PAH Data as Forensic Source Identification Tools: The Good, the Bad, and the Ugly!**
Robert I. Haddad, Ph.D., Applied Geochemical Strategies, Inc., Arroyo Grande, CA

4:15-5:00  **Isotope Applications for Contaminant Source Identification and Allocation: Theory to Practice**
Julie Sueker, Ph.D., P.H., P.E., BBL, Inc., Golden, CO

5:00  **Adjourn**

**Day Two: November 5, 2003**

8:15-8:30  **Review and Introduction to the Morning Session**
Robert I. Haddad, Ph.D. (Moderator), Applied Geochemical Strategies, Inc., Arroyo Grande, CA

8:30-9:15  **PCB Fingerprinting**
Glenn Johnson, Ph.D., The University of Utah, Salt Lake City, UT

9:15-10:00  **Perchlorate: Source Identification and Release Reconstruction Techniques**
Peter M. Mesard, P.E., C.E.G., Exponent, Inc., Oakland, CA

10:00-10:15  **Break**

10:15-11:00  **The Implications Of Bioavailability In Determining Risk-Based Sediment Cleanup Standards: New Regulations And New Perspectives**
Andy Davis, Ph.D., Geomega, Boulder, CO
11:00-12:00  **Geochemistry and Source Speciation of Hexavalent Chromium in a California Aquifer**  
William E. Motzer, Ph.D., R.G., Todd Engineers, Emeryville, CA

12:00-1:00  **Lunch**

1:00-1:45  **Forensic Review of Upward Vapor Intrusion Models: A Reality Check**  
Blayne Hartman, Ph.D., Transglobal Environmental Geochemistry, Solano Beach, CA

1:45-2:30  **Molecular Microbiology Applications in Environmental Forensics**  
Raul J. Cano, Ph.D., Environmental Biotechnology Institute, California Polytechnic State University, San Luis Obispo, CA

2:30-2:45  **Break**

2:45-3:30  **Forensic Evaluation of Contamination by Solvents Originating from Coatings Used in Public Water Supply Storage and Distribution Facilities**  
Thomas M. Johnson, R.G., C.HG., LFR Levine Fricke, Emeryville, CA

3:30-4:00  **Forensic Analysis of Fugitive Methane Gas Emissions**  
Alan Jeffrey, Ph.D., ZymaX Forensics, San Luis Obispo, CA

4:00-4:45  **Forensic Interpretation of Typical Petroleum Hydrocarbon and Oxygenate Analytical Data**  

4:45-5:00  **Questions & Answers of Faculty**  
Robert I. Haddad, Ph.D., Applied Geochemical Strategies, Inc., Arroyo Grande, CA

5:00  **Adjourn**
Mission Valley Marriott Hotel Information:

The Mission Valley Marriott is just 10 minutes (8 mi SW) from San Diego International Airport (SAN). By car: Take Harbor Drive to Hwy 5 North then to Hwy 8 East. Exit the Qualcomm exit. Turn left on Qualcomm Way. Turn right on Rio San Diego Drive. Hotel is on your right.

The hotel does not provide a shuttle, however, many ground transportation options are available directly from the airport. “Cloud Nine Shuttle” is $7.50 per person. Reservations are not necessary; cross the street upon exiting baggage claim and Cloud Nine Shuttles are located at the curb near the taxis and other ground transportation.

San Diego boasts an almost perfect year-round climate. Most days are sunny, averaging 70 deg. F with low humidity. Delight in a world of sightseeing pleasures on your trip to San Diego. Major attractions include: miles of white-sand, sunny beaches, charming Old Town, the Gaslamp District, the San Diego Zoo, Sea World, Wild Animal Park, U.S. Navy facilities and Qualcomm Stadium. Get a taste of Mexico in Tijuana, just a short drive south.

The Mission Valley Marriott hotel has 17 floors and 350 guest rooms --all with multiple PC data ports with high-speed Internet access. Enjoy casual all-day dining at Café Del Sol or unwind at The Cantina, the hotel’s on-site happy hour bar. Visit the website for a full description of amenities at the hotel: http://www.marriotthotels.com

The Mission Valley Marriott
8757 Rio San Diego Drive
San Diego, CA 92108
Tel: 619-692-3800 or 800-842-5329
Fax: 619-692-0769

Accomodations Information:
Single/Double: $139.00, Triple: $149.00, Quad: $159.00, Suite: $418.00
- Participants are responsible for making their own room reservations. Please contact the hotel at the above phone or fax, or visit the website to make an on-line reservation.
- Cut off date for reservations: October 6, 2003 to receive the above rates.
- You must mention the group name (International Society of Environmental Forensics or ISEF) to receive our special group rates listed above.
- A cash or credit card deposit is required to make your reservation.
- Check in time 4 PM, check out time 11 AM
- Onsite parking available for $10.00 per day (Self Park) or $13.00 per day (Valet).
- You may cancel your reservation without penalty before 6 PM on the day of arrival.

Special Note: Early reservations are recommended and encouraged. The hotel is anticipating a full house due to other groups coinciding with our workshop. Please make your room reservations early!

www.EnvironmentalForensics.org