

**Environmental Forensics: Theory, Applications, and Case Studies**  
Renaissance Ilikai Waikiki Hotel, Honolulu, Hawaii  
April 14-15, 2003

**DAY ONE**

7:30-8:15	<b>Registration</b> Coffee & Continental Breakfast
8:15-8:30	<b>Welcome and Workshop Introduction</b> <i>Robert D. Morrison, Ph.D., DPRA, Escondido, CA</i>
8:30-9:30	<b>Overview of Petroleum Hydrocarbon Chemistry and Environmental Forensics</b> <i>Ileana Rhodes, Ph.D., Shell Global Solutions, USA Inc., Houston, TX</i>
9:30-9:45	<b>Break</b>
9:45-10:45	<b>Application of Isotopes and Specialized Ratios in Petroleum Hydrocarbon Forensics: Theory and Case Studies</b> <i>Alan Jeffrey, PhD, Zymax Forensics, San Luis Obispo, CA</i>
10:45-11:45	<b>PAHs as Forensic Source Identification Tools: The Good, the Bad, and the Ugly</b> <i>Robert Haddad, Ph.D., Applied Geochemical Strategies, Inc., Arroyo Grande, CA</i>
11:45-12:45	<b>Lunch</b>
12:45-1:45	<b>Graphical Presentation, Admissibility, and Challenges to Environmental Forensic Techniques in Litigation: Petroleum Hydrocarbon Case Studies</b> <i>Paul D. Phillips, Esq., Holland &amp; Hart, LLP, Denver, CO</i>
1:45-2:45	<b>Application of Statistics and Data Analysis Methods in Environmental Forensics</b> <i>Glen W. Johnson, Ph.D., University of Utah, Salt Lake City, Utah</i>
2:30-3:00	<b>Break</b>
3:00-4:00	<b>Reconstructing Information from Existing Data</b> <i>Elizabeth Harvey, Chevron/Texaco, Richmond, CA</i>
4:00-5:00	<b>A Comparison of Statistical Measures of Similarity for Relating Hydrocarbon Signatures of Contaminated Sediments with Suspected Petroleum Sources</b> <i>Jeffrey W. Short, Ph.D., Auke Bay Laboratory, Juneau, Alaska</i>
5:00	<b>Adjourn</b>

**DAY TWO**

8:00-8:15	<b>ISEF Overview</b>
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*Paul T. Kostecky, Ph.D., ISEF, Amherst, MA*

- 8:15-9:15      **Forensic Techniques for Age Dating and Source Identification of Chlorinated Solvents**  
*Leo Lehmicke, Ph.D., Exponent, Bellevue, Washington*
- 9:15-10:30     **Advances in Stable Isotopes for Contaminant Source Identification: Chlorinated Solvents and Petroleum Fuels/Oxygenates**  
*R. Paul Philp, Ph.D., University of Oklahoma, Norman, Oklahoma*
- 10:30-10:45    Break
- 10:45-11:15    **The Use of Atmospheric Contaminants to Estimate the Ages of Contaminant Plumes in Ground Water**  
*Gil Oudijk, Triassic Technology, Inc., Princeton, New Jersey*
- 11:15-12:00    **Environmental Forensic Investigations of PCBs in Biota**  
*Glenn W. Johnson, Ph.D., University of Utah, Salt Lake City, Utah*
- 12:00-1:30     Lunch
- 1:30-2:30       **Contemporary Archeology (“Garbology”) – Use in Dating Environmental Activities – Case Studies**  
*Eric L. Butler, Ph.D., Gradient Corporation, Cambridge, Massachusetts*
- 2:30-3:30       **Application and Challenges in Groundwater Modeling for Environmental Forensic Investigations**  
*Brendan M. Harley, Ph.D., CDM International, Inc., Cambridge, MA*
- 3:30-3:45       Break
- 3:45-5:00       **Collection, Handling and Analysis of Environmental Samples in Civil and Criminal Investigations: An NEIC Perspective**  
*Richard Ross and Kenna Yarbrough, NEIC, Denver CO*