



# ISEF



## ISEF International Society of Environmental Forensics

*is Pleased to Announce the Following Workshop*

### September 21-22, 2005



La Fonda  
on the Plaza,  
Santa Fe, NM

## *Environmental Forensics:* **Focus on Perchlorate**

The purpose of this workshop is to bring the recognized forensic leaders in this field together to present the various technologies available to the forensic scientists when investigating perchlorate in the environment. The focus of the faculty is to provide environmental consultants, attorneys and regulators with state of the art information on the multitude of perchlorate sources and methodologies available to allocate liability between not only multiple anthropogenic sources but from naturally occurring sources. The use of contaminant modeling in the unsaturated zone and in groundwater is presented via case studies to illustrate modeling techniques for identifying the release point and travel times of perchlorate through the subsurface. The legal impact of Daubert challenges to these new technologies is presented along with case studies involving perchlorate. The analytical techniques and the associated biases is shared along with issues regarding sampling of different media for perchlorate.

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#### **Workshop Program Director:**

*Robert D. Morrison, Ph.D., DPRA, Inc., San Marcos, CA*

#### **Workshop Moderators:**

*Peter M. Mesard, P.E., C.E.G., C. Hg., Exponent, Oakland, CA*

*William E. Motzer, Ph.D., Todd Engineers, Emeryville, CA*

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*Workshop information and on-line registration is available at*

**[www.EnvironmentalForensics.org](http://www.EnvironmentalForensics.org)**

[www.EnvironmentalForensics.org](http://www.EnvironmentalForensics.org)

# Preliminary Program

## *Environmental Forensics: Focus on Perchlorate*

September 21-22, 2005 • La Fonda on the Plaza, Santa Fe, NM

### DAY ONE: Wednesday, September 21, 2005

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#### *Workshop Moderators:*

*Peter M. Mesard, P.E., C.E.G., C. Hg., Exponent, Oakland, CA*

*William E. Motzer, Ph.D., Todd Engineers, Emeryville, CA*

8:00-8:30	<b>Registration</b> (coffee)
8:30-8:45	<b>Welcome and Workshop Orientation</b> <i>Peter M. Mesard, P.E., C.E.G., C.Hg., Exponent, Oakland, CA</i>
8:45-9:45	<b>Overview of State-of-the-Practice of Perchlorate Forensics</b> <i>William E. Motzer, Ph.D., Todd Engineers, Emeryville, CA</i>
9:45-10:45	<b>Analytical Methods for Perchlorate- Past, Present, and Future</b> <i>Ali Haghani, MWH Laboratories, Monrovia, CA</i>
10:45-11:00	<b>Break</b>
11:00-12:00	<b>Using Multiple Approaches to Determine the Source of Perchlorate and Associated Challenges for Wide Spread Low Level Occurrences</b> <i>Andrew Jackson, Ph.D., P.E., Texas Tech University, Lubbock, TX</i>
12:00-1:30	<b>Lunch</b>
1:30-1:45	<b>Introduction to the Afternoon Session</b> <i>William E. Motzer, Ph.D., Todd Engineers, Emeryville, CA</i>
1:45-2:45	<b>Stable Isotope Forensics of Perchlorate: Source Characteristics and Groundwater Case Studies</b> <i>Neil C. Sturchio, Ph.D., University of Illinois at Chicago, Chicago, IL</i>
2:45-3:45	<b>An Overview of Anthropogenic Sources of Perchlorate</b> <i>Peter M. Mesard, P.E., C.E.G., C.Hg., Exponent, Oakland, CA</i>
3:45-4:15	<b>Break</b>
4:15-5:15	<b>Estimating Perchlorate Leachate Travel Times to Groundwater in an Arid Environment</b> <i>Stephen J. Cullen, Ph.D., PG, Daniel B. Stephens, Goleta, CA</i>
5:15	<b>Adjourn</b>

*Nachos and Margarita Networking Reception*

Hosted by DPRA, Inc. (5:15-6:30pm)

# Preliminary Program

## *Environmental Forensics: Focus on Perchlorate*

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### DAY TWO: Thursday, September 22, 2005

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8:30-8:45	<b>Introduction and Overview to the Second Day</b> <i>William E. Motzer, Ph.D., Todd Engineers, Emeryville, CA</i>
8:45-9:30	<b>Electrochemical Generation of Perchlorate Ions in Chlorinated Drinking Water</b> <i>Andrew Jackson, Ph.D., P.E., Texas Tech University, Lubbock, TX</i>
9:30-10:30	<b>Identification of Naturally Occurring Sources of Perchlorate</b> <i>Huiming Bao, Ph.D., Louisiana State University, Baton Rouge, LA</i>
10:30-10:45	<b>Break</b>
10:45-11:15	<b>Identification of Naturally Occurring Perchlorate in Southern California</b> <i>Ioana Petrisor, Ph.D., DPRA, Inc., San Marcos, CA</i>
11:15-12:15	<b>Selective Ion Exchange for Perchlorate Separation, Recovery, and Forensics from Environmental Matrixes</b> <i>Baohua Gu, Ph.D., Oak Ridge National Laboratory, Oak Ridge, TN</i>
12:15-1:30	<b>Lunch</b>
1:30-2:30	<b>Modeling Perchlorate Transport in Soil and Groundwater</b> <i>Ashok K. Katyal, Ph.D., Resources &amp; Systems International, Inc., Blacksburg, VA</i>
2:30-3:30	<b>Daubert Challenges and Other Legal Issues Facing Expert Testimony Pertaining to Perchlorate</b> <i>Douglas Gravelle, Hinson &amp; Gravelle LLP, Westlake Village, CA</i>
3:30-4:00	<b>Break</b>
4:00-5:00	<b>Presence of Perchlorate in Urine as a Biomarker</b> <i>Raj Mangaraj, Ph.D., Battelle Memorial Institute, Columbus, OH</i>
5:00	<b>Adjourn</b>

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Support for this workshop has been provided by:

- *DPRA, Inc.*
- *The Association for Environmental Health and Sciences (AEHS)*
- *International Society of Environmental Forensics (ISEF)*



# ISEF

www.EnvironmentalForensics.org

## La Fonda on the Plaza, Santa Fe, NM



### Hotel Information:

A city whose beautiful, brown adobe architecture blends with the high desert landscape offers much to do. One of the oldest cities in the United States, Santa Fe has long been a center for the creative and performing arts. Among several prominent art museums, are the Georgia O'Keeffe, the Museum of International Folk Art and the Palace of the Governors.

La Fonda is the only hotel in Santa Fe that is located directly on the historic Plaza, the heart of the city's activities and attractions. The Hotel is just steps away from history and art museums, galleries, historic churches, shopping and dining. La Fonda is one of just 167 hotels in the United States that has been identified by "Historic Hotels of America" as having faithfully maintained original historic architecture and ambience.

Each of La Fonda's 167 newly renovated rooms and suites is colorful and unique, featuring hand painted furniture and other artistic touches, from tile murals to whimsical wall accents. Some rooms have traditional vigas and latillas and others have fireplaces and private balconies.

The onsite restaurant, La Plazuela, serves breakfast, lunch and dinner. La Fiesta Lounge offers nightly live entertainment and is open from 11am through midnight. Room service is available daily for breakfast, lunch and dinner. There is also the independently run French Pastry Shop just off La Fonda's lobby, which offers delicious breakfast and lunch selections.

Hotel Amenities: Brand new exercise facility with the latest equipment, open-air two-tier hot tub, steam room, massage services and a large heated outdoor swimming pool; high-speed wireless Internet; On-site dining at La Plazuela Restaurant or la Fiesta Lounge

Visit the La Fonda on the Plaza website for a full description of hotel amenities:  
[www.lafondasantafe.com](http://www.lafondasantafe.com)

**La Fonda on the Plaza**  
100 East San Francisco Street  
Santa Fe, NM 87501  
Tel: 800-523-5002 or 505-995-2321  
Fax: 505-995-2324  
[www.lafondasantafe.com](http://www.lafondasantafe.com)

### Room Rate:

Single/Double: \$169.00 + tax

- Participants are responsible for making their own room reservations. Please contact the hotel at the above phone number to make a reservation.
- Cut off date for reservations: August 29, 2005 to receive the above rate.
- You must mention the group name (ISEF) to receive our special group rate listed above.
- Check in time 3PM, check out time 12NOON

### Travel Information:

The closest airport is Albuquerque International Airport (Airport Code ABQ), which is 59 miles (approx. 1 hour driving time) from the hotel. The Sandia Shuttle Service runs between Albuquerque and Santa Fe 26 times per day. The cost is \$43.00 roundtrip or \$23.00 one-way. Call for reservations (888-755-5696) or visit [www.sandiashuttle.com](http://www.sandiashuttle.com).

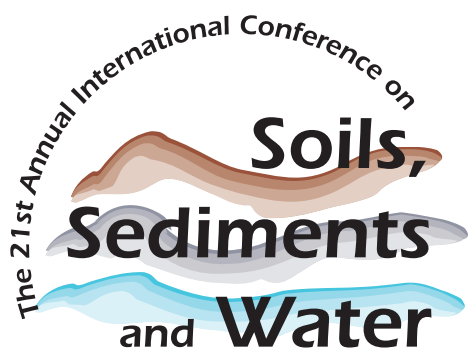
Helpful sites: [www.cabq.gov/airport/](http://www.cabq.gov/airport/)  
[www.sandiashuttle.com](http://www.sandiashuttle.com)

**SOUTHEAST ASIA ENVIRONMENTAL FORENSICS CONFERENCE  
NATIONAL TAIPEI UNIVERSITY OF TECHNOLOGY  
Taipei, Taiwan • September 19-21, 2005**

The International Society of Environmental Forensics (ISEF) in conjunction with the Taiwan Environmental Protection Agency and the Industrial Technology Research Institute (ITRI) of Taiwan is hosting a three day international conference titled the Southeast Asia Environmental Forensics Conference on September 19-21, 2005. The conference will be held at the National Taipei University of Technology in Taipei, Taiwan and will emphasize environmental forensics in Southeast Asia. The conference will bring together a global community of environmental consultants, regulators and scientists for a series of plenary sessions and workshops that address topics associated with forensic techniques. The conference includes three days of afternoon concurrent sessions devoted specifically to environmental forensic techniques applicable for soils, surface water, groundwater, and air contamination investigations. Several sessions are also planned to share recent emerging analytical techniques that can assist in the forensic investigation of contamination. Abstracts and workshops will be presented from scientists from Ireland, Taiwan, China, Egypt, Singapore, Canada, South Korea, Thailand, England, Malaysia, Viet Nam, Hong Kong, Japan, Brazil and Australia. In addition, a poster session is planned that will include technical posters on the subject of environmental forensics submitted from over 30 countries.



*The conference agenda and hotel information may be found at*  
[www.EnvironmentalForensics.org](http://www.EnvironmentalForensics.org)



**October 17-20, 2005**  
University of Massachusetts at Amherst

Visit our website:  
[www.UMassSoils.com](http://www.UMassSoils.com)

The annual Conference on Soils, Sediments and Water at the University of Massachusetts at Amherst has become the preeminent technical national conference in this important environmental area. The conference attracts approximately 700 - 800 attendees annually from across the United States as well as from Canada and other foreign countries. Attendees include a wide variety of representation from state and federal agencies; military; industries including railroad, petroleum, transportation, utilities; the environmental engineering and consulting community; and academia. The conference promises to be an exciting opportunity for all those concerned with the challenge of developing creative, cost-effective assessments and solutions that can withstand the demands of regulatory requirements. There will be a strong and diverse technical program in concert with a variety of educational opportunities available to attendees. The exhibition section brings the real-world application to the technical theory and case studies which will be presented in the platform and poster sessions. Focused workshops will provide attendees with the type of practical application information which will impact their job performance immediately.

**For More Information or to be Included on our Mailing List contact:**

Denise Leonard, Environmental Health Sciences, N344 Morrill, University of Massachusetts, Amherst, MA 01003  
Phone: (413) 545-1239 Fax: (413) 545-4692 Email: [dleonard@schoolph.umass.edu](mailto:dleonard@schoolph.umass.edu)

ANNOUNCEMENT

16th Annual AEHS Meeting and West Coast Conference on  
**Soils, Sediments, and Water**  
March 13-16, 2006 • Marriott Mission Valley, San Diego, California

March 2006 will mark the 16th annual gathering of environmental professionals to the **AEHS Meeting & West Coast Conference on Soils, Sediments, and Water**. For the past 15 years, this annual conference has helped to bring the environmental science community closer together by providing a forum to facilitate the exchange of information of technological advances, new scientific achievements, and the effectiveness of standing environmental regulation programs. Attracting 500 - 600 participants annually, the AEHS Meeting & West Coast Conference is a highly successful and nationally known conference focusing on important and timely environmental issues related to soil and water. Attendees are drawn from a variety of professions including state and federal regulatory agencies, environmental engineering and consulting firms, the petroleum and chemical industries, and academia. The 2006 conference promises to be an exciting opportunity for environmental professionals who are concerned with developing creative, cost-effective assessments and solutions that can withstand the demands of regulatory requirements.

For further information regarding the conference, submitting an abstract, sponsoring or exhibiting please see our website

[www.aehs.com](http://www.aehs.com)

Or contact the Conference Coordinator Brenna Lockwood at AEHS  
E-mail: [brenna@aehs.com](mailto:brenna@aehs.com) • Tel: 413-549-5170 • Fax: 413-549-0579  
AEHS, 150 Fearing Street, Suite 21, Amherst, MA 01002



# WORKSHOP REGISTRATION FORM

**The International Society of Environmental Forensics**  
**Environmental Forensics: Focus on Perchlorate, Santa Fe, NM**  
**September 21-22, 2005 • FAX Return to: 413-549-0579**  
**On-line registration available at [www.EnvironmentalForensics.org](http://www.EnvironmentalForensics.org)**

Name:  Mr.  Ms.  Dr. \_\_\_\_\_

Company or Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail : \_\_\_\_\_

Please check this box if you would like to receive occasional email announcements about new workshops, conferences and publications

## REGISTRATION FEES

General Registration .....\$649.00

ISEF Member .....\$549.00

Regulatory and Academic .....\$300.00

— Regulatory rate is valid for federal, state and municipal REGULATORY personnel only.

— Academic rate is valid for faculty, staff and students.

— 10 % discount for firms sending 5 or more people (registrations must be submitted together).

## REGISTRATION FEE INCLUDES:

- *Course Enrollment for 2 days*
- *Course Workbook*
- *Morning and Afternoon Refreshments (2 days)*
- *Lunch (2 days)*
- *Welcome Reception*
- *1-year Membership to the International Society of Environmental Forensics (ISEF), which includes a 1-year Subscription (electronic) to Environmental Forensics, an International Journal (2006 Calendar Year)*

**LATE REGISTRATION FEE** Received after August 24, 2005 .....ADD \$50.00

**TOTAL WORKSHOP FEES** .....\$ \_\_\_\_\_

## Please indicate method of payment

Check (please make checks payable to ISEF)  Purchase Order Number \_\_\_\_\_

*P.O. number must be submitted with this form, fee is to be paid in full by August 24, 2005*

Please Charge:  MasterCard  Visa  Discover  American Express

Account Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Cardholder Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Encumbered purchase orders will be accepted from institutions and agencies for the purpose of pre-registration only. Full payment must be made by August 24, 2005. Non-compliance will result in a \$25.00 processing fee, in addition to a late fee for any resulting billings. Please fax or send completed form along with full payment BY August 24, 2005 TO AVOID LATE FEE to:

**ISEF, 150 Fearing Street, Suite 21, Amherst, MA 01002, USA**

Tel: 413-549-5170, Fax: 413-549-0579

**[www.EnvironmentalForensics.org](http://www.EnvironmentalForensics.org)**

*For further information regarding registration, please contact Brenna Lockwood at the number(s) above or email [brenna@aehs.com](mailto:brenna@aehs.com)*

Cancellation Policy: cancellations prior to August 24, 2005 will receive a refund, minus a \$100.00 cancellation fee. There will be no refunds after August 24, 2005.