

**2010 North American Environmental Field Conference & Exposition**  
**January 12 – 15, 2010**  
**Embassy Suites Hotel USF, Tampa, Florida**

**FULL EVENT SCHEDULE**

**Program Key**

**Tuesday, January 12, 2010**

8:00 a.m. – 10:00 a.m.

**Conference Platform Papers**

Conference Hall - Salons F & G

**SESSION I: KEYNOTE SESSION**



Conference Platform Papers



Indoor Workshops



Outdoor Workshops & Demos

*Session Moderator:*

David M. Nielsen, *The Nielsen Environmental Field School, Las Cruces, NM*

- ✿ Cross-Cutting Opportunities for the Clean-Up Enthusiast
  - Arnold E. Layne, *Director, Technology Innovation & Field Services Division, Office of Superfund Remediation & Technology Innovation, U.S. Environmental Protection Agency, Washington, DC*
  
- ✿ The Disconnect Between Monitoring and Models
  - Graham E. Fogg, *University of California-Davis, Department of Land, Air & Water Resources, Davis, CA*
  
- ✿ High-Resolution, Real-Time Methods for the Determination of Hydrostratigraphy and Contamination Distribution
  - Seth Pitkin, *Stone Environmental Inc., Montpelier, VT*
  
- ✿ Overview of the Discrete Fracture Network (DFN) Approach for Investigating Contaminated Sites in Fractured Sedimentary Rock
  - Beth L. Parker, *University of Guelph, School of Engineering, Guelph Ontario*

10:00 a.m. – 10:15 a.m. Refreshment Break

10:15 a.m. – 12:15 p.m.

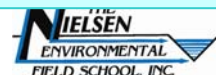
**Conference Platform Papers**

Conference Hall - Salons F & G

**Session II – High-Resolution Approaches to Site Characterization**

*Session Moderator: Sam Williams, Geosyntec Consultants Inc., San Diego, CA*

- FLUTe Flexible Liner Applications for Investigation of a Large-Diameter Municipal Well in Fractured Dolostone
  - Karl Belan, Beth L. Parker and Jonathan Kennel, *University of Guelph, School of Engineering, Guelph, ON*; John Cherry, *University of Waterloo, Department of Earth Sciences, Waterloo, ON*



- Determination of Trichloroethylene in Rock Samples Using Microwave-Assisted Extraction and Cool On-Column Injection
  - Tadeusz Gorecki and Yongdong Liu, *University of Waterloo, Department of Chemistry, Waterloo, ON*; Beth L. Parker and Maria Gorecka, *University of Guelph, School of Engineering, Guelph, ON*
- Fracture Identification by Measuring Heat Dissipation in Lined Holes
  - Peter Pehme, *University of Waterloo, Department of Earth Sciences and Waterloo Geophysics, Inc., Waterloo, ON*; Beth L. Parker, *University of Guelph, School of Engineering, Guelph, ON*; John Cherry, *University of Waterloo, Department of Earth Sciences, Waterloo, ON*
- Hydraulic Packer Tests in Fractured Rock Relevant to Contaminant Transport Analysis
  - Patryk Quinn and John Cherry, *University of Waterloo, Department of Earth Sciences, Waterloo, ON*; Beth L. Parker, *University of Guelph, School of Engineering, Guelph, ON*

10:15 a.m. – 12:15 p.m.

**Indoor Workshops**

Breakout Rooms – Second Floor

**Magnolia Room**

- Dissolved Oxygen Sensing Technologies
  - Laura St. Pierre, *YSI Inc., Yellow Springs, OH*

**Citrus Room**

- New Field Monitoring Technologies for In-Situ Landfill/Ground Gas, Mercury Detection and Soil Headspace
  - Geoff Hewitt and Bob Wheelhouse, *Ion Science Americas LLC, Waterbury, VT*

**Palm Room**

- Demonstration of Method Applicability and Quality Control for XRF in Soil Matrices
  - Stephen Dymant, *US Environmental Protection Agency, Washington, DC*

**Cypress Room**

- Wireless Site Monitoring
  - Gregg Gustafson, *Instrumentation Northwest Inc., Kirkland, WA*; Mark Kram, *Groundswell Technologies, Inc., Santa Barbara, CA*

12:15 P.M. – 1:15 P.M. Lunch Break

1:15 p.m. – 3:15 p.m.

**Conference Platform Papers**

Conference Hall - Salons F & G

Session III – High-Resolution Approaches to Site Characterization



*Session Moderator: Gary Robbins, University of Connecticut, Dept of Natural Resources and the Environment, Storrs, CT*

- The Use of Electrical Resistivity and Induced Polarization Surface Geophysics as a Non-Invasive High-Resolution Characterization Tool for Environmental Site Evaluation and Remediation
  - Boyce L. Clarke, *Arcadis, Baton Rouge, LA*; Jim Cloonan, *Arcadis, Greenville, SC*
- Results From the Use of a Heated Trunkline to Enhance Performance of the Membrane Interface Probe (MIP)
  - Thomas M. Christy and Dan Pipp, *Geoprobe Systems, Salina, KS*
- Development of Mathematical Models for the Characterization of the MIP System
  - Jan Bumberger and Peter Dietrich, *Helmholtz Centre for Environmental Research (UFZ), Leipzig, Germany*
- Direct Sampling Ion Trap Mass Spectrometer (DSITMS) and Dynamic Site Investigations; Utilizing Real-Time and High-Resolution Sampling Methods
  - Eric R. Killenbeck, *Arcadis, Newton, PA*; Nick R.H. Welty, *Arcadis, Novi, MI*; J. Linton, *Arcadis, Tampa, FL*; J.A. Quinnan, *Arcadis, Brighton, MI*

3:15 p.m. – 3:30 p.m. Refreshment Break

3:30 p.m. – 5:30 p.m.

### **Conference Platform Papers**

Conference Hall - Salons F & G

Session IV – High-Resolution Approaches to Site Characterization

*Session Moderator: J. F. Devlin, University of Kansas, Dept of Geology, Lawrence, KS*

- Triad Approach Using the Membrane Interface Probe to Evaluate Chlorinated Solvent Plumes
  - Brad Carlson, *Zebra Environmental, Tampa, FL*; Maria D.S. Watt, Jessica R. Beattie and Ross Trube, *CDM Inc., Edison, NJ*
- Assessment of In-Situ Biodegradation Potential of Hydrocarbons and Fuel Oxygenates Using <sup>13</sup>C-Labeled Amendments and Bio-Sep Beads
  - Kerry Sublette, *University of Tulsa, Dept of Chemical Engineering, Tulsa, OK*
- The Use of Solid-Phase Microextraction and Various Gas Chromatography Systems for Providing Versatile and Efficient On-Site VOC Analytical Programs
  - Michael Rossi and Dave Crosby, *Stone Environmental Inc., Montpelier, VT*

- Stratigraphic Interpretation of High-Resolution Methods
  - Nick R.H. Welty, *Arcadis, Novi, MI*; Eric R. Killenbeck, *Arcadis, Newton, PA*; J.A. Quinnan, *Arcadis, Brighton, MI*

1:15 p.m. – 5:30 p.m.

### Indoor Workshops

#### Breakout Rooms – Second Floor

(Refreshment Break from 3:15 p.m. – 3:30 p.m. in the Exhibit Hall)

#### Magnolia Room

- Anaerobic Attenuation of Petroleum Hydrocarbons in the Subsurface: Characterization and Enhancement of Natural Processes
  - Lyle G. Bruce, *Consultant (BP Remediation Engineering, Retired)*

#### Citrus Room

- Soil Vapor Sampling for Vapor Intrusion Investigations\*
    - Blayne Hartman, *Hartman Environmental Geoscience Inc., Solana Beach, CA*
- \*This workshop will run from 1:15 p.m. to 3:45 p.m. indoors, and continue outdoors from 4:00 p.m. to 5:30 p.m.

#### Palm Room

- Effective DNAPL Site Characterization
  - William M. Davis, *Triad Environmental Solutions Inc., Decatur, GA*; Joe Rossabi, *Redox Tech, Cary, NC*

#### Cypress Room

- Proper Drilling and Grouting Practices for a Variety of Geologic Environments
  - Dennis Duty, Jim Mabrey and Mark Whittle, *Baroid Industrial Drilling Products*

1:15 p.m. – 4:45 p.m.

### Outdoor Workshops & Equipment Demos

#### Outdoor Field Area

1:15 p.m. – 2:15 p.m.

#### Field Site #1

- 12-Volt DC Pumping Technologies Workshop
  - Jassen Savoie, *Geotech Environmental Equipment, Denver, CO*

#### Field Site #2

- Using the Horiba U-50 Series Multi-Parameter Water-Quality Meter
  - Pamela Millett, *Horiba Instruments, Inc., Irvine, CA*

#### Field Site #3

- Active Gas InFusion Systems for Bioremediation and Saturated Water Injection for Enhanced NAPL Recovery
  - Mark Steiner, *Chemviron Midwest Inc., Wooster, OH*

2:30 p.m. – 3:30 p.m.

**Field Site #1**

- Well Development Done Right
  - Tom Kwader, *URS Corp., Tallahassee, FL*

**Field Site #2**

- Instant Metal Mapping with Field-Portable GPS-XRF
  - Ken Smith, *Innov-X Systems, Inc., Woburn, MA*

**Field Site #3**

- Installation of Pre-Pack Screen Monitoring Wells
  - Wes McCall, *Geoprobe Systems, Salina, KS*

3:45 p.m. – 4:45 p.m.

**Field Site #1**

- Dual-Phase Extraction with the HVT 1200 Truck-Mounted Remediation System
  - Mark Steiner, *Chemviron Midwest, Inc., Wooster, OH*

**Field Site #2**

- Practical Wireless Data Collection: Installation and Well Monitoring Technology
  - Gregg Gustafson, *Instrumentation Northwest, Kirkland, WA*

**Field Site #3**

- Soil Vapor Sampling for Vapor Intrusion Investigations
  - Blayne Hartman, *Hartman Environmental Geoscience Inc., Solana Beach, CA*

5:30 p.m. – 7:30 p.m.

**Complimentary Welcome Reception in the Exhibit Hall**

**Co-sponsored by Schlumberger Water Services and Nielsen Environmental Field School**

**Wednesday, January 13, 2010**

8:00 a.m. – 10:00 a.m.

**Conference Platform Papers**

Conference Hall - Salons F & G

**Session V - LNAPL and DNAPL Site Characterization**

*Session Moderator: Willis Weight, Carroll College, Dept of Mathematics, Engineering & Computer Science, Helena, MT*

- Why Are DNAPL Sites So Hard to Characterize?
  - William M. Davis, *Triad Environmental Solutions, Inc., Decatur, GA*

- Application of an In-Well Tracer Technique for Direct Measurement of LNAPL Flux
  - Craig Divine, Jonathan Smith, Brad Koons, Bruce Rust, and Terri Rubis, *Arcadis, Highlands Ranch, CO*; Tom Sale, *Colorado State University*; Paul J. Kurzanski, *CSX Transportation Inc.*
- Multi-Component NAPL Investigation of MGP Waste with Focus on TarVOST Technology
  - Terry Griffin, *Cardno TBE, Clearwater, FL*; Randy St. Germain, *Dakota Technologies, Fargo, ND*
- Evaluation of Downgradient Response to Source Treatment at a Site with Complex Lithology and a Mixed DNAPL Source Zone
  - Adam Gilmore, Steven Chapman and Beth L. Parker, *University of Guelph, School of Engineering, Guelph, ON*

10:00 a.m. – 10:15 a.m. Refreshment Break

10:15 a.m. – 12:15 p.m.

**Conference Platform Papers**

Conference Hall - Salons F & G

Session VI – High-Resolution Approaches to Monitoring

*Session Moderator: Joe Rossabi, Redox Tech, Cary, NC*

- Karst Problems and Flexible Liner Experience
  - Carl Keller, *Flexible Liner Underground Technologies (FLUTe), Santa Fe, NM*
- Monitoring Back Diffusion Effects from Clayey Interbeds in a Sandy Aquifer Following Source Cutoff
  - Stephen Chapman, Beth L. Parker and Kristina Small, *University of Guelph, School of Engineering, Guelph, ON*; Seth Pitkin, *Stone Environmental Inc., Montpelier, VT*
- Evaluation of Nitrate Sensors for Ground-Water Remediation Monitoring
  - Stuart J. Nagourney, *New Jersey Department of Environmental Protection, Trenton, NJ*; Michael Brody, *US Environmental Protection Agency, Washington, DC*; Amy Dindal, *Battelle ETV Advanced Monitoring Systems Center*
- Automated Environmental Monitoring and Visualization for Optimized Ground-Water Management
  - Mark Kram, *Groundswell Technologies Inc., Santa Barbara, CA*; Ed Beighley, *San Diego State University, San Diego, CA*; Hugo Loaiciga, *University of California – Santa Barbara, Santa Barbara, CA*

8:00 a.m. – 12:15 p.m.

### Indoor Workshops

#### Breakout Rooms – Second Floor

(Refreshment Break from 10:00 a.m. – 10:15 a.m. in the Exhibit Hall)

#### Magnolia Room

- Incremental and Stratified Sampling Designs for Surface Soil Analyses\*
    - Deana M. Crumbling, *US Environmental Protection Agency, Washington, DC*;
    - Robert Johnson, *Argonne National Laboratory, Environmental Science Division, Argonne, IL*
- \*This is Part 1 of an 8-hour workshop – it will continue from 1:15 p.m. – 5:30 p.m.*

#### Citrus Room

- Practical Guidelines for Vapor Intrusion Studies
  - Atul M. Salhotra, *RAM Group, Houston, TX*

#### Palm Room

- Developing Site Conceptual Models to Support Informed Ground-Water Remediation Decisions
  - Part 1: Does the SCM at Your Petroleum-Impacted Site Make Sense (8:00 a.m. – 10:00 a.m.)
  - Part 2: Evaluating Physical and Biological Treatment Options for Hydrocarbon-Impacted Sites (10:15 a.m. – 12:15 p.m.)
    - Gaylen R. Brubaker, *AECOM Environment, Raleigh, NC*

#### Cypress Room

- Applied Karst Hydrogeology, With Emphasis on Dye Tracing and Ground-Water Monitoring
  - Ralph O. Ewers and Peter J. Idstein, *Ewers Water Consultants, Richmond, KY*

8:45 a.m. – 12:15 p.m.

### Outdoor Workshops & Equipment Demos

#### Outdoor Field Area

8:45 a.m. – 9:45 a.m.

#### Field Site #1

- Practical Field Use of the HydraSleeve for No-Purge Ground-Water Sampling
  - Kent Cordry, *Geolnsight, Inc., Las Cruces, NM*

#### Field Site #2

- Compact Rotasonic Drilling Techniques Workshop
  - Mike Casey, *Sonic Sampling and Supply, Woodacre, CA*

10:00 a.m. – 11:00 a.m.

#### Field Site #1

- Pumping Test With a Pressure Transducer
  - Jassen Savoie, *Geotech Environmental Equipment, Denver, CO*

#### Field Site #2

- High-Performance Closed-Beam 50kV/10W Field-Portable XRF for Site Characterization
  - Jose Brum, *Innov-X Systems, Inc., Woburn, MA*

11:15 a.m. – 12:15 p.m.

#### Field Site #1

- Field Deployment & Recovery of Passive (No-Purge) Ground-Water Samplers
  - Bradley Varhol, *EON Products Inc., Snellville, GA*

#### Field Site #2

- Creating a Simple Closed-Loop Ground-Water Monitoring Network
  - Jason Nagasawa, *Solinst Canada Ltd., Georgetown, ON*

12:15 p.m. – 1:15 p.m.

**Complimentary Luncheon in the Exhibit Hall**

1:15 p.m. – 3:15 p.m.

#### **Conference Platform Papers**

Conference Hall – Salons F & G

Session VII – Characterization of Ground-Water Systems

*Session Moderator: Cindy Paul, US Environmental Protection Agency, NRMRL, Ada, OK*

- Application of Land-Based and Low Altitude Infrared Thermography to Identify Ground-Water Discharge to Streams and to Guide Geochemical Sampling
  - Brewster Conant, Jr. and N.J. Mochnacz, *University of Waterloo, Department of Earth Sciences, Waterloo, ON*
- Point Velocity Probes (PVPs) From the Drawing Board to the Field
  - J.F. Devlin, *University of Kansas, Department of Geology, Lawrence, KS*
- Circumventing Sand-Packed Drainage Complications in Determining Hydraulic Conductivity from Monitoring Wells with Partially Submerged Screens
  - Gary Robbins and Alejandra T. Aragon-Jose, *University of Connecticut, Department of Natural Resources and the Environment, Storrs, CT*
- Development of a Hydraulic Conductivity Estimate for the Hydraulic Profiling Tool (HPT)
  - Wes McCall and Thomas M. Christy, *Geoprobe Systems, Salina, KS*

3:15 p.m. – 3:30 p.m. Refreshment Break

3:30 p.m. – 5:30 p.m.

### Conference Platform Papers

Conference Hall – Salons F & G

### Session VIII – Characterization & Sampling of Ground-Water Systems

*Session Moderator: Sandy Britt, ProHydro Inc., Fairport, NY*

- Evaluating the Hydraulic Properties of Shallow First-Order Alluvial Systems and the Aquifer Diurnal Water-Level Fluctuations at Different Vegetation Sites in Hag Creek, Whitetail Basin, Southwestern Montana
  - Willis Weight, *Carroll College, Department of Mathematics, Engineering & Computer Science, Helena, MT*; Kevin Chandler, *Absorake, MT*; Clayton Marlowe, *Montana State University, Department of Animal and Range Sciences*
- Ground-Water Discharge From Riparian Zones and Preferential Pathways: Implications for Buffer-Strip Widths to Protect Surface Water
  - Mark K. Waldick, Brewster Conant Jr., and David L Rudolph, *University of Waterloo, Department of Earth Sciences, Waterloo, ON*
- Ground-Water Tracing: Innovative Uses for Environmental Site Characterization
  - Shiloh Kirkland and Tom Aley, *Ozark Underground Laboratory, Protem, MO*
- Results from a Recent Field Demonstration at the Former McClellan AFB, Comparing the Snap Sampler, Dialysis Sampler and Low-Flow Purging and Sampling
  - Louise V. Parker, *U.S. Army Corps of Engineers CRREL, Hanover, NH*

1:15 p.m. – 5:30 p.m.

### Indoor Workshops

Breakout Rooms – Second Floor

(Refreshment Break from 3:15 p.m. – 3:30 p.m. in the Exhibit Hall)

1:15 p.m. – 5:30 p.m.

### Magnolia Room

- Incremental and Stratified Sampling Designs for Surface Soil Analyses\*
  - Deana M. Crumbling, *US Environmental Protection Agency, Washington, DC*;  
Robert Johnson, *Argonne National Laboratory, Environmental Science Division, Argonne, IL*

*\*This is Part 2 of an 8-hour workshop*

1:15 p.m. – 2:15 p.m.

### Citrus Room

- Direct-Push Drilling Technology for Environmental and Remedial Investigations
  - Thomas D. Dalzell, *AMS, Inc., American Falls, ID*; Per Ljunggren, *Envi, Alingsas, Sweden*

2:15 p.m. – 3:15 p.m.

**Citrus Room**

- Environmental and Geotechnical Sampling and Testing Procedures With Hand-Operated Equipment
  - Thomas D. Dalzell and Hari Anestos, *AMS, Inc., American Falls, ID*

1:15 p.m. – 3:15 p.m.

**Palm Room**

- Developing Site Conceptual Models to Support Informed Ground-Water Remediation Decisions  
Part 3: SCM and Remediation Strategy Development at Chlorinated Solvent Sites
  - Nanjun Shetty, *AECOM Environment, Raleigh, NC*

1:15 p.m. – 2:15 p.m.

**Cypress Room**

- Introduction to Passive/No-Purge Ground-Water Sampling
  - Bradley Varhol, *EON Products, Inc., Snellville, GA*

2:15 p.m. – 3:15 p.m.

**Cypress Room**

- Practical Field Applications of the Hydrasleeve for No-Purge Ground-Water Sampling
  - Kent Cordry, *Geolnsight Inc, Las Cruces, NM*

3:30 p.m. – 4:30 p.m.

**Citrus Room**

- Introduction to Numerical Interpretation of Cone Penetration Tests (CPTu)
  - Wojciech Janecki, *Geosoft sp. z.o.o., Wroclaw, Poland*

4:30 p.m. – 5:30 p.m.

**Citrus Room**

- Application of Databases in Geotechnical and Geo-Environmental Engineering
  - Wojciech Janecki, *Geosoft sp. z.o.o., Wroclaw, Poland*

3:30 p.m. – 5:30 p.m.

**Palm Room**

- Performing Rapid Toxicity Assessments (RTAs) with Freshwater, Marine & Sediment Samples
  - Bryan Bjorndal, *Assure Controls, Inc., Vista, CA*

3:30 p.m. – 5:30 p.m.

**Cypress Room**

- Quality Control for Field Activities
  - Linda Hoffman, *HSW Engineering Inc., Tampa, FL*

1:15 p.m. – 5:30 p.m.

## Outdoor Workshops & Equipment Demos

Outdoor Field Area

1:15 p.m. – 2:15 p.m.

### Field Site #1

- Low-Flow Ground-Water Sampling with Multi-Parameter Instrumentation & Flow Cells
  - Jassen Savoie, *Geotech Environmental Equipment, Denver, CO*; and Laura St. Pierre, *YSI, Inc., Yellow Springs, OH*

1:15 p.m. – 3:15 p.m.

### Field Site #2

- High-Resolution Real-Time Subsurface Investigation Methods
  - Seth Pitkin and Michael Rossi, *Stone Environmental, Inc., Montpelier, VT*

2:30 p.m. – 3:30 p.m.

### Field Site #1

- No-Purge Sampling with the Snap Sampler
  - Sandy Britt, *ProHydro Inc., Fairport, NY*

3:30 p.m. – 4:30 p.m.

### Field Site #2

- Handheld Field-Portable XRF for Cost-Effective Environmental Site Characterization Project Management
  - Kim Russell, *Innov-X Systems, Inc., Woburn, MA*

3:45 p.m. – 5:30 p.m.

### Field Site #1

- Dual-Phase Extraction: Short-Term Remedial Actions and Pilot Testing
  - Mark Steiner, *Chemviron Midwest, Inc., Wooster, OH*; James Begley, *inVentus Technologies, Plymouth, MA*

4:45 p.m. – 5:30 p.m.

### Field Site #2

- Dual-Tube Soil Sampling With Sonic Advancement
  - Quinton Wilson, *Geoprobe Systems, Salina, KS*

5:30 p.m. – 7:30 p.m.

Complimentary Socializer in the Exhibit Hall

Sponsored by The Nielsen Environmental Field School

## Thursday, January 14, 2010

8:00 a.m. – 10:00 a.m.

### **Conference Platform Papers**

Conference Hall - Salons F & G

#### Session IX – Ground-Water Sampling

*Session Moderator: Louise V. Parker, US Army Corps of Engineers CRREL, Hanover, NH*

- Well Purging, Travel Times and Discharge Concentrations: Where the Water Comes From, and When it Arrives
  - Sanford L. Britt, *ProHydro Inc., Fairport, NY*; James Martin-Hayden, *University of Toledo Dept of Geology, Toledo, OH*; Mitch Plummer, *Idaho National Laboratory, Idaho Falls, ID*; Louise Parker, *US Army Corps of Engineers, CRREL, Hanover, NH*
- Rigid Porous Polyethylene (RPP) Passive-Diffusion Samplers – Case Studies and Comparisons with Conventional Sampling Techniques
  - Mark Wilson and Dee O'Neill, *Columbia Analytical Services, Rochester, NY*
- Passive Ground-Water Sampling and Small-Diameter Direct Push Wells: Does Size Matter?
  - Kent Cordry, *Geolnsight Inc., Las Cruces, NM*
- Going Green: Reducing the Environmental and Monetary Footprint of Ground-Water Sampling
  - Toni Mehraban, Stacey Arens, Paula Gellner, Jennifer Miller and Hhan Olsen, *MWH Americas, Salt Lake City, UT*; Barbara Hall and Britt Grunewald, *Hill Air Force Base, Salt Lake City, UT*

10:00 a.m. – 10:15 a.m. Refreshment Break

10:15 a.m. – 12:15 p.m.

### **Conference Platform Papers**

Conference Hall – Salons F & G

#### Session X – Characterization of Ground-Water and Surface-Water Systems

*Session Moderator: Gillian L. Nielsen, Nielsen Environmental Field School, Las Cruces, NM*

- The Importance of Properly Developing Ground-Water Monitoring Wells
  - Thomas Kwader, *URS Corp., Tallahassee, FL*
- Comparison of Hydraulic Conductivity Determinations in Direct-Push Monitoring Wells and Co-Located Conventional Monitoring Wells
  - Louise Parker and Nathan Mulherin, *US Army Corps of Engineers, CRREL, Hanover, NH*; Wes McCall, *Geoprobe Systems, Salina, KS*

- Rapid Toxicity Assessments (RTAs) to Optimize Water-Quality Testing Budgets
  - Bryan Bjorndal, *Assure Controls Inc., Vista, CA*
- Benefits of Auditing Field Activities
  - Linda E. Hoffman, *HSW Engineering Inc., Tampa, FL*

8:00 a.m. – 12:15 p.m.

### Indoor Workshops

#### Breakout Rooms – Second Floor

(Refreshment Break from 10:00 a.m. – 10:15 a.m. in the Exhibit Hall)

#### Magnolia Room

- Advanced Design Application & Data Analysis for FP-XRF in Soil Matrices\*
  - Deana M. Crumbling and Stephen Dymont, *US Environmental Protection Agency, Washington, DC*

*\*This is Part 1 of an 8-hour workshop – it will resume at 1:15 p.m.*

#### Citrus Room

- Environmental Forensics\*
  - Dennis Beckmann, *BP Remediation Engineering & Technology*; Lyle Bruce, *Consultant (BP Remediation, Retired)*

*\*This is Part 1 of an 8-hour workshop – it will resume at 1:15 p.m.*

#### Cypress Room

- Environmental Chemistry Basics for Remediation: Implications for Surfactant-Enhanced Remediation
  - Bud Ivey, *Ivey International, Campbell River, BC*

8:00 a.m. – 10:00 a.m.

#### Palm Room

- EPA Method 5035A Preservation Method Primer – Literature Review & Case Studies
  - Michael J. Pickering, *Ash Creek Associates, Portland, OR*

10:15 a.m. – 12:15 p.m.

#### Palm Room

- Monitoring Ground Water With Divers
  - Eric Coulombe, *Schlumberger Water Services, Tucson, AZ*

8:45 a.m. – 12:15 p.m.

### Outdoor Workshops & Equipment Demos

#### Outdoor Field Area

8:45 a.m. – 9:45 a.m.

**Field Site #1**

- Recent Advances in Methods for Determining VOC Concentrations in Core From Sedimentary Rock Sites
  - Beth L. Parker, *University of Guelph, School of Engineering, Guelph, ON*;
  - Tadeusz Gorecki, *University of Waterloo, Waterloo, ON*; Seth Pitkin, *Stone Environmental, Montpelier, VT*

**Field Site #2**

- Compact Rotosonic In Action
  - Mike Casey, *Sonic Sampling and Supply, Woodacre, CA*

10:00 a.m. – 11:00 a.m.

**Field Site #1**

- Dual-Scan GeoVISION micro and GeoVISION nano Video Borehole Camera Systems
  - Franklin J. Marks, *Marks Products Inc., Williamsville, VA*

**Field Site #2**

- Ground-Water and Remedial Investigations Using Direct Push, Hollow-Stem Auger, CPTu and HRP Technologies
  - Tom Dalzell and Ken Lipscomb, *AMS Inc., American Falls, ID*; Per Lundgren, *Envi, Alingsas, Sweden*

11:15 a.m. – 12:15 p.m.

**Field Site #1**

- Demonstration of the Geoprobe 8140 Sonic Machine
  - Tom Omli, *Geoprobe Systems, Salina, KS*

**Field Site #2**

- Soil Sampling, Soil Gas Sampling and Remedial Injection Procedures Using Hand-Operated and Direct-Push Equipment
  - Tom Dalzell, Ryan Anderson and Hari Anestos, *AMS Inc., American Falls, ID*; Per Lundgren, *Envi, Alingsas, Sweden*

12:15 p.m. – 1:15 p.m. Lunch Break

1:15 p.m. – 2:45 p.m.

**Conference Platform Papers**  
Conference Hall – Salons F & G  
Session XI – Vapor Intrusion

*Session Moderator: Todd McAlary, Geosyntec Consultants Inc., Guelph, ON*

- Practical Guidelines for Vapor Intrusion Studies
  - Steven D. Folsom, *HSA Engineers & Scientists, Tampa, FL*

- Quantitative Passive Sampling for Vapor Intrusion Assessment – Recent Developments to Improve Quantitation and Reduce the Costs of Monitoring
  - Todd A. McAlary and Hester Groenevelt, *Geosyntec Consultants, Inc., Guelph, ON*; Suresh Seethapathy and Tadeusz Gorecki, *University of Waterloo, Department of Earth Sciences, Waterloo, ON*
- A New Passive Diffusion Sampler for Improving the Calibration of Models to Evaluate Vapor Movement at UST Sites
  - Cynthia J Paul, Dominic DiGiulio, John T. Wilson and Ken Jewell, *US Environmental Protection Agency, National Risk Management Research Laboratory, Ada, OK*; John Menatti and Robin Davis, *Utah Department of Environmental Quality, Salt Lake City, UT*

2:45 p.m. – 3:00 p.m. Refreshment Break

3:00 p.m. – 5:30 p.m.

**Conference Platform Papers**

Conference Hall – Salons F & G

Session XII – Characterization of Soil Systems

*Session Moderator: Ramon Rivera, Adventus Americas, Inc., Titusville, FL*

- Field Sampling for Site Characterization: Lessons Learned
  - Steven T. Downey, *Shaw Environment & Infrastructure, Knoxville, TN*; Kimberlie Chambers, *McTech*
- Instant Metal Mapping with Commercially Available Field-Portable GRS-XRF Systems
  - Ken Smith, Kimberley Russell & Jose Brum, *Innov-X Systems, Woburn, MA*
- Multi-Incremental vs. Composite Grab Sample Characterization in Mountainous Terrain
  - Richard Meadows and Nick McHenry, *U.S. Army Corps of Engineers, Huntington, WV*; John Quaranta and Suzanne Belle, *West Virginia University, Morgantown, WV*
- Depth Profile Sampling for Perchlorate at the Utah Test and Training Range
  - Wayne C. Downs, *Hill Air Force Base, Salt Lake City, UT*; Karl C. Nieman, *Select Engineering Services, Layton, UT*
- Implementation of Method 8330B for Explosives Residue Characterization at the Utah Test and Training Range
  - Karl C Nieman, *Select Engineering Services, Layton, UT*; Wayne C. Downs, *Hill Air Force Base, Salt Lake City, UT*

1:15 p.m. – 5:30 p.m.

### Indoor Workshops

#### Breakout Rooms – Second Floor

(Refreshment Break from 3:15 p.m. – 3:30 p.m. in the Exhibit Hall)

1:15 p.m. – 5:30 p.m.

#### Magnolia Room

- Advanced Design Application & Data Analysis for FP-XRF in Soil Matrices\*
  - Deana M. Crumbling, *US Environmental Protection Agency, Washington, DC*  
*\*This is Part 2 of an 8-hour workshop*

#### Citrus Room

- Environmental Forensics\*
  - Dennis Beckmann, *BP Remediation Engineering & Technology*; Lyle Bruce, *Consultant (BP Remediation, Retired)*  
*\*This is Part 2 of an 8-hour workshop*

#### Palm Room

- Using Bio-Sep Traps for Robust Decision Making in the Management and Remediation of Ground Water Impacted by Hydrocarbons, Fuel Oxygenates and Chlorinated Hydrocarbons
  - Kerry Sublette, *University of Tulsa, Dept of Chemical Engineering, Tulsa, OK*;  
Greg Davis, *Microbial Insights, Rockford, TN*

1:15 p.m. – 3:15 p.m.

#### Cypress Room

- A Look at Non-Ideal Aquifer Test Response – What Are the Data Really Saying?
  - Willis Weight, *Carroll College, Department of Mathematics, Engineering & Computer Science, Helena, MT*

3:30 p.m. – 5:30 p.m.

#### Cypress Room

- Low-Flow Ground-Water Sampling
  - Robert Mooney, *In-Situ Inc., Fort Collins, CO*

1:15 p.m. – 4:45 p.m.

### Outdoor Workshops & Equipment Demos

#### Outdoor Field Area

1:15 p.m. – 2:15 p.m.

#### Field Site #1

- Low-Flow Ground-Water Sampling
  - Jason Evans, *In-Situ Inc., Fort Collins, CO*

#### Field Site #2

- Demonstration of HPT Logging Using the Geoprobe 7855 Direct-Push Platform
  - Wes McCall and Thomas Christy, *Geoprobe Systems, Salina, KS*

2:30 p.m. – 3:30 p.m.

**Field Site #1**

- Deployment & Retrieval of Rigid Porous Polyethylene (RPP) Passive Diffusion Samplers
  - Mark Wilson, *Columbia Analytical Services, Inc., Rochester, NY*

**Field Site #2**

- Application and Use of Surfactant Technology to Enhance In-Situ Contaminant Remediation
  - Bud Ivey, *Ivey International, Campbell River, BC*

3:45 p.m. – 4:45 p.m.

**Field Site #1**

- New Developments in Ground-Water Sampling
  - Brian Anderson, *Innovative Sampling Systems, Sauk City, WI*

3:45 p.m. – 5:30 p.m.

**Field Site #2**

- Active Gas InFusion Systems for Bioremediation and Saturated Water Injection for Enhanced NAPL Recovery
  - Mark Steiner, *Chemviron Midwest Inc., Wooster, OH*

5:30 p.m. Conference Adjourns for the Day

Complimentary Embassy Suites Manager's Reception for Guests Staying at the Host Hotel

**Friday, January 15, 2010**

8:00 a.m. – 10:00 a.m.

**Conference Platform Papers**

Conference Hall (Salons F & G)

Session XIII – Assessment & Monitoring for Remediation/Site Remediation Approaches

*Session Moderator: Sam Williams, GeoSyntec Consultants Inc., San Diego, CA*

- Vadose Zone Monitoring As a Key to Ground-Water Protection and Optimization of Remediation Strategies
  - Ofer Dahan, *Ben-Gurion University, Zuckerberg Institute for Water Research, Ben Gurion, Israel*
- Evaluation of Injection Techniques in Moraine Clay with Sand Stringers, Skuldelev, Denmark
  - Joe Rossabi and John Haselow, *Redox Tech, Cary, NC*; C Christensen, C Muchitsch, C Riis, C Layburn, C Thompson, *NIRAS*; C Terkelsen, *Capitol Region, Denmark*

- Bioremediation of Chlorinated Solvent DNAPL Using Passive Aggression
  - Sam Williams & Brian Hitchens, *Geosyntec Consultants Inc., San Diego, CA*
- In-Situ Chemical Reduction Technologies – Differentiators and Implementation
  - John Valkenburg and Ramon Rivera, *The Adventus Group, Titusville, FL*

10:00 a.m. – 10:15 a.m. Refreshment Break

10:15 a.m. – 12:15 p.m.

**Conference Platform Papers**

Conference Hall (Salons F & G)

**Session XIV – Contaminant Remediation Approaches**

*Session Moderator: Gillian L. Nielsen, Nielsen Environmental Field School, Las Cruces, NM*

- Oxygen Issues in the Application of Reductive Dechlorination
  - Joe Rossabi, John Haselow and R. Steffan, *Redox Tech, Cary, NC*
- Hyperaccumulation of Cadmium by Soybean Plants – A Phytoremedial Approach
  - Rashmi Gurram, *Flushing, NY*
- Natural Attenuation at a Site Located in Southeastern Mexico, a Case Study
  - Alfonso Espitia C., Javier Barron S. and Adriana Roldan-Martin, *Universidad Autonoma Metropolitan-Azcapotzalco, Departamento de Energia, Azcapotzalco, Mexico*
- Cement Kiln Dust Used In-Situ for the Stabilization of Hazardous Waste
  - Paul Ruehl, *LaFarge North America, Bingham Farms, MI*

8:00 a.m. – 12:15 p.m.

**Indoor Workshops**

Breakout Rooms – Second Floor

(Refreshment Break from 10:00 a.m. – 10:15 a.m. in the lobby across from the Conference Room – Salons F & G)

**Magnolia Room**

- Proper Drilling and Grouting Practices for a Variety of Geologic Environments
  - Dennis Duty, Jim Mabrey and Mark Whittle, *Baroid Industrial Drilling Products, Houston, TX*

**Citrus Room**

- Designing Pumping and Slug Tests and Using Pressure Transducer Data
  - Ted Way, *In-Situ Inc., Fort Collins, CO*

**Palm Room**

- Practical Training in the Use of Direct-Push Logging Methods for Site Characterization
  - Wes McCall, Thomas M. Christy and Dan Pipp, *Geoprobe Systems, Salina, KS*

8:00 a.m. – 10:00 p.m.

Cypress Room

- Data Management With Diver VisiONE
  - Emiel Dijkstra, *Schlumberger Water Services, Waterloo, ON*

10:15 a.m. - 12:15 p.m.

Cypress Room

- New Developments in Ground-Water Sampling
  - Brian Anderson, *Innovative Sampling Systems, Sauk City, WI*

12:15 p.m. – 12:30 p.m.

**Conference Closing Remarks and Adjournment**

Conference Hall – Salons F & G