

Program

Thursday, November 12, 2009 - Morning Session

7:30 am - 8:30 am	Registration and Continental Breakfast
8:30 am - 8:40 am	Welcome and Opening Remarks Larry Cerrillo, CPG, Moderator - Ingenuity Enterprises International, Inc.
8:40 am - 9:10 am	<i>In-Situ Stress Determination by Hydraulic Fracturing Method at Shallow Depth: A Case History</i> Adnan Aydin, Ph.D. - Department of Geology and Geological Engineering, University of Mississippi
9:10 am - 9:20 am	Questions and Answers
9:20 am - 9:50 am	<i>Application of Pneumatic Fracturing and Media Injection Adjacent to/within Structures</i> Deborah L. Schnell, P.E. - Pneumatic Fracturing, Inc.
9:50 am - 10:00 am	Questions and Answers
10:00 am - 10:30 am	Break and Visit Exhibits
10:30 am - 11:00 am	<i>Development of High Performance Proppants from Alternative Raw Materials Derived from Industrial/Domestic Waste Streams</i> John R. Hellmann - Pennsylvania State University
11:00 am - 11:10 am	Questions and Answers
11:10 am - 11:40 am	<i>Deep Shale Natural Gas: Abundant, Affordable, and Water Efficient</i> Matthew E. Mantell, P.E. - Chesapeake Energy Corporation
11:40 am - 11:50 am	Questions and Answers
12:00 noon - 1:00 pm	Luncheon Keynote Speaker Anne D. Weber, Attorney, CPG - Weber Law Firm, LLC <i>Hydraulic Fracturing - The Legal Framework</i>



Program

Thursday, November 12, 2009 - Afternoon Session

12:00 noon - 1:00 pm	Luncheon - Sponsored by Frac Rite Remediation, Inc.
1:00 pm - 1:30 pm	<i>A Critical Analysis of Groundwater Quality Trends in the Center of Natural Gas Development in Garfield County, Colorado</i> Robert J. Sterrett, Ph.D. - HCltasca Denver, Inc.
1:30 pm - 1:40 pm	Questions and Answers
1:40 pm - 2:10 pm	<i>Using Selected Propping Agents to Enhance Hydraulic Fractures for Environmental Remediation</i> Seth C. Hunt - Foremost Solutions, LLC
2:10 pm - 2:20 pm	Questions and Answers
2:20 pm - 2:50 pm	<i>Methods and Applications of Hydraulic Fracturing Technologies Applied to In-Situ Biological, Chemical and Bio-Chemical Remediation</i> Vincent E. Barlock, P.G. - Vista GeoScience LLC
2:50 pm - 3:00 pm	Questions and Answers
3:00 pm - 3:15 pm	<i>Break and Visit Exhibits</i>
3:15 pm - 3:45 pm	<i>Proprietary Issues Regarding Emplacement of Hydraulic Fractures for Environmental Remediation</i> Seth C. Hunt - Foremost Solutions, LLC
3:45 pm - 3:55 pm	Questions and Answers
3:55 pm - 4:25 pm	<i>Hydraulic Fracturing Enhanced Groundwater Remediation at F.E. Warren Air Force Base, Wyoming</i> Belinda Butler-Veytia - URS Corporation, Denver
4:25 pm - 4:35 pm	Questions and Answers
4:35 pm - 5:05 pm	<i>Enhancement of Existing Remedial Systems Using Pneumatic Fracturing</i> Deborah L. Schnell, P.E. - Pneumatic Fracturing, Inc.
5:05 pm - 5:15 pm	Questions and Answers



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Friday, November 13, 2009 - Morning Session

7:30 am - 8:30 am	Registration and Continental Breakfast
8:30 am - 8:40 am	Welcome and Opening Remarks Larry Cerrillo, CPG, Moderator - Ingenuity Enterprises International, Inc.
8:40 am - 9:10 am	<i>How to Provide Near-Surface Hydraulic Fracturing to Enhance In-Situ Chemical Oxidation and/or Bioremediation</i> David Houghton, P.G., CPG - A+ Environmental Solutions
9:10 am - 9:20 am	Questions and Answers
9:20 am - 9:50 am	<i>Fracture-Emplacement of a Micro-Iron/Carbon Remediation Amendment in Sedimentary Bedrock, Saprolite, and Partially Weathered Rock</i> Joanna Moreno - Adventus Group
9:50 am - 10:00 am	Questions and Answers
10:00 am - 10:30 am	Break and Visit Exhibits
10:30 am - 11:00 am	<i>Subsurface Injection Technologies and Monitoring Systems for In-Situ Chemical and Bio-Chemical Remediation Systems - It's a Contact Sport</i> John V. Fontana, P.G. - Vista GeoScience LLC
11:00 am - 11:10 am	Questions and Answers
11:10 am - 11:40 pm	<i>Hydraulic Fracturing versus Injection Delivery Techniques: Vanquishing the "Direct Push" Myth</i> Gordon H. Bures, M.Eng., P.Eng. - Frac Rite Environmental Ltd.
11:40 pm - 11:50 pm	Questions and Answers

Thank You for Attending! Have a safe trip home!

Please fill out the Questionnaire in the back of the book and leave it at the registration table.





Presenter Biographies

Larry Cerrillo, CPG, Moderator - Ingenuity Enterprises International, Inc.

Larry Cerrillo is a past national and Colorado state section president of AIPG. He has a BS in Geology from Syracuse University and an MS in Hydrogeology from Colorado State University. Larry has worked nationally and internationally on groundwater and environmental projects. In addition to his hydrogeologic background, he has several certificates of training in alternative dispute resolution (ADR) including a certificate of advanced study in ADR from Denver University. He is currently working at his second career as a mediator, facilitator and arbitrator of environmental, public policy, water, and construction disputes.

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Adnan Aydin, Ph.D. - Department of Geology and Geological Engineering, University of Mississippi

Dr. Aydin received his BSc (Geological Engineering) and MSc (Engineering Geology) degrees from Middle East Technical University, Turkey, in 1983 and 1986, respectively, and his PhD (Well Hydraulics) degree from Memorial University of Newfoundland in 1994. Prior to joining University of Mississippi, he taught at The University of Hong Kong for about ten years. Dr. Aydin published over 50 journal articles and conference proceedings, and directed over 20 basic and contract research projects on a wide variety of topics.

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Deborah L. Schnell, P.E. - Pneumatic Fracturing, Inc.

Deborah L. Schnell is the President of Pneumatic Fracturing, Inc. (PFI) and a licensed engineer in New Jersey. She is a graduate of Lafayette College and received a Master of Science in Civil Engineering from New Jersey Institute of Technology. Prior to the founding of PFI, a woman-owned business, Ms. Schnell was employed as a consultant where she was involved in remedial investigations, innovative technologies for remediation, and Superfund work. Ms. Schnell founded PFI in 2000 and has pioneered the processes of directional injection for targeted fractures and emplacement of remedial products and dry media injection. Ms. Schnell has over fifteen years of engineering experience and has been involved in the pneumatic fracturing/injection technology for fourteen years where 70% of the projects have been conducted adjacent to or within structures or near utilities. She has published several papers regarding the pneumatic fracturing technology, zero valent iron injection, and performance monitoring of subsurface delivery of remedial products.

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John R. Hellmann - Pennsylvania State University

John R. Hellmann is Professor of Materials Science and Engineering and Associate Dean for Education in the College of Earth and Mineral Sciences. As a Penn State faculty member since 1986, he has also served as Associate Director of the Center for Advanced Materials (1986-1995), Chairman of the Ceramic Science and Engineering Program (1998-2001), and as Associate Head for Undergraduate Studies in Materials Science and Engineering (2001-2007). In addition to maintaining an active teaching and research portfolio, in his position as Associate Dean he is responsible for curriculum, accreditation, recruiting and retention, scholarships, international internships, and outreach activities in the College of Earth and Mineral Sciences.

His research interests concern the mechanical reliability and thermochemical durability of ceramics, metals, and intermetallic materials in severe thermal environments. He has active research programs in development and characterization of materials for gas turbines, advanced propulsion systems, and enhanced oil and natural gas recovery technology, as well as in the design and fabrication of laminated ceramic composites.



Presenter Biographies

possessing engineered stress states for use as armor and cutting tools. He has published over one hundred peer reviewed papers on research supported by the Department of Energy, NASA, Office of Naval Research, National Science Foundation, and industry, and has supervised the research of over 120 graduate and undergraduate students, many of whom have received national and international awards for their work.

Professor Hellmann earned his bachelor and doctorate degrees in Ceramic Science at Penn State, followed by a five year stint as a member of technical staff at Sandia National Laboratories in Albuquerque, New Mexico prior to returning to the faculty at Penn State.

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Matthew Mantell, P.E. - Chesapeake Energy Corporation

Matt Mantell is an Environmental Engineer with Chesapeake Energy working out of their Corporate Office in Oklahoma City, OK. Matt is responsible for water supply planning, produced water reclamation, spill prevention control and countermeasure, and underground injection control programs. His education includes a Bachelor of Science in Geography, a Master of Regional and City Planning, and a Master of Science in Civil Engineering (w/Environmental Emphasis) all from the University of Oklahoma. Matt is a licensed professional engineer in Oklahoma, Texas, and Pennsylvania. Prior to joining Chesapeake Energy in June 2008, he was a Staff Engineer in the water business group with the consulting firm, CH2M HILL, working out of the company's Oklahoma City office.

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Robert J. Sterrett, Ph.D. - HClitasca, Denver, Inc.

Principal Hydrogeologist with HClitasca Denver, Inc. Dr. Sterrett has over 25 years of experience in the areas of groundwater and contaminant transport analysis, and soil and groundwater remediation. His expertise includes analysis of the fate and transport of chemicals in the vadose zone; and the design and analysis of soil and groundwater remediation systems. He has also undertaken the analysis of mine and construction dewatering systems. Dr. Sterrett was the technical editor and chief contributor to the 3rd edition of Groundwater and Wells.

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Seth C. Hunt - Foremost Solutions, LLC

Mr. Hunt has thirty-seven years of experience in solving problems in environmental programs as both an entrepreneurial businessman and an EPA executive. Mr. Hunt was one of the first managers selected by EPA in 1971 when the new agency started up a regional office in Denver. Initially he served as the Director of Human Relations as was challenged to establish an approved federal personnel system from scratch and staff the Regional Office and EPA's National Enforcement and Investigation Center which was also located in Denver. Mr. Hunt retired from EPA in 1988 after having served in the Regional executive positions of Assistant Regional Administrator for Policy and Management, Deputy Regional Administrator and as Interim Regional Administrator in 1983. He also served as a Special Assistant to EPA's Administrator in Washington, DC.

In 1990 Mr. Hunt started USTMAN Industries which was the first company to be nationally certified to offer the innovative leak detection method for underground storage tanks called Statistical Inventory Reconciliation, a computerized technology of analyzing tank inventory records. In 1993, he sold USTMAN Industries



Presenter Biographies

and started FOREMOST Solutions, Inc. believing it was a bigger calling to clean up contaminated sites, rather than finding the causes.

Mr. Hunt is the inventor or co-inventor of five patents involving environmental issues.

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Vincent E. Barlock, P.G. - Vista GeoScience LLC

Mr. Barlock is a registered Professional Geologist with over 24 years of professional consulting experience in the disciplines of hydrogeology, hydraulic fracturing, and groundwater monitoring for the Industrial, Solid Waste, and O&G industries. Experience includes the management and technical oversight of hydrogeologic ISCO remediation projects and bioremediation environmental projects throughout the United States and overseas. Has worked for the USGS as research mineral geologist; solid waste project manager; Principal-in Charge of a national consulting firm's Denver operations; remediation director at Pelorus En Biotech; and currently serves as the director of remediation for Vista GeoScience. He continues to provide expert witness and testimony & litigation support services on landfills and large MGP environmental due-diligence investigations for Fortune 500 O&G firms.

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Belinda Butler-Veytia - URS Corporation, Denver

Ms. Belinda Butler-Veytia is a Chemical Engineer with over 8 years of experience with URS Corporation based in Denver, Colorado. She currently supports Denver and URS offices nationwide in the application of in situ remedial applications as a corporate technology lead. Belinda also serves as the Leader for the Manufacturing and Chemical, Pharmaceutical & Commercial Business Lines for Colorado Operations.

Ms. Butler-Veytia's strengths include the design and implementation of in situ chemical oxidation and bioremediation applications for the treatment of recalcitrant contaminants in groundwater, specifically in low permeability lithologies. Her specific experience includes the design and implementation of remedial systems involving direct push and permanent well injection systems, passive infiltration (gravity driven), pneumatic injection, and amendment emplacement using hydraulic or pneumatic fracturing.

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David Houghton, P.G., CPG - A+ Environmental Solutions

David Houghton has 20 years of experience in engineering and technical services, environmental assessments, regulatory strategy, and chemically-impacted remediation activities. His career began as a firefighter, emergency medical technician, and US Coast Guard Master Captain. David is a trained Incident Commander, Safety Officer, and an instructor in Hazardous Materials and Confined Spaces. He is a frequent conference participant in order to remain up to date on cutting-edge technologies, and an experienced professional speaker and expert witness. David and his wife DeDe own A+ Environmental Solutions <www.envir-solutions.com> and Aqua Safaris SCUBA Center <www.aquasafaris.com>. Both businesses are located in Santa Cruz, CA.

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Joanna Moreno - Adventus Group

Joanna Moreno, PHG, is the Director of Groundwater Services for Adventus Americas, Inc. She has more than 25 years experience in using mathematical models to optimize groundwater remedial designs and resource



Presenter Biographies

management for industry and government projects worldwide. She co-authored the John Wiley book: A Practical Guide to Groundwater and Solute Transport Modeling. She holds a B.Sc. degree in Physics and Meteorology from the University of Reading, U.K.

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John V. Fontana, P.G. - Vista GeoScience LLC

John Fontana is a professional geologist and licensed water well driller with over 25 years of experience. He is President and CEO of Vista GeoScience and provides a variety of support services to the mineral extraction and environmental remediation industries. Based in Golden, Colorado, he manages Vista who provides a geochemical and environmental laboratory, mobile lab services, specialized soil gas technologies, environmental drilling, remediation, in-situ chemical injection and hydro-fracturing remediation services, and pioneered many of these service in the Rocky Mountain region. Mr. Fontana has supervised many Triad type environmental site characterizations and remediation projects. He provided expert testimony in the area of trace natural gas analysis and natural gas seep related issues. Mr. Fontana has co-authored over 30 presentations and papers on geochemistry, environmental site characterization, and remediation technologies. Mr. Fontana holds a BS in Oceanography, Geology and Physics from Humboldt State University.

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Gordon H. Bures, M.Eng., P.Eng. - Frac Rite Environmental Ltd.

Gordon is a professional engineer, co-founder and Principal at Frac Rite Environmental Ltd. based in Calgary, Alberta, Canada. He earned a Bachelor of Science Degree in Geological Engineering at the University of Manitoba in 1985, and a Master of Environmental Engineering Degree at the University of Alberta in 1993.

Gord is an experienced practitioner in the in situ design and implementation of remediation systems at contaminated industrial and commercial sites across Canada, the USA, Europe, Asia, and Africa. For the last 15 years, he has specialized in the enhanced remediation of low permeability soils using soil hydraulic fracturing and amendment delivery techniques. Gord is developing applications of fracture-enhanced, in situ chemical oxidation and bioremediation (BIO FRAC™ process) with vendors and consulting partners, including the mapping of fractures and amendment distribution using tiltmeter geophysics.

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