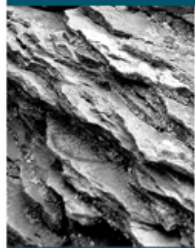


Pittsburgh | Oct 5-6, 2016



The SHALE Exchange

Emerging Technologies & Business Opportunities

AGENDA

October 4, 2016

PRE-CONFERENCE TOUR: National Energy Technology Laboratory (NETL) Center for Geological and Environmental Services

A look at several different laboratory research areas at NETL's Center for Geological and Environmental Services

October 5, 2016

MORNING

Opening Remarks

Patrick Findle, Gas Technology Institute (GTI)

Keynote Presentations

Shale Gas Challenges for Sustainable Development Around the World

Zachary Arnold

General Manager-Operations
Northeast Natural Energy

Paul Doucette

Operating Agent for the International Energy
Agency (IEA)'s Gas & Oil Technology
Collaboration Program

Environmental Best Practices Forum

M4ShaleGas: Measuring, Monitoring, Mitigating and
Managing the Environmental Impact of Shale Gas
Dr. Holger Cremer, Netherlands Organization for
Applied Scientific Research (TNO)

Air Emissions and Carbon Footprint

Paula Costa, National Laboratory of Energy and
Geology (LNEG) and M4ShaleGas Consortium

Groundwater and Wastewater Management

Monika Konieczynska, Polish Geological Institute
(PGI-NRI) and M4ShaleGas Consortium

Characterization, Analysis of Prospectivity and Assessment of Subsurface Risks for European Shales

Jan ter Heege, TNO and M4ShaleGas Consortium

Technological Innovation Forum

Field Research Shale Wells—

Transforming Shale Development: Maximizing Well Efficiency and Mitigating Environmental Impacts

Marcellus Shale Energy and Environment
Laboratory (MSEEL)

Dr. Timothy R. Carr, West Virginia University

Hydraulic Fracturing Test Site (HFTS)

Jordan Ciezobka, GTI

Sponsor Lightning Round

Fun 1-minute messages from conference sponsors

International Shale Challenges and Innovation Forum

Featuring presentations from the Netherlands,
Argentina, Denmark, China, Canada, and Mexico

AFTERNOON

TOUR: Universal Well Services

An up-close, hands-on look at well field
operations, facilities, and equipment

EVENING

Reception

University of Pittsburgh
Technology Poster Session

Featuring university research and
presentations from conference speakers:
WVU, GTI, and M4ShaleGas

October 6, 2016

TOUR: EQT Drill Site and Hydraulic Fracturing Site

A tour of an EQT shale gas production site,
followed by a classic barbecue lunch

FOR MORE INFORMATION:

patrick.findle@gastechnology.org
www.gastechnology.org/Events

Who Should Attend Shale Exchange?

- International Representatives and Organizations
- Technology Experts and Developers
- Producers
- Operators
- Service Companies
- Government Representatives
- Investors in Emerging Technology
- Engineering, Service, Legal and Consulting Companies

“One of the best energy-related conferences I have attended.”

—2015 Shale Exchange Attendee

What You'll See on the Field Tours

The Marcellus Shale is the largest natural gas play in the United States and one of the largest in the world. Field tours will include a gas well services company as well as shale drilling and hydraulic fracturing operations, to offer an important perspective on the size, complexity, and professional level of management of shale development activities.

Universal Well Field Operations, Facilities and Equipment Review

Getting hands-on access to field infrastructure and equipment is a rare opportunity. That's what you'll get when you sign up for the tours. Universal Well Services provides natural gas and oil well services in the Marcellus and Utica shale formations, including hydraulic fracturing and cementing services.



National Energy Technology Laboratory (NETL) Center for Geological and Environmental Services

The Shale Exchange 2016 offers attendees an up-close look at NETL's Center for Geological and Environmental Sciences, a tour focused on the Lab's onsite research in sustainable production and utilization of domestic energy resources. As a division of NETL's Research and Innovation Center, the Center for Geological and Environmental Sciences collaborates with industry, academia, and other government laboratories to deliver affordable, sustainable technologies and solutions for the development of energy resources in the US.

Only participants registered by August 22 will be eligible to attend this tour due to DOE's background check process.

EQT Shale Well Site Tour

Experience firsthand the size, logistics, and dynamics of a shale well pad, including hydraulic fracturing and drilling operations. In addition to an up-close tour, access to field personal for questions and discussion of the operations and an enticing Northern Barbeque lunch are provided. EQT is one of the Marcellus region's largest exploration and production companies, developing and implementing innovative and environmentally-friendly drilling technology to effectively and efficiently tap into unconventional reservoirs, such as shale, tight sands, and coalbed methane.

“The entire conference was great and we hope to attend next year. Thank you!”

—2015 Shale Exchange Attendee

Contact patrick.findle@gastechnology.org or visit www.gastechnology.org/Events for more information.