

# USAEE Workshop Methane Hydrates

<i>Date &amp; Time:</i>	Wednesday, July 31, 2013, 1:45 – 5:15pm
<i>Location:</i>	Fore Deck Room, Captain Cook Hotel
<i>Cost:</i>	\$50.00 Conference registrants, \$75.00 non-registrants Includes a light lunch at the beginning of the workshop and coffee break
<i>Approx. # of participants:</i>	40-50

## **Objective**

The primary goal of the workshop is to inform engineers & energy economists, policy makers, legal practitioners, regulators and energy market analysts of some of the technical issues surrounding the development of gas resources in methane hydrates.

## **Composition of Audience**

Energy economists and engineers in industry, government and academia, students completing PhD degrees in energy economics or engineering, banking professionals and other financial institutions trading energy derivatives, engineering & energy consulting firms, government regulatory or advisory agencies, or law firms.

## **Schedule**

### Gas Hydrate Fundamentals

*Presenter: Brian Anderson, NETL-RUA Faculty Fellow, National Energy Technology Laboratory, and  
GE Plastics Professor in Chemical Engineering, Statler College of Engineering and Mineral Resources,  
West Virginia University*

- What they are?
- Where they are found?
- Types of occurrences
- Potential Implications (Resources, GeoHazards, Climate)

### Gas Hydrate Petroleum Systems

*Presenter: Ray Boswell, Technology Manager, Natural Gas Technology, U.S. Department of Energy, National  
Energy Technology Laboratory, Pittsburgh, PA*

- Prospective occurrence types
- Exploration/Characterization technologies
- Potential Volumes
- Case Study of Assessments:
  - 1. Alaska, 2. Japan, 3. Gulf of Mexico, 4. U.S. Atlantic

### Gas Hydrate Production Concepts

*Presenter: Brian Anderson*

- Potential Methods
  - 1. Depressurization, 2. Chemical Injection, 3. Thermal
  - Focus on the cost benefit of each method.
- Field Experiments
  - 1. Canada, 2. Alaska, 3. Japan
- Numerical Simulation/Production Prediction Gulf of Mexico and ANS
- Future test design and nature of likely future production approaches
- Production challenges in obtaining and sustaining commercial production rates
- AK ANS life-cycle assessment

### Coffee Break

### Future

*Presenter: Ray Boswell*

- Status/Goals of International Programs:
  - 1. Japan, 2. India, 3. Korea, 4. China, 5. Others
- Potential timelines for production

### Discussion