

AIChE-Pittsburgh March Meeting Notice

Thursday, March 15, 2012

Joint meeting with the ACS-Energy Technology Group (ACS-ETG)

Methane Hydrates: The Next Frontier Resource and Climate Change Wildcard?

Ray Boswell, U.S. Department of Energy, National Energy Technology Laboratory

Although it is clear that global fossil fuel resources are finite, it continues to remain very difficult to suggest that one knows just what that finite volume may ultimately be. A steady stream of technological improvements have enabled society to access resources that were once thought to be inaccessible, the most recent being the realization of vast volumes of both oil and gas that can be recovered from shale formations. Perhaps the next resource poised to address future energy needs is gas hydrate. Gas hydrate is a naturally-occurring combination of methane gas and water that occurs broadly and in great volumes under regions of permafrost and in the shallow sediments of deep-water continental shelves and slopes around the globe. Recent research in the U.S. and in a number of the world's most rapidly growing and energy-challenged nations suggest that energy recovery from certain types of gas hydrate deposits is likely to be feasible using existing technological approaches. In addition, field programs, primarily in the Arctic, suggest that gas hydrates are an important, dynamic, and poorly-understood component of the global carbon cycle and may have potential implications as a feedback to global warming. This talk will outline the state of gas hydrate research and development and the most recent views on gas hydrate resource potential and its role in the natural environment.

Dr. Ray Boswell is the Technology Manager for Methane Hydrates at the U.S. Department of Energy's National Energy Technology Laboratory where he is responsible for framing and directing an integrated research program in partnership with industry, academia, DOE's National Labs, international research programs, and other federal agencies. He has a B.S. degree from the College of William and Mary and M.S. and Ph.D. degrees in Geology from West Virginia University. He has served as a co-chief scientist for gas hydrate field projects in the Indian Ocean, on the Alaska North Slope, and in the Gulf of Mexico. For further details on methane hydrates, please contact Ray Boswell at Ray.Boswell@NETL.DOE.GOV.

***Location: Spaghetti Warehouse, 26th & Smallman Streets, Strip District, Pittsburgh PA
Free parking behind the restaurant. Thursday, March, 15, 2012, Social Hour 6:00 pm, Dinner 6:30 pm,
Talk 7:30 pm.***

For reservations, please contact Dr. Todd Gardner, Chair, AIChE-Pittsburgh Section, by Wednesday, March 14, 2012 at 304-285-4226 or by E-mail at Todd.Gardner@NETL.DOE.GOV. Our meetings are open to all.

The cost of the dinner is \$17 including tax and gratuity. Please specify your preference: spaghetti with meatballs, 15-layer lasagna, four-cheese manicotti, fettuccini alfredo, or grilled chicken Caesar salad. Also, please indicate special needs such as vegetarian, gluten-free, etc.