

Rocky Mountain AIChE News

January 2013

Volume 22 Number 4

January Section Meeting: Premier of FRACKNATION – A Viewing Event

FRACKNATION is a film aimed at highlighting the good economic news about increased oil and natural gas production and the environmental record of fracturing underground shale formations. Hydraulic fracturing of hydrocarbon bearing formations deep in the earth has been safely and successfully practiced for decades. The combination of careful geologic analysis using seismic and similar technologies, multi-well directional drilling from single, small footprint pads, and hydraulic fracturing truly has the potential to eliminate United States of America dependence on foreign oil & gas until such time as alternative energy sources are fully developed and deployed. The positive impact of low cost domestic hydrocarbons on the economy of the United States, and indeed on that of the world, using the combination of these technologies cannot be understated.

Western Energy Alliance (WEA) is a non-profit trade association representing 400 companies engaged in all aspects of environmentally responsible exploration and production of oil and natural gas in the Rocky Mountain West. WEA provides networking opportunities with others conducting business in the same areas. Service companies, financial institutions, accounting and law firms, and exploration & production companies are all part of the Western natural gas and oil community.

The Rocky Mountain Section of AIChE has made reservations for 30 attendees and members are

January Section Meeting

Topic: Premier of FRACKNATION – A Viewing Event

Date: Tuesday, January 22nd

Time: 5:30 – 9:00 p.m.

Show starts at 7:00 p.m. Reception before the showing with snacks, hors d'oeuvres and a cash bar.

Location: Sheraton Hotel 1550 Court Place, Denver, CO

Cost: Members: \$20
(w/RSVP)* Non-Members: \$25
Students & Unemployed: \$10

Please RSVP by FRIDAY, January 18th (early RSVPs are greatly appreciated!) indicating your name, phone number, and number of attendees. Please RSVP to Martin Vorum at rockyaiche@yahoo.com.

*Add \$5 for attending meeting without RSVP

invited to join the members and guests of WEA to watch FRACKNATION in a conference-style setting at the Sheraton Hotel in Denver. WEA will offer a reception before the showing with snacks, hors d'oeuvres and a cash bar.

STATE SCIENCE FAIR

State Science Fair time is fast approaching. Judging will occur at CSU on April 10, 2013. If you aspire to participate in the next "America's Got Science Talent", this is the job for you. Contact Michael Mutnan at mmutnan@juno.com for more information.

We are classified as "Special Judges" since we focus on Chemical Engineering related projects. Awards (monetary and certificates) are given to 1st and 2nd Place in the Senior and Junior High Divisions. We also invite the winners to be our guests at one of our meetings.

The science fair group must be informed who our judges are by March 1 for inclusion into a "Judges Database". Once on the list, you will receive a packet with particulars, and more importantly, a badge that gets you into the judging area.

Michael can access the database for late inclusions. Last year badges were issued to judges not on our list, so a last minute decision seems to be acceptable.

In the past parking was available at the CSU Equestrian Center. This includes bus service to campus. Judging is held 12:15 p. m. to 5:00 p. m. A short meeting occurs at around 11:00 a. m. with lunch (pizza and drinks).

A very intense, but very rewarding day awaits you. PARTICIPATE!!!!

What Did I Miss?

David Helmer, EH&S Manager for Atmel provided an overview of the company's semiconductor manufacturing facility, focusing on the processes of Oxide Deposition, Photo-Lithography, Etching, Thin Films, and Ion Implantation. Etching involves both liquid and/or plasma processes, creating as many as many as 35 layers of thin films. Small particle accelerators are used for ion implantation, and even "gamma backstreaming", a non-directional method, may be employed. The tour included viewing the clean rooms and major sophisticated tools and the utilities areas, where highly specialized storage requirements are met to contain nitric, hydrochloric, hydrofluoric and phosphoric acids, isopropyl alcohol, acetone, ethyl acetate, and propylene glycol mono-ether acetate. Large volumes of liquid nitrogen,

hydrogen, argon and oxygen are also stored, as are difficult materials like arsine, phosphine, chlorine and even pyrophoric materials like silane and dichlorosilane.

David Helmer of Atmel discusses the rigorous requirements of safe handling and storing the sophisticated materials used by the semiconductor industry.



An AICHE member and Atmel Employee gets to show fellow attendees where she works!

PAST JANUARY AICHE MEETING PRESENTATIONS

- 2000 Transition from Industry to Academia Al Weimer, CU Boulder
- 2001 So You Want to Start Your Own Business? David Rapley, Rapley/VECO
- 2002 Earthquake Information For the World Waverly J Person, Earthquake Information Center
- 2003 EHS Management Issues of the Pharmaceutical Sector Dean M. Calhoun, Affyigility Solutions
- 2004 Sampling Theory Francis Pitard, Francis Pitard Consultants
- 2005 Characterization and Simulation of Complex Hydrocarbon Reservoirs James R Gilman, iReservoir
- 2006 Use of Vacuum in the Chemical, Pharmaceutical & Industrial Applications Mitch Levy, Fluid Technology, Inc
- 2007 Hydrogen Transfer Membranes Doug Jack, Eltron Research
- 2008 Oil Shale Jeremy Boak, Colorado School of Mines
- 2009 Uranium, The Other Green Energy Dennis Gertenbach, Sr. VP, Hazen Research, Inc
- 2010 Rheology of Non-Newtonian Fluids Dr. Matthew Liberatore, Colorado School of Mines
- 2011 Flow Assurance and Natural Gas Hydrates Eric Grzelak, Colorado School of Mines

AIChE Meetings

2013

Jan 31-Feb 1	Midwest Regional Conference at Illinois Institute of Technology Chicago, IL
Feb 24-26	SBE's Int'l Conf. on Accelerating Biopharmaceutical Development Coronado Isl., CA
Mar 19-20	SPE/AIChE Workshop on Flow Assurance Austin, Texas
Apr 28-May 2	AIChE 2013 Spring Meeting and 9th Global Congress on Process Safety San Antonio, TX

Live Online Events

Jan 23	1:30-3:00 EST Emissions of Mercury and Other Air Toxics: Compliance Strategies for Coal Combustion
Jan 30	2:00-3:00 EST Solutions for a Sustainable Tomorrow

National AIChE Contact Info

AIChExpress Service Center:

(US/Canada): 1-800-AIChemE
(1-800-242-4363)

(International): 203/702-7660
Fax: 203/775-5177

E-mail: xpress@aiche.org

Member Services: 800.242.4363

Career Services: 646.495.1330

Awards & Honors: 646.495.1317

Address: 3 Park Avenue
New York, NY 10016-5991

Web Page: <http://www.aiche.org>

Rocky Mountain AIChE Officers

Tom Wellborn	Director / Treasurer	303/933-0533 twellborn@astraenergy.net
Martin Vorum	Chair	303/384-7414 martin.vorum@nrel.gov
Open	Vice-Chair / Program	
Kevin Milliman	Past Chair	303/704-7530 Kmilliman94@gmail.com
Mike Mutnan	Secretary	mmutnan@juno.com
Open	Membership	
Mike Moes	Communication	303/796-0535 mmoes@ekiconsult.com
Patrick Burton	New Mexico Liaison	pdburto@sandia.gov
Dr. Patrick Johnson	Wyoming/SD Liaison	pjohns27@uwo.edu
Cory Jensen	Student Chapter Liaison	970/219-5990 cory.jensen.co@gmail.com
Laura Moes	Editor and Web Admin	303/770-2432 lauramoes@msn.com

Rocky Mountain AIChE News is published eight times a year by the Rocky Mountain section of AIChE. Opinions expressed herein are those of the authors and are not necessarily those of AIChE nor the officers of this section.

The objectives of AIChE are to advance chemical engineering in theory and practice, to maintain a high professional standard among its members, and to serve society, particularly where chemical, engineering can contribute to the public interest.

AIChE Rocky Mountain is a public non-profit 501(c)(3) organizations and thus any and all donations are tax deductible.

Rocky Mountain AIChE News Publication Schedule

February 2013 issue

Articles due Wednesday, February 6th

Publish on Friday, February 8th

Meeting on Tuesday, February 19th

MEETING SCHEDULE

The Rocky Mountain District of AIChE generally meets the third Tuesday of every month, September through November and January through May.

Rocky Mountain AIChE News
America Institute of Chemical Engineers
7900 S. Monaco Ct.
Centennial, CO 80112-1326

On the Web at:

<http://rockymtn.aiche.org>

*Send your E-MAIL address to
mmoes@ekiconsult.com to receive
this newsletter electronically!*



**Sheraton
Hotel
1550 Court
Place,
Denver, CO**