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Read below for February events!

Cheers,

Marija Mircevska

Newsletter Editor

SPE Award Nominations Accepted through February 15!

REGIONAL AWARD NOMINATION PROCESS WILL ONLY TAKE 15-20 MINUTES OF YOUR TIME

SPE Awards recognize members for professional contributions, technical progression and service.

Full explanation of the individual awards at:

www.spe.org/awards/

You will also see international awards listed at this link. Please consider nominating a colleague for an international award as well.

Awarding regional awards gives our whole section recognition for the great work and service the members here put forth! So please take a moment, follow the link above, pick an award that you know someone deserves, and follow the instructions to complete the nomination.

February 4, 2016

GENERAL MEETING

Groundwater Quality and Oil and Gas Development in Colorado

Dr. Joseph Ryan Professor and Bennett-Lindstedt Faculty Fellow University of Colorado Boulder

- February 17, 2016, 11:30 AM 1:30 PM
- Denver Athletic Club

Tickets:

Members	\$25
Non-Members	\$35
Walk-Ins	\$40

Abstract: Public databases provide records of groundwater quality in the vicinity of oil and gas



- Continuing Education
- HSSE Study Group
- Racquetball/Handball Tournament
- Award Nominations



February SPE Newsletter



development and the composition of hydraulic fracturing fluids in Colorado. We used these databases, assembled by the Colorado Oil and Gas Conservation Commission and the Ground Water Protection Council ("FracFocus"), to assess whether or not oil and gas development has had an effect on groundwater quality. In the Denver-Julesburg Basin, the occurrence of methane is related to proximity to coal beds for biogenic methane and to well construction issues in older wells for thermogenic methane. The occurrence of toxic

groundwater contaminants is rare and not readily attributed to any source. For potential groundwater issues related to hydraulic fracturing, focus should be shifted to compounds that are not only potentially toxic, but are mobile, persistent, and frequently used. An analysis of these characteristics of the organic compounds used in hydraulic fracturing fluid results in a short list of compounds of concern, but many of these compounds are not routinely measured in groundwater samples.

Biography: Dr. Rvan has been teaching and doing research at the University of Colorado since 1993. Before 1992, he was a National Research Council postdoctoral fellow at the U.S. Geological Survey in Boulder, and he still works closely with U.S.G.S. scientists on many of his research interests. He obtained his B.S. in Geological Engineering at Princeton University in 1983 and his M.S. (1988) and Ph.D. (1992) in Environmental Engineering at the Massachusetts Institute of Technology. His research interests focus on role of surfaces and "colloids" (very small mineral and organic particles) in the fate and transport of contaminants in natural waters. Most of his research is motivated by "real" problems, like plutonium at Rocky Flats, polycyclic aromatic hydrocarbons released in an oil spill, mercury in the Everglades, microbes in groundwater, offroad vehicles causing erosion in the James Creek watershed, and metals released by abandoned mines in the Lefthand Creek watershed. Recently, Joe has served as a technical advisor for two community groups dealing with water quality problems in Boulder County, the James Creek Watershed Initiative and the Lefthand Watershed Oversight Group, with the assistance of funding from the University of Colorado's Outreach Committee.

Register Now

CONTINUING EDUCATION

Monte Carlo Simulation for the Oil and Gas Industry Susan Peterson, Ph.D., Consultant

February 23-24, 2016, 8:00 AM - 5:00 PM Registration Deadline is Friday, February 5, 2016

14th Annual Gas Well Deliquification Workshop

February 29 – March 2, 2016

Sponsored by the Artificial Lift R&D Council and Southwestern Petroleum Short Course

Information you need to optimize gas well Deliquification!

- Continuing Education
 Courses
- Technical Sessions
- Panel Discussions
- Breakout Sessions
- Exhibitors
- Networking

Detailed information can be found on <u>our website</u>.

Contact Information:

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⁹ Brown Palace Hotel and Spa, 321 17th St, Denver

Register Now

Registration Fee \$1,400 for members \$1,800 for non-members *Registration fee is fully refundable until February 5, 2016*

1.6 CEUs (Contiinuing Education Units) will be awarded by SPE-Americas Office for this 3-day course

For more details, contact Darien O'Brien, P.E.

Course Description: During this course, participants work directly with spreadsheet-based risk simulation software (either Crystal Ball or @Risk) to examine and modify prepared models and to create simple models of their own. Participants will also analyze historical data using histograms, cross plots, correlation in Excel, and software to fit probability distributions to data. Several worksheet models are included. The course covers software basics such as menus, settings, distributions, outputs, graphics, statistics, sensitivity, analysis, interpreting results, and creating reports.

Course Contents: This course helps with making better business decisions by addressing the uncertainty and risks that occur during projects or planning. Better allocation of money for budgeting is needed, particularly in a competitive environment with significant swings in prices and expectations. Because of that, it becomes even more important to plan ahead for variations and for what might be beyond single numbers.

About the Instructor: Dr. Susan Peterson has more than 20 years of experience as a consultant, project manager/senior drilling engineer, and as an instructor. Peterson specializes in risk analysis and decision-making methods for full field development, and AFE time and cost models. As a consultant, Peterson performs project-specific risk analysis and provides training on decision and risk analysis. She has led a risk analysis and decision methods initiative, and has been responsible for the risk analysis on projects ranging from fast-track remote gas field development to large capital expenditure oil development. She holds PhD and MS degrees from Texas A&M University and a BS from Marietta College, all in petroleum engineering.

HSSE STUDY GROUP

The Importance of FGOR in Designing New Oil and Gas Production Facilities Alon Mandel, Noble Energy

February 11, 2016, 11:30 AM - 1:00 PM
 Halliburton, 1125 17th Street, 19th Floor Training Room

RSVP: Clory Martin

Abstract: State and federal laws require certain facilities to design, install, operate, and maintain effective pollution control measures to minimize emission of VOCs from storage vessels. A common approach to vapor control system design is to model the potential peak flow of emissions and size the vapor control system based on those results.

Maximum potential flash gas generation rates occur during separator dumps and are estimated from process simulation softwares. Given that typical pressurized hydrocarbon liquid samples are often collected at a separator pressure less than the maximum, a tank control system designer would like to understand the uncertainty in process simulation software estimates of flash gas generation rate at the maximum separator operating pressure and tank temperature. In these cases, it is reasonable to estimate vented volumes (via a burner or a flare) using flash-gas-to-oil ratio (FGOR) data for the wells feeding the facility, provided these data are accurate, repeatable and applicable to the crude oil production rates at the time.

Biography: Alon Mandel is an environmental engineer working at Noble Energy since 2014. Alon has a bachelor's degree in chemical engineering from the University of Michigan, and two master's degrees in political sciences and environmental engineering from Tel Aviv University. He is also a former Olympian (Beijing, 2008) and an NCAA All-American athlete.

SPE Racquetball/Handball Tournament

36th Annual Winter Tournament

Eebruary 26, 2016, 12:30 PM (Noon)

• Denver Athletic Club

Registration Fee: Professionals: \$35 Students: \$25

Register Now

All levels of participation welcome

Funds to benefit the Denver Section SPE Scholarship fund. Entry fee includes refreshments & Dinner/Awards Banquet.

Trophies & Door Prizes presented at Awards Banquet.

Please arrive 20 minutes early for registration.Tournament Chairman has the right to re-classify entrants. Each player will play several short matches in a round robin format or standard tournament play depending on number of participants. Eye Protection Required.

Sponsorship opportunities available, inquire with <u>Tournament</u> <u>Chairman</u>.

After registering, please email John Arsenault to indicate level preferred on your entry: Open/A or B, C+, C, Novice

Society of Petroleum Engineers - Denver Section

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