

SPE Mid-Continent Section Newsletter

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SPE Mid-Continent Section

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Voting members consist of the Executive Committee. The Chairman only votes in the event of a tie. A Motion can be voted upon with a Quorum of the Voting Members present. A Quorum consists of five Voting Members present. An affirmative vote will consist of 51% of the Quorum present. Committee Chairmen and in their absence, the Committee Vice Chairmen are encouraged to attend board meetings and provide representation and committee reports. The editor welcomes newsworthy items about SPE members or events. Please provide a **draft to the newsletter editor by the 25th of the month**. Change of contact information requests should be made to SPE in Richardson, TX, 1-800-456-8863, or service@spe.org.

Chairman's Gavel

Nathan Buchanan, 2017-2018 Chairman

Colleagues:

Spring is here, and we have been busy in the Mid-Continent Section.

We held two luncheon meetings in the month of March. A joint luncheon with Tulsa Geological Society and the Geophysical Society of Tulsa was held March 6, with Dr. Jeremy Boak from the Oklahoma Geological Survey speaking--the topic was induced seismicity in Oklahoma. This was the second joint event we have held with other local oil and gas professional societies. Dr. Srikanta Mishra with the Battelle Memorial Institute presented a talk titled "Big Data Analytics; What Can it Do for Petroleum Engineers and Geoscientist?" on March 21. Dr. Mishra also conducted a short course on March 22 which was very well attended and which received very positive feedback. Thanks to Dr. Mishra for taking the time to both present a luncheon and conduct a short course.

We have an upcoming luncheon meeting on April 4: John Jackson with Unimin Corporation will be presenting "OSHA New Silica Regulation and How to Mitigate It with No Footprint". We also have an SPE Distinguished Lecturer to look forward to on April 20: Fernando L. Benalcazar with APD Proyectos CIA. LTDA will give a talk titled "Oil and Gas Operations – Integrating the Realities of the Social License". Please note that this luncheon will be held at the Oaks Country Club.

Dr. Mohan Kelkar will be conducting a short course, "Analysis of Producing Wells in Unconventional Reservoirs", on April 28 at the University of Tulsa. Please check SPEMC's website for registration details.

The SPE Improved Oil Recovery Conference is taking place April 14-18. The IOR conference takes place biennially, and it generates the largest portion of the revenue for our section's scholarship program (and contributes a significant amount of our section's operating budget). It's not too late to register for the conference or one of the short courses (www.speior.org).

We are getting to the time of year where we will need to select members for leadership positions in our section. If you are interested in a board position or committee chairmanship, get in touch with me or another board member. Leadership positions do take some time, but without members putting time and effort into these positions we would be unable to conduct luncheons, short courses or any other section activities.

I will look forward to seeing you at an upcoming event.

Nathan Buchanan
2017-2018 Chairman
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A FREE SERVICE FOR MID-CONTINENT SECTION MEMBERS AND THEIR EMPLOYERS

SPE is offering a free service to section members and their employers for the posting of jobs offered by employers (please, no third party recruiters) seeking to hire SPE members and for members seeking employment. Unless otherwise arranged, ads will stay on the website for one calendar month. To view available jobs go to the section website www.spemc.org and select Help Wanted/Situation Wanted. To submit an ad (120 words or less, please) e-mail spemc@spemc.org for consideration.

From Your Editor

Betty Felber, 2017-2018 Editor

April is finally here. It is a very busy month for the Mid-continent Section with two luncheon meetings and the Improved Oil Recovery Conference. The SPE International President elect is visiting us and highlighting the Improved Oil Recovery All Conference Monday luncheon. The Tuesday luncheon honors our six new IOR Pioneers inductees. The Conference has 27 technical sessions. Among them are two sessions dedicated to IOR in shale reservoirs.

I encourage all of you to attend as many of the activities as you can. Each one offers you an opportunity to learn about various technology developments, field successes and cutting edge developments. Support our section in a special way by attending the Conference our section's principal event.

Enjoy the conference and the section meetings during April.

Betty Felber
Editor

Calendar of Events

Wednesday, April 4, 2018 - Luncheon Meeting - Summit Club

- John Jackson, Unimin Corporation "OSHA New Silica Regulation and How to Mitigate It with No Footprint"

April 14-18, 2018, SPE Improved Oil Recovery Conference - Tulsa

- Short Courses Sat. 14th - Sun. 15th, Technical Program Sessions, Mon. 16th - Wed. 18th - Register Now at www.speior.org.

Friday, April 20, 2018 - Luncheon Meeting - Oaks Country Club

- Fernando L. Benalcazar, APD Proyectos CIA. LTDA - Distinguished Lecturer "Oil and Gas Operations – Integrating the Realities of the Social License"

Saturday, April 28, 2018 - Short Course - The University of Tulsa

- Mohan Kelkar, The University of Tulsa "Analysis of Producing Wells in Unconventional Reservoirs" 9:00 a.m. - 4:30 p.m.

Thursday, May 10, 2018 - Luncheon Meeting - Summit Club

- R. Scot Buell, Chevron Energy Technology Company - Distinguished Lecturer "Waterflood Design and Operational Best Practices"

Monday, May 21, 2018 Tulsa SPE Mid-Continent Section Golf Tournament

- Forest Ridge Golf Club, Broken Arrow (see details page 4)

All SPE luncheons are held at the Summit Club unless otherwise noted - See p7 for more details.

2018 Mid-Continent Section Golf Tournament

Sign Up Now

Monday, May 21, 2018
Forest Ridge Golf Club, Broken Arrow
Entry deadline is Monday, May 14th

This year the 2018 Tulsa SPE Mid-Continent Section Golf Tournament will be on Monday, May 21st at Forest Ridge Golf Course in Broken Arrow. We are looking forward to another fun event, but are changing to a spring event in 2018.

This year every golf entrant will receive a Cutter and Buck Half-Zip pullover (see example below) and a logoed SPE/Forest Ridge hat. It will be greatly appreciated to mark sizing on the entry form for the Half-Zip pullover to ensure we get proper sizes. More info about sizing can be found on the entry form.

You can pay by credit card at this link <https://spemcgolf2018.eventbrite.com>, or send a check to Cudd Energy Services, Attn: Charley Mathis, 320 S. Boston Ave, Suite 1030-14 Tulsa, OK 74103. You must send in a completed entry form (Download the entry form at www.spemc.org/events/SPEMC_2018_Golf_Tournament_Entry_Form.pdf) along with paying on Eventbrite or payment by check. Send entry forms to CMathis15447@cudd.com.

For tournament questions please contact Nathan Nitchals at 918.856.1091 or nnitchals@msdir.com. Looking forward to seeing you on the course.



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APRIL 2018

WEDNESDAY, April 4, 2018 - Luncheon Meeting

Location: Summit Club, 30th Floor, Ballroom

Speaker: John Jackson, Unimin Corporation

Topic: "OSHA New Silica Regulation and How to Mitigate It with No Footprint"

Register: <https://spemc040418.eventbrite.com>

Description

In June 2016, the Occupational Safety and Health Administration, OSHA, reduced the Permissible Exposure Limit (PEL) and created an Action Level (AL) for respirable crystalline silica (RCS) by half and will require engineering controls to help mitigate employee exposure. In June 2018, the new RCS PEL of 0.05 mg/m³ averaged over an 8-hour period will apply to hydraulic fracturing and most other industries, and engineering control obligations will commence in June 2021 for hydraulic fracturing operations.

With an average of over one million pounds of silica sand used in horizontal well completions, crystalline silica is a major component of hydraulic fracturing. Multiple proppant transfer points can generate high concentrations of airborne dust, from offloading trucks to being pumped down hole. Engineering controls can be used to mitigate exposure.

A study was conducted at multiple hydraulic fracturing sites to determine if RCS concentrations could be reduced below OSHA's new PEL using engineering controls that do not have an onsite footprint, namely chemically pre-treated sand. The results showed significant reductions in RCS in both personal and area sampling.

Speaker

John Jackson

John Jackson is the Application Technology Manager for Unimin Energy in The Woodlands, Texas. He holds a Bachelor of Science degree in Chemistry from Sam Houston State University. John has spent the last 7 years in proppant research and development for the hydraulic fracturing industry. He is currently developing engineering methods to control respirable crystalline silica within the Oil & Gas and glass markets.

John serves as the Co-Chair of the American Petroleum Institute 19 C group, which oversees the practice for measurement of proppants used in hydraulic fracturing. He previously served 5 years on the Board of Directors for the Society of Petroleum Engineers Gulf Coast Section, where he won awards for section services and committee of the year.

SPE Mid-Continent luncheon meetings are held at the Summit Club** in Tulsa from 11:20-1:00 p.m. unless otherwise noted. SPE Mid-Continent luncheon meetings are held at the Summit Club in Tulsa. To register and pay by credit card, or make a reservation to pay by check or cash at the door, go to the corresponding link for a luncheon. Luncheon cost is \$25.00 professional, \$10 retired/unemployed, and free for students (limited seating available). Payment by credit card is for advanced registrations ONLY, no credit cards will be accepted at the meeting, only check or cash with a reservation. Registration ends 48 hours prior to the luncheon date. No walk-ins please.

**Summit Club | Bank of America Center, 15 West Sixth Street (NE corner of 6th & Boulder) | Tulsa, OK 74119 | 918.582.5243 | Parking details are available at www.summittulsa.com/club/parking.

FRIDAY, April 20, 2018 - Luncheon Meeting

Location: Oaks Country Club

Speaker: Fernando L. Benalcazar, APD Proyectos CIA. LTDA - Distinguished Lecturer

Topic: "Oil and Gas Operations – Integrating the Realities of the Social License"

Register: <https://spemc042018.eventbrite.com>

Description

Oil and gas are essential parts of a sustainable future. Though these are finite energy resources and sources of greenhouse gas emissions, the world continues to require their production. For this reason, it is imperative that we consider improved industry practices.

To begin, the audience will be presented with the most basic principles of sustainability pertaining to oil and gas operations, including SPE's position on this matter. When oil is discovered at a location, decisions and guarantees cannot be made without considering the project's life cycle. Our commitments must be demonstrated consistently along each stage of a project in direct consideration of a sustainable future.

Next, several case studies relating to sustainability, integrating the realities of the social license to operate and operations will be presented to the audience, detailing the required steps for the successful execution of any project facing challenging conditions.

The presentation will conclude by underlining that the inclusion of internal and external stakeholders will only enrich the project and, therefore, pave the road to success. It is our responsibility to create a culture of operational professionalism and reliability through active participation. In order to counterbalance the world's energy demand, we must produce oil and gas while considering that the more efficiently the energy is produced, the more affordable the energy will be. The oil industry is not only committed to its own sustainability but also to the sustainability of our planet.

Speaker

Fernando L. Benalcazar

A Senior Adviser with APD Proyectos, Fernando L. Benalcazar has been in the oil industry for 24+ years and has provided project management and support for numerous international projects in Syria, France, Canada, the US, Oman, Venezuela,

Colombia, and Ecuador. Benalcazar focuses on operation excellence, sustainable development, and stakeholder engagement. He also specializes in health, safety, and environment (HSE), local content, capacity building, and new ventures. He has authored or coauthored more than 12 technical papers and holds a MS degree in civil engineering from Alberto Luiz Coimbra Institute for Graduate Studies and Research in Engineering (COPPE) at the Federal University of Rio de Janeiro, Brazil. He holds a Certified Safety Professional (CSP) designation in the US and has served on SPE's Sustainability Technical Committee since 2012. Benalcazar was the chair of a SPE Applied Technology Workshop and of two Latin American and Caribbean regional conferences. He has acted as a member of SPE Ecuador's Board since 2011 and is currently President-Elect. Benalcazar has been a chairperson for the environmental focus area of the SPE International HSSE-SR Advisory Committee since 2015.

SATURDAY, April 28, 2018 - SHORT COURSE | 9:00 a.m. - 4:30 p.m.

Location: The University of Tulsa, Keplinger Hall, Room L1

Instructor: Mohan Kelkar, The University of Tulsa

Topic: "Analysis of Producing Wells in Unconventional Reservoirs"

Register: <https://spemc042818.eventbrite.com>

Description

The course fee of \$350 includes course notes, lunch, and a PDH certificate.

The Course

Analyzing producing wells in unconventional formation requires different evaluation techniques compared to conventional wells. Unlike conventional formation, unconventional wells produce under transient conditions for long time and analyzing the data under those conditions correctly is important. This one day course will cover both theory and practice of evaluating the wells producing from unconventional formations. Specific topics covered will include: presence of flow regimes in producing wells; evaluation and identification of flow regimes; reservoir parameters that can be obtained from evaluation of production data; use and abuse of standard decline curve analysis tools; and proper methodology for generating type curves. We will demonstrate the methodology using Harmony software which is widely used in the industry. Course notes will be provided.

Instructor

Mohan Kelkar received his MS in Petroleum Engineering and PhD in Chemical Engineering from the University of Pittsburgh. He joined the University of Tulsa as assistant professor in 1983 and is currently Williams Endowed Chair Professor of Petroleum Engineering at the University of Tulsa. He served as a chairman of Petroleum Engineering department from 2002 through August of 2016. He has authored over 60 refereed papers and has made over 250 technical presentations at various technical meetings. He has authored or co-authored three books. He is actively involved in Society of Petroleum Engineers (SPE) and recently served as regional director at SPE International.

MAY 2018

THURSDAY, May 10, 2018 - Luncheon Meeting

Location: Summit Club, 31st Floor, Renaissance Room

Speaker: R. Scot Buell, Chevron Energy Technology Company - Distinguished Lecturer

Topic: "Waterflood Design and Operational Best Practices"

Register: <https://spemc051018.eventbrite.com>

Description

Reservoir engineers cannot capture full value from waterflood projects on their own. Cross-functional participation from earth sciences, production, drilling, completions, and facility engineering, and operational groups is required to get full value from waterfloods. Waterflood design and operational case histories of cross-functional collaboration are provided that have improved life cycle costs and increased recovery for onshore and offshore waterfloods. The role that water quality, surveillance, reservoir processing rates, and layered reservoir management has on waterflood oil recovery and life cycle costs will be clarified. Techniques to get better performance out of your waterflood will be shared.

Speaker

R. Scot Buell

Scot Buell has worked globally for 36 years as a petroleum engineer. He was a 2005-2006 SPE Distinguished Lecturer, is the author of 12 SPE papers, served as an SPE technical editor for 20 years, and has served as an SPE section Chairman, Forum Chairman, and Applied Technology Workshop Chairman. He has worked as an expert in the design of new waterfloods and the operation of existing waterflood projects in Asia, North America, Europe, and Africa. He provided technical leadership for 30 waterflooded reservoirs offshore West Africa for nine years. He currently serves as a corporate reserves auditor specializing in waterflood and EOR reserve estimates. He also serves as the principal researcher for thermal horizontal wells and thermal subsurface integrity management for Chevron Energy Technology Research Company. He holds a BS and MS in Petroleum Engineering and MS in Petroleum Economics, all from Colorado School of Mines.

SAVE THE DATE

THURSDAY, May 24, 2018 - Luncheon Meeting

Location: Summit Club, 30th Floor, Ballroom

Speaker: Paul Mundy, Flogistix

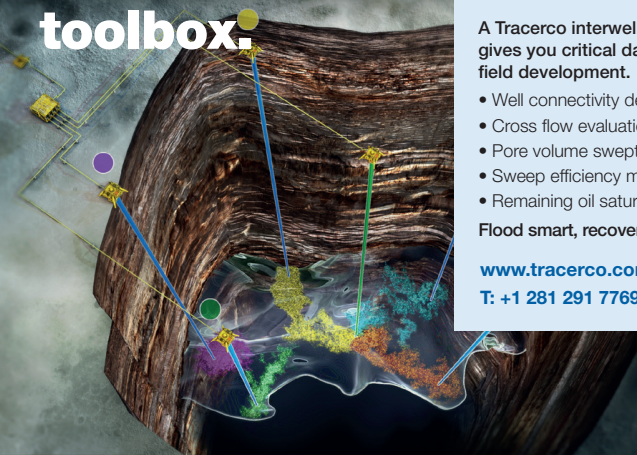
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"Opportunity is missed by most folks because it is dressed in overalls and looks like work"

— **Thomas A. Edison**

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