SPE Mid-Continent Section Newsletter

January 2024 | Issue No. 489

Mid-Continent Section

SPE Mid-Continent Section

Executive Committee Voting Members

	Phone	E-mail
Chairman:		
Brian Flake, Calyx Energy		bflake@calyxenergy.com
Vice Chairman (Programs):		
Bryn Lewis, Magellan		bryn.lewis@magellanlp.com
Secretary:		
McKenzie Bender, Williams		
Treasurer:		
Ryan Owens, Bank of Oklahoma Energy Group		ROwens@bokf.com
Directors:		
Nathan Buchanan, Parsage Oil Company	918-857-0434	nsbuchanan@gmail.com
Kyle Drew, Calyx Energy	214-673-2011	kylesdrew@gmail.com
Charley Mathis, Thru Tubing Solutions	918-629-5853	cmathis@thrutubing.com
Hap Pinkerton, Halliburton	918-645-1715	hap.pinkerton@halliburton.com
Joseph Tyree, Consultant	918-504-7171	joseph-tyree@outlook.com
Past Chairman:		
Miranda Dunham, Exponent Energy		mirandabdunham@gmail.com
Regional Director:		
Robert Martinez		

Committee Chairmen Non-Voting Members

Newsletter Editor:		
Betty Felber, Consultant	918-403-9199	IORImplement@outlook.com
Assistant Newsletter Editor, Webmaster, Communications:		
Kristi Davies, Consultant		sixgun@olp.net
Newsletter Advertising:		
Open		
Social Media:		
Joseph Tyree, Consultant	918-504-7171	joseph-tyree@outlook.com
Continuing Education:		
Open		
Awards:		
Open		
Scholarships:		
Bryn Lewis, Magellan		bryn.lewis@magellanlp.com
Memberships:		
Mike Stafford, The University of Tulsa	918-631-2604	mike-stafford@utulsa.edu
Nominations:		
Miranda Dunham, Exponent Energy		mirandabdunham@gmail.com
IOR Conference 2024:		
Tom McCoy		tfrmccoy@gmail.com
Young Professionals:		
Open		
Golf Tournament:		
Michael Owens, Extract Production Services		michaelsowen1989@gmail.com
Sporting Clays Tournament:		
Charley Mathis, Thru Tubing Solutions	918-629-5853	cmathis@thrutubing.com

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 50% 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, 1-800-456-6863, or service@spe.org.

Chairman's Gavel

Brian Flake, 2023-2024 Chairman

Our first regular meeting of the year will be on January 24th, 2024. Additionally, our February meeting speaker will be Janelle Lawer, who is a touring distinguished lecturer from SPEI. Her talk is titled, "Is Mercury Contaminating your Natural Gas? Improved Accuracy in Downhole Analysis; A Case Study from Sand Face to Production Stream."

IOR 2024 registration is live. Information on the event and links to the registration page can be found at www.speior.org. We look forward to seeing you in attendance. You may also find a link to the program of events at the website as the schedule continues to be fleshed out. If you would like to become a sponsor or host an exhibit, those options are available as well.

Thanks,

Brian Flake
2023-2024 Chairman
bflake@calyxenergy.com

Now Available: The SPE International App

The New SPE International App allows you access to SPE anytime, anywhere. It has many great benefits: access to our widely used OnePetro® and PetroWiki® platforms, the latest content from SPE magazines and publications which you can tailor to your preferences, and global networking opportunities through SPE Connect.

SPE Mid-Continent Newsletter Sponsors

From Your Editor

Betty Felber, 2023-2024 Editor

Welcome to 2024. Our Section is busy with the monthly business and preparing for the 2024 IOR Conference. Thanks to Tom McCoy, our 2024 IOR General Chair.

Our January meeting will be an interesting meeting. We are going to have interesting meetings throughout the rest of our Section Officers terms. If you haven't come to any of our monthly meetings then you have missed out.

Wishing you the best year ever.

Betty Felber
Editor

Calendar of Events

Wednesday, January 24, 2024 - Luncheon Meeting - OSU Tulsa

- Rojelio Medina, Halliburton Wireline and Perforating, "Unconventionals: An overview of techniques using wireline data to solve for water saturation"

Wednesday, February 21, 2024 - SPE Distinguished Lecturer - Luncheon Meeting - OSU Tulsa

- Janelle Lawer, "Is Mercury Contaminating your Natural Gas? Improved Accuracy in Downhole Analysis: A Case Study from Sand Face to Production Stream"

April 23-25, 2024 - SPE Improved Oil Recovery Conference - Tulsa

Short Courses: Monday, April 22nd , Technical Program Sessions: Tuesday, April 23rd - Thursday, April 25th - **www.speior.org**. **REGISTRATION IS NOW OPEN**

All SPEMC luncheons are held at the OSU Tulsa Conference Center unless otherwise noted - See pp 6-7 for more details.

TU SPE Student Spotlight

Tate Brockett is a senior that will graduate from The University of Tulsa in May 2024 with a BS in Petroleum Engineering and has accepted a position with Occidental Petroleum. Tate is from Tulsa, has served the TU Student SPE Chapter as the Lunch-and-Learn Committee Chairman, worked as a Field Intern for Hilcorp as well as interned with Oxy last summer prior to being offered full time employment with them.

Why Did You Want to Become a Petroleum Engineer? "So, as I learned more about it, from the big picture side I think it's really cool how all these different things have to work together to get hydrocarbons out of the ground and, for example gas for your car, there's so many different processes for that chain of events to happen. Also, there are always ways to improve, and make it more efficient, I thought that was really cool. From the more personal mission point side, I think that as you improve people's access to affordable, and cheaper energy their standards of living go up exponentially. Oil, gas, and hydrocarbons are right now the best way to do that. I think that over 80% of the world's energy still uses oil, gas, and coal. That was my personal reason for doing it. A lot of third world countries still have high levels of poverty and low standards of living because they don't have access to electricity."

Favorite Class That You've Taken. "My favorite class was Petroleum Economics with Dr. Pereyra. I really enjoyed that because I liked the economic side of everything. It's all about making money at the end of the day, but it's really applicable outside of my specific degree. Just in life, like basically if you have this much money, and you invest it at this interest rate, how much will it make in ten years? What if you have a recurring payment you have to make? There are all these different equations where you can see how much money you can make in all these different ways. I really enjoyed that class. It was a lot of fun.

Outside Of Class What Do You Do? "Extracurriculars I'm involved in are the S.P.E student chapter, my Fraternity Beta Upsilon Chi. I'm not involved in a lot of other organizations on campus, I'm married and have a 15-month-old so that keeps me pretty busy outside of classes. I enjoy working out and playing pick-up basketball. As far as things for fun, I enjoy doing things with my wife, like playing board games, that's lots of fun. I'll play video games occasionally. Those are the things I do for fun. But working out and sports are probably my favorite things to do."

Favorite Memories from Classes and Internships. "For the classes, I've really enjoyed all the petroleum professors, they've been really awesome. I've really enjoyed Professor Stafford, especially because he brings lots of examples from his time in the field. It makes it a lot more relatable and will help you understand why it's so important

continued on page 8

TU SPE Professional Spotlight

Michael Owen is the Application Engineering Manager at Extract Production located in Broken Arrow, OK. He graduated The University of Tulsa in 2014 and is currently the Golf Committee Chairman for the Mid-continent Section.

What Led You to Become a Petroleum Engineer? I've always been kind of interested in the oil industry. I was a transfer student from Community College to The University of Tulsa, I knew I wanted to go into the engineering field. I didn't know If I wanted to go into mechanical or petroleum. That was until kind visited the campus and saw the facility and it really switched me from mechanical petroleum pretty quick. I never really wanted to go back after that.

Do You Classify as a Production Engineer? I am the manager of our Applications Group, the way I like to explain my job is I'm basically the production engineer for an artificial lift service company. We are given data sheets from customers whether that's a production engineer, or field personnel. We then work up a design to solve their artificial lift needs. One of the unique things is my team utilizes analysis, which is a production engineer's tool to try to optimize their wells production. For some of our customers we are as close to production engineers as they have, some of the Oklahoma companies operate with very limited staff and they only have one or two engineers on staff. So that's kind of where my team comes in and then. We also have a second team which is monitoring and optimization. That group basically watches production trends, and E.S.P trends to troubleshoot problems and try to optimize their production. So, like I said, basically I am a production engineer, but for a service company instead of a producer.

What is Currently Your Favorite Part of Your Job? I think designing E.S.P's is probably the most interesting. Like getting a problem from a customer, and then providing them with the design that they wouldn't have anticipated. I think designing E.S.P's is the most fun.

What Has Been Your Favorite/Most Interesting Project You've Worked On? A pretty interesting project right now is a geothermal project here in Oklahoma. They want to pair a surface pump with a down hole pump, and then take retired oil wells to use them to generate electricity, and heat for rural school districts in Oklahoma. Which is pretty interesting concept considering we're utilizing Oklahoma's current resources, to try to alleviate bills for rural school districts in Oklahoma that can't really afford it.

continued on page 9

SPE Mid-Continent Section

Presentations / Meetings

JANUARY 2024

WEDNESDAY, January 24, 2024 | Luncheon Meeting | 11:20 am -1:00 pm.

Location: OSU Tulsa Conference Center, 700 N. Greenwood, Tulsa, OK 74106. Room: North Hall 150 (An interactive campus map is available at **https://tulsa.okstate.edu/map** showing the location of the conference center and where parking is available.)

Speaker: Rojelio Medina, Halliburton Wireline and Perforating

Topic: "Unconventionals: An overview of techniques using wireline data to solve for water saturation"

Register: To register and pay by credit card, or to make reservations to pay with cash or check at the door,* go to **https://spemc012424.eventbrite.com**. Registration ends Tuesday, January 23rd at 10:00 a.m..

Speaker Bio: Rojelio Medina is a solutions advisor with Halliburton. Rojelio develops integration techniques for formation evaluation and well integrity in conventional and unconventional reservoirs. Rojelio has studied many disciplines of petrophysics and borehole geology while working as a consultant in Halliburton's Geoscience and Production group. Medina received his B.S. degree in Geology from Texas A&M University – Kingsville in 2005, and a member of SPWLA.

FEBRUARY 2024

WEDNESDAY, February 21, 2024 | Luncheon Meeting | 11:20 am -1:00 pm.

Location: OSU Tulsa Conference Center, 700 N. Greenwood, Tulsa, OK 74106. Room: North Hall 150 (An interactive campus map is available at **https://tulsa.okstate.edu/map** showing the location of the conference center and where parking is available.)

Speaker: Janelle Lawer, Woodside Energy | SPE Distinguished Lecturer

Topic: "Is Mercury Contaminating your Natural Gas? Improved Accuracy in Downhole Analysis; A Case Study from SandFace to Production Stream"

Register: To register and pay by credit card, or to make reservations to pay with cash or check at the door,* go to **https://spemc022124.eventbrite.com**. Registration ends Tuesday, February 20th at 10:00 a.m.

Watch for announcements about future meetings and events in this newsletter or by email. 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. In-person luncheon cost is $20.00 for Professionals, Retired, Unemployed, Graduate Students, and free for Undergraduate Students. Payment by credit card is for advanced registrations ONLY, no credit cards will be accepted at the meeting, only check or cash accepted at the door with a reservation.

Description: Natural gas is a critical part of the world's energy supply and plays an important role in the transition to lower carbon energy sources. Industry's ability to process natural gas safely and efficiently will continue to rely on an accurate understanding of feed gas composition and contaminants, particularly in enabling future developments via existing infrastructure.

Mercury is toxic to organisms and highly volatile. Produced from hydrocarbon basins globally, the inaccurate measurement of mercury concentrations can potentially impact aspects of health, process safety, environment, operations, waste disposal, and project decommissioning. Trace mercury concentrations in the hydrocarbon stream can potentially introduce liquid metal embrittlement hazards to industrial equipment, including cryogenic heat exchangers used to refrigerate gas into LNG. Worldwide, significant project cost overruns and processing incidents have resulted from uncertainty around mercury concentrations in hydrocarbon streams.

Successful mercury management ideally begins early in a project's lifecycle with development decisions informed by accurate measurement of mercury concentrations from reservoirs. Historically, this has been problematic as mercury contamination and scavenging often results in large range of uncertainty in sampled gas.

The results and recommendations from a multi-company collaborative study to reduce mercury uncertainty in gas will be shared with industry. New downhole sampling and analysis techniques will be highlighted, along with insights from a case study of the Julimar Field in Western Australia. The recommendations, procedures and operational best practices discussed will be applicable across the industry, and beneficial to any party considering the impact of mercury in the development and processing of natural gas resources.

Speaker Bio: Janelle Lawer is an energy industry professional with 20 years working with supermajor and mid- size exploration and production companies in Australia and the USA. She has held roles across the spectrum of geoscience, petrophysics, reservoir engineering and technical asset management, with a focus on delivering integrated technical solutions.

Janelle holds a Bachelor of Science (Hons I) from the University of Queensland, Australia. She is an active member of the Society of Petroleum Engineers (SPE) and will serve as a SPE Distinguished Lecturer in 2023-2024.

Student Spotlight continued from page 4

to learn what you're learning. And then the most impactful memory was my first internship because I hadn't yet seen any of the equipment before: I got to go onto a drilling barge, I got to go into the driller's cabin, I got to drill the well for a couple of minutes and see how everything was going on, so that was probably my favorite memory from my first internship.

Favorite Internship Experience So Far. My internships have definitely been the most valuable thing for me as far as learning, getting that hands-on experience. It's been really fun to translate something you've seen in a book, or have been studying, and see it in the real world. After my freshman year, I interned with Hilcorp, it was a field internship and I got to see all kinds of stuff in the field, like where the fluid went and seeing the separation process, it was really cool seeing how everything fits together. Then my internship after that was with Oxy, in production engineering, I got to do a bunch of sucker rod pump designs and optimization. It was cool seeing how you can make everything more efficient, and ways to save money, also really just seeing ways to apply concepts in internships.

Where Did Your Internships Take You? "With Hilcorp I was out of Port Sulfur, it was technically offshore, but it was 6-12 feet of water. We had to take a boat out there and it was about an hour south of New Orleans. Then with Oxy, I was out of the Houston office after my sophomore year, but the assets I was working on were in the Midland Basin. This last summer I worked for Oxy again, this time in their Woodlands office. It was a suburb of Houston, and that was all working on Gulf of Mexico stuff."

What do Consider to Be an Attractive Workplace Environment? "I've really enjoyed working at Oxy because you feel like you're a part of the team. Even the really high upper management people are happy to take time to talk to you! Especially as an intern I've emailed many different people and tried to meet with them, just so that I can learn about things. You feel like you're a part of the team, you're working together, and you're not necessarily trying to compete with the other people in your same company. I've really enjoyed that sort of workplace culture where you're trying to help each other out.

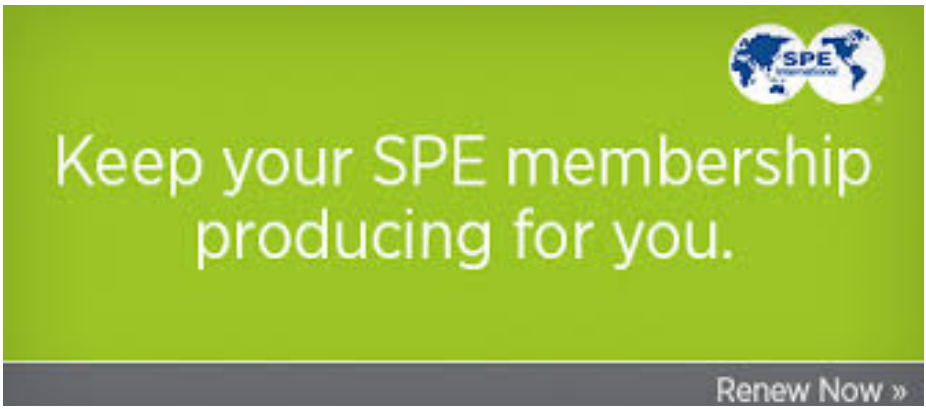
Post Graduation Aspirations. "I'm going to start full-time with Oxy, as part of their early engineering development program, in July of 2024. My location is not 100% confirmed but I'm pretty sure I'll be working 2 weeks on 2 weeks off, in the Gulf of Mexico as an operations engineer. I will probably be doing that for about a year to 18 months. I'll then rotate somewhere else and do 12-18 months there, then I'll rotate in the office as a production engineer or some sort of office engineer. In the long run, I'd like to do management of some kind. As far as production, I think production or reservoir is something I'd want to do because I've gotten some experience in production, and I really enjoyed that, but my answer will probably change after I've done a couple of rotations. But that's the goal, at least for right now.

Professional Spotlight continued from page 5

Do You Plan on Staying as a Production Engineer?
Yes, I think that's where my niche is. I have worked as a Drilling /completions consultant in my past and I really prefer production. I wanted to become a drilling engineer really bad when I first came out of school. Then once I did it for a little bit, I realized that it's not for me. Production engineering is really interesting, I think it's definitely the one where you solve problems for now, and in the future. A production engineer owns that well for like 50 years, meaning the things you do have to be sustainable for a long period of time.

Any Advice for Students Pursuing Petroleum Engineering? Study and actually learn the materials, you will use it in the future. As much as you think you think you won't. Do not undervalue your education at the University of Tulsa, in my experience is given top notch education, so the more you can retain and keep through your time at the University you're going to benefit.

I also went to this symposium and I knew half the people there. The oil industry is very tight and so you always want to give yourself a good reputation. You definitely do not want to have a bad reputation. Next thing you know when you need a job, you might have a hard time finding one. Definitely focus and retain what you're learning at school, do not just not just go after the grades, actually learn the concepts that they're trying to teach you. Make sure that you uphold a social aspect to, where you're building relationships with people. Every person you're going to school with will see you in your future.



FIND US ON OUR SOCIAL MEDIA PAGES!

Stay up to date on all future events, news, and announcements!
(Scan QR Codes with Phone Camera)

FACEBOOK
www.facebook.com/SPEMidCon

TWITTER
@SPEMidCon

LINKEDIN
www.linkedin.com/company/spemidcon

"You can't go back and change the beginning, but you can change the ending"

— C. S. Lewis, Author

PetroWiki

PetroWiki is a free resource from SPE to answer many basic petroleum engineering and operational questions. SPE professional members can contribute their expertise through updating or adding to PetroWiki content.

http://petrowiki.org/PetroWiki

SPE Monthly Bulletin No. 489
Issue Date: January 12, 2024
SPE Mid-Continent Section
P.O. Box 575
Tulsa, OK 74101-0575