



# spwla today

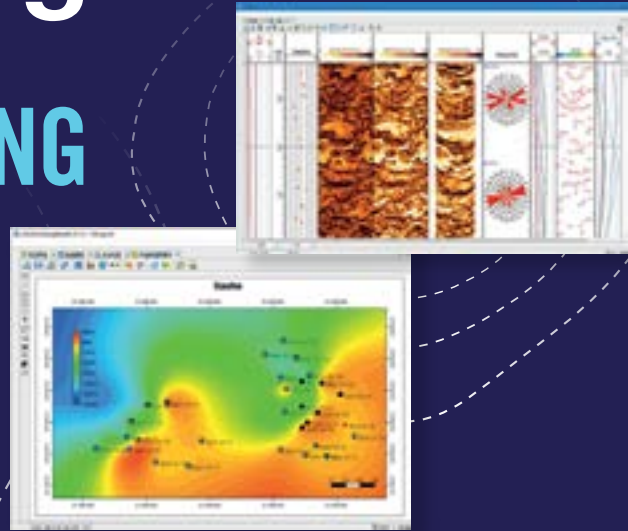


NEWSLETTER



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# CNPC

# *Petrophysics Journal*

## CALL FOR PAPERS

- PAPERS ACCEPTED FOR REVIEW THROUGHOUT THE YEAR
- SPWLA CONFERENCE PROCEEDINGS ARE ELIGIBLE FOR SUBMISSION
- PUBLISHED PAPERS AVAILABLE ON SPWLA AND ONEPETRO DIGITAL LIBRARIES



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**CALENDAR OF EVENTS**

**October 30–November 2, 2023**

*International Geomechanics Symposium (IGS)*  
The Role of Geomechanics for Efficient and Sustainable Energy Supply  
Al Khobar, Saudi Arabia  
<https://www.igsevent.org/>

**November 8–9, 2023**

*SPWLA 2023 Fall Topical Conference*  
Hosted by Acoustics SIG and Borehole Imaging SIG  
See and Hear the Formation:  
Exploring the Synergies Between Borehole Imaging and Borehole Acoustics  
Houston, Texas, USA  
<https://www.afes.org.uk/spwla-2023-fall-topical-conference/>

**May 18–22, 2024**

*SPWLA 65th Annual Symposium*  
Sheraton Grand Rio Hotel & Resort  
Rio de Janeiro, Brazil  
[www.spwla.org](http://www.spwla.org)

**About the Cover**

SPWLA is a global organization with chapters and special interest groups all over the world. To learn more about SPWLA and how you can connect with a chapter near you, visit [spwla.org](http://spwla.org).

**Notice: Articles published in *SPWLA Today* are not subject to formal peer review but are subject to editorial review and are verified for technical consistency and relevance.**

## From the President



**Jennifer Market**  
SPWLA President  
2023–2024

Hello, and welcome to the November newsletter. It is hard to believe we are approaching the end of 2023 already. A wealth of society activities are underway between now and the end of the year.

Everyone is excited about the 2024 symposium in Rio de Janeiro—we had over 400 abstract submissions! While I don't want to steal the thunder of the technology team who will share the details in their article, I can say that we are excited about the number of good-quality submissions we've received from around the world, and the team is well into the review and selection process.



**SPWLA**  
BRAZIL CHAPTER

<https://www.spwlaworld.org/welcome-to-the-65th-annual-symposium/>

In the last newsletter, I mentioned how we are working to make the society ever more inclusive globally. For this edition, I would like to focus on some of the activities in our Asia Pacific region.

In September, I was privileged to attend two superior conferences in Chiba, Japan.

The first was the Horizontal and High Angle Special Interest Group (HAHZ SIG) meeting, a two-day live event held September 11–12, with approximately 60 people participating from not only Asia Pacific but from around the world. There were more than 20 intriguing talks on the theme of “Thinking Sideways to the Far East – Blending in the Near-Field and Far-Field Reservoir Characterization,” which engendered lively discussions about best practices, new techniques, and challenges still awaiting solutions. It was also a great chance to reconnect with friends.



## From the President



The second event was the 28th Japan Formation Evaluation Society (JFES) Symposium held in Chiba on September 13–14. It was a hybrid event attended by approximately 100 participants live and dozens more online. The talks were a mix of ~30 invited talks and selected abstracts presented in person and online. The theme was CCS/CCUS, with many interesting presentations and discussions from both Japan and around the world. The experience shared by the Japanese teams and those working in the USA, Norway, and Iceland sparked discussions on best practices and how techniques employed in other locations could be applied locally.

JFES holds an annual symposium (usually live) as well as quarterly technical meetings (usually online) with a long reputation for high-quality speakers and discussions. I encourage everyone to attend. The annual symposium is always in English, and the quarterly meetings often are, too (the invitation will specify), so they appeal to a broad audience.



The JFES board meeting.

We'd like to thank Japan Oil, Gas and Metals National Corporation – Technology & Research Centre (JOGMEC-TRC), of Chiba, Japan, for hosting both the JFES Symposium and the HAHZ SIG meeting. The facilities were first class, and we thank JOGMEC for their continued support of the society.



We'd also like to thank the organizing committees for the HAHZ and JFES meetings for organizing excellent events, and I would like to add my personal thanks for the warm welcome received.



I was delighted to attend the Batangas State University Student Chapter General Assembly on September 27. This is one of our active student chapters holding both technical meetings and student events to connect the petrophysics community. There are many budding young people studying fields related to petrophysics at Batangas State University, and we look forward to working with them for many years to come. We are also in the process of launching a professional chapter in the Philippines this year, which will provide a professional continuation for this wonderful group of students.

In September, the East China Chapter also held its annual symposia, the 14th UPC International Symposia on New Logging Techniques, in Qingdao. I was truly disappointed to be unable to attend (conflicting dates with the Japanese meetings), but the SPWLA International board was well represented by Harry Xie, VP Technology-Elect.



We are pleased to announce that we will host the Asia-Pacific Regional Conference in Bangkok, Thailand, on October 6–9, 2024. Abstract submissions are open, with a deadline of March 29, 2024. We are excited to have this long-awaited regional conference and invite petrophysicists from around the world to plan to attend.

Together with AAPG, EAGE, and SPE, SPWLA is an endorsing society of the 2023 International Geomechanics Symposium (IGS), to be held in Al Khobar, Saudi Arabia, on October 30–November 2. I'll be representing the SPWLA and presenting. Look out for the detailed report in the next newsletter! The president's column in the next newsletter will be focused on our Middle East chapters and activities.

Thank you again to the SPWLA family for supporting us. Remember that our volunteers make the society great, and volunteering is a great way to learn and expand leadership capabilities. Opportunities are available on the SPWLA website (see the "Volunteer Opportunities" tab) or contact [president@spwla.org](mailto:president@spwla.org) for help connecting to the right place to participate.

Kind regards,  
President Jennifer Market  
+61 455 148 188  
[president@spwla.org](mailto:president@spwla.org)



## From the Editor



Stephanie Ellen Perry  
2022–2023  
Vice President Publications

Happy fall, everyone. The issue is filled with great information and updates from all of the SPWLA leaders. Thanks to everyone who contributes to the health and growth of the organization. Be sure to check out the chapter updates, as well as the upcoming annual conference status and ongoing efforts.

Sincere regards,

Stephanie Perry  
VP Publications

PAID ADVERTISEMENT

## Efficient Horizontal Well Logging Solution

<p><b>HIGH</b></p> <p>Temp, Pressure resistance Efficiency Strength Reliability</p>	<p><b>500°F</b></p>	<p><b>29,878 psi</b></p>	<p><b>φ85</b></p>	<p><b>20T Strength</b></p>
<p><b>11+</b></p> <p>Flexible combination of logging tools</p>				
<p><b>2</b></p> <p>Working Mode: Wireline &amp; Storage</p>				
<p><b>500+</b></p> <p>Runs Globally, Expertise in logging service</p>				



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## Up Next



**Iulian Hulea**  
**SPWLA President-Elect**  
**2023–2024**

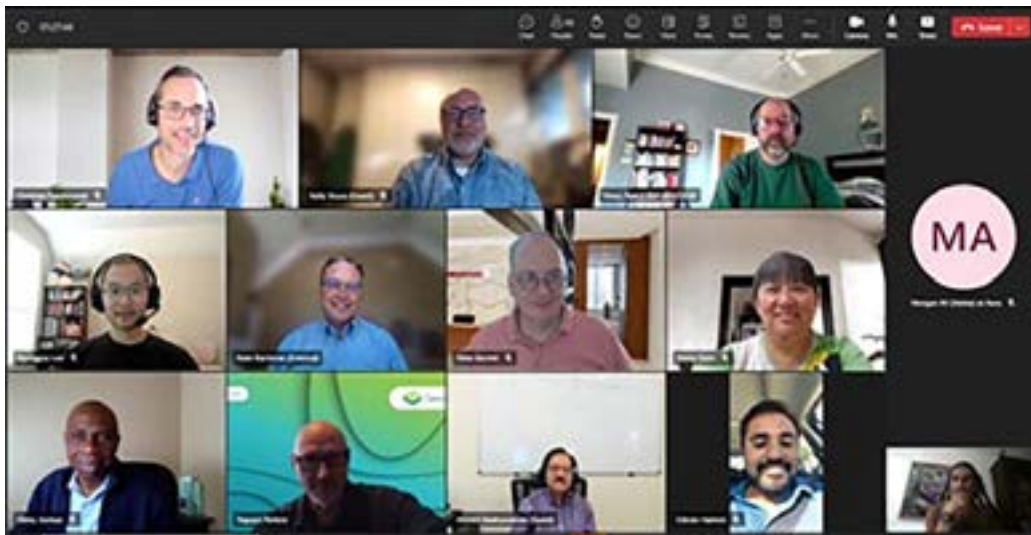
Dear Colleagues,

Greetings from your President-Elect!

Following the Lake Conroe symposium, my duties as VP Technology have been all closed out, and the planning of next year's symposium in Rio is in the capable hands of our esteemed colleagues Bob Gales and Harry Xie. One of the things that I would still like to see preserved from my time as VP Technology (continuing what was started with Carlos Torres-Verdín) is the transparent metric used in evaluating the abstracts and presentations. Talking about continuity in our organization, one of the things that I must conclude soon is a proposal for the duties and tasks split between the VP Technology and VP Technology-Elect. If any reader has some thoughts on this issue, please feel free to contact me as we are in the process of shaping that.

The other task that falls under the President-Elect's responsibilities concerns the Special Interest Groups (SIG) interaction. As you might be aware, in parallel to the chapters, the SPWLA hosts various SIGs that promote a dip dive into various topics that petrophysics revolves around, from machine learning to nuclear! Just like the chapters, they organize periodic meetings and topical conferences.

In my function as President-Elect, I would like to strengthen communication and sharing of best practices between all those SIGs. One way to promote that was to organize an online event with the SIGs' officers. The event was a success, well attended, and resulted in a few actions for both the SIGs' representatives (use the SPWLA calendar [1] to promote SIG events, find and review their own bylaws, create a promotion video for each SIG) and myself (organize the next event in December focused on financial aspects, invite Sharon Johnson for that). Thank you again to those who participated. If I missed anyone, please do not hesitate to contact me ASAP! Here's a (limited) sample of those participating in the call:



The last thing I would like to mention is that although we have Dubai lined up as our 2025 symposium host, we are looking for candidates concerning the 2026 symposium. Please get in touch with me/Jennifer if you are in doubt or looking for extra motivation to submit a bid!

Again, it is an honor and pleasure to serve the SPWLA in this volunteering role!

Iulian Hulea  
President-Elect 2023–2024

[1] [CalendarRoster - Event Calendar \(spwla.org\)](#)



**Robert H. (Bob) Gales**  
2023–2024 VP Technology



**Harry Xie**  
2023–2024 Vice President  
Technology-Elect

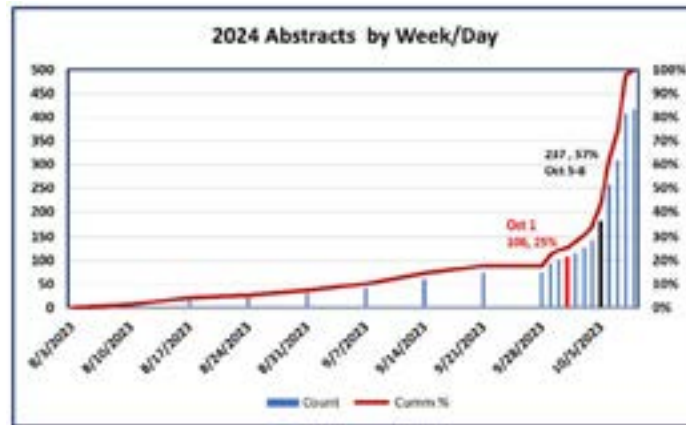
Dear Colleagues,

By the time you read this, Abstract Submission is closed, and the SPWLA Technical Committee will be busy reviewing and rating abstracts to select those that will present in Rio on May 18–24, 2024.

We are running on schedule to stay 1 month ahead on reviews and notice of acceptance to align with the 2024 SPWLA Symposium, which has been moved up by 1 month. Now, the challenges begin as the Technical Committee will start reviewing their abstract packages in mid-October. This is always a difficult task because of the number of quality papers submitted. We have a target completion of November 10 and notice to authors by December 1, 2023, if an oral or poster presentation.

I would like to commend our SPWLA colleagues. We again topped 300 abstracts, ending with **417**, even with the aggressive schedule. We did have a few questions on submission challenges, but overall, it went fairly smoothly. A software problem said “No attachment” after the figures were attached, but by logging out and back in to edit, they were visible. Others tried to add “special characters” in their titles. We apologize that the Second Category choice was above the Category selection. The vendor will have this fixed for future years. The goal of this was to make it easier for authors to select section options. We welcome suggestions as we continue to tune the process.

For those interested, here is a typical abstract submittal timeline. Almost 60% were in by the first week of October.



Each Technical Committee member will be assigned about 80 abstracts to review and rate. As expected, the technical content accounts for the majority of the evaluation. The structure of the abstract, along with a clear captioned figure to support the abstract, account for a huge component. Commercialism is an on or off. With many abstracts near the middle, small changes can make a difference.

Core technical contribution	30%	Technical 65%
Relevance & significance	20%	
Conclusion & key learnings	15%	
Structure & organization	15%	Writing 25%
Illustration & clear communication	10%	
Commercialism	10%	
<b>Total=</b>	<b>100%</b>	

I would also like to thank our Technical Committee for their continued engagement. As previously with the comprehensive list of Special Organized Sessions, they have contributed to a broad range of workshops for consideration. We ended up with 14 suggestions. This will be narrowed to eight for the Saturday and Sunday prior to the Symposium based on the Technical Committee and Brazil Technical Committee feedback. The list will be finalized in November and updated in the Symposium news.

Once again, thank you for your enthusiastic support. We look forward to seeing you in Rio.

Yours sincerely,

Robert H. (Bob) Gales  
SPWLA VP Technology 2023–2024  
[VP-Technology@spwla.org](mailto:VP-Technology@spwla.org)

Harry Xie  
SPWLA VP Technology-Elect 2023–2024  
[VP-Technology-Elect@spwla.org](mailto:VP-Technology-Elect@spwla.org)



**Jing Li**  
**2023–2025 VP Finance,**  
**Secretary, and**  
**Administration**

Dear SPWLA Colleagues,

I want to share the finance overview. The financial status of the SPWLA continues to have steady growth and remains healthy; the total assets in October 2023 increased by 2.42% compared to October 2022.

Despite the inflation, we completed the 2023–2024 budget with 8.6% less than last year by merging duplicated expenses and cutting down on some proposed spending. I will continue to promote efficiency in spending and ensure all expenses are to maximize the benefit for individual members and the broader community.

Please continue supporting our workshops, topical conferences, annual symposiums, and other SPWLA initiatives. If you have ideas for new sources of revenue for the society, please reach out and share your thoughts.

Thank you for your ongoing support.

Sincerely,

Jing Li

2023–2025 VP Finance, Secretary, and Administration

## Learning Opportunities



**Kelly Skuce**  
2022–2024 Vice President  
Education

**Hello SPWLA Colleagues**, the extended summer up here in Calgary has turned to cool mornings and sunny afternoons with a lot of yard cleanup to get ready for winter. The same goes for in the office. Everyone is getting back to work downtown, and my project workload is going through the roof. Life of a consultant, I guess! The SPWLA is also getting back in the swing of things as the abstract submission deadline for Rio 2024 has passed, and the hard work of choosing papers has started. The Distinguished Speaker program is getting back up and running to highlight the selected papers from the 2023 Symposium. Our first will be on October 25 (which will have passed by the time this is in print), but hopefully, a full schedule will be available soon once the speakers have chosen some dates. I would also like to mention our new Regional Distinguished Speakers chosen by the Regional Directors using input from their respective chapters and regional conferences. We currently have three but expect more from other regions.

Regional Speaker	Company	Title
<b>Mohammed Al-Hamad</b> (Middle East/Africa)	<b>SLB</b>	<b>ACCURATE INTERFACIAL TENSIONS (IFT) OF RESERVOIR FLUIDS AT RESERVOIR CONDITIONS</b>
<b>Jiajie Wang</b> (Asia-Pacific)	<b>Graduate School of Environmental Studies, Tohoku University</b>	<b>DISSOLUTION BEHAVIORS OF NATURALLY ALTERED BASALTS IN A BRINE AT 100°C FOR IN-SITU CO<sub>2</sub> MINERALIZATION</b>
<b>Philip Tracadás</b> (North America)	<b>Halliburton</b>	<b>USING THE "ENTIRE" ACOUSTIC WAVEFORM TO QUANTIFY FORMATION PROPERTIES BEYOND VELOCITY</b>

Each speaker will be focused on a specific SPWLA region (hence Regional Distinguished Speaker). However, they are available virtually as well for your chapter meetings if time differences and schedules permit. Here is a picture of some of us discussing the DS program.



All SPWLA professional and student chapters will be provided with a list of their contact info to be able to schedule a webinar or in-person meeting presentation.

Keep on learning,  
Kelly Skuce  
2022–2024 VP Education,

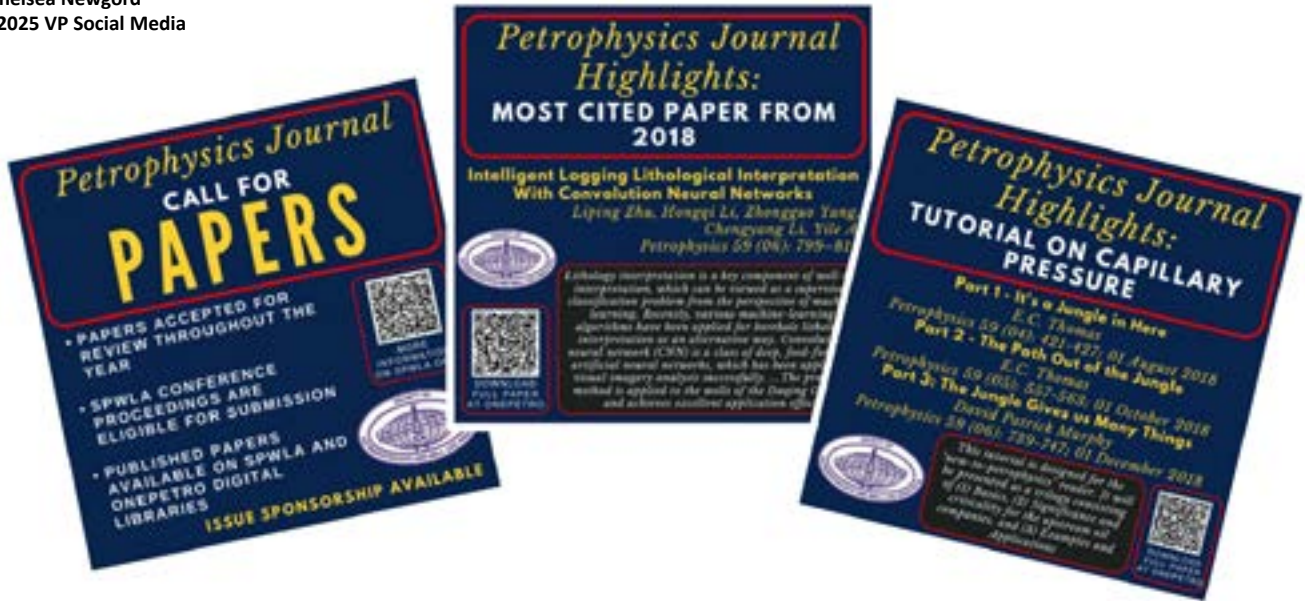


Chelsea Newgord  
2023–2025 VP Social Media

Hello SPWLA Colleagues,

It has been a busy fall with calls for abstracts and active local chapters and Special Interest Group (SIG) events! To cover this information, there has been an average of one social media post per week.

We have started sharing a new series of posts on the *Petrophysics* journal. These are posted once a month and have/will highlight different papers that have been published, such as tutorials, most cited papers, and key papers from a topic.



Like and comment!



~ Chelsea Newgord  
VP Social Media 2023–2025  
[VP-SocialMedia@spwla.org](mailto:VP-SocialMedia@spwla.org)



Javier Miranda  
2022–2024 North America 1  
Regional Director

We continue our work preparing for the 2024 Annual Symposium at the Sheraton Grand Rio Hotel & Resort. As a small society, our volunteers wear many hats, and your board is no different, with most of us involved in our positions and also local chapters, the technology committee, special interest groups (SIGs), etc. With limited economic and manpower resources, this is the only way to achieve what we do. Check out updates for SPWLA Rio 2024, and stay tuned for more announcements related to next year's symposium at the following link:

### [Welcome to the 65<sup>th</sup> Annual Symposium – SPWLA World](#)

**Let's keep the energy, planning, and work to make Rio 2024 the best SPWLA International Annual Symposium we have ever seen!** The call for abstracts is now closed, which means all technology committee members' work has started. Stay assured we will prepare an excellent technical program under Bob and Harry's leadership to share outstanding material in the best venue to share petrophysics-related work!

The Houston Chapter continues its activities, being the most active chapter in the region by far and perhaps one of the most active chapters in the world as they used to be. Now that COVID is in the rear-view mirror, we must focus on the windshield and continue working to bring excellent technical and networking activities to our members as the Houston Chapter has been doing under Bernd's, Neal's, Amer's, and Artur's leadership. In fact, several technical seminars are happening in the West, North, and Downtown sections, as well as networking activities the last Thursday of every month at the same location and time (5 to 8 pm at Cedar Creek Bar & Grill, 1034 West 20th Street, 77008). The most recent one was on Thursday, October 26, and the next one will be on Thursday, November 30. Feel free to attend if you are in town. You will regret not attending before! The entire SPWLA community is invited; there is no need to RSVP, so join us even if you are in town for a visit. Come at your leisure; no payment is required. Come and mingle with fellow petrophysics enthusiasts. These social events have become a tradition in Houston and are well attended by petrophysicists, geologists, geophysicists, engineers, and managers. You can also expect to see current and past SPWLA international board members and recognized names in our industry, including SPWLA Distinguished Speakers! My first picture below shows some of the fun we had at the most recent event. I also want to mention that this year, the Houston Chapter will host its renowned **Technology Show on Friday, December 8**, where many companies have already secured a spot. Take advantage of the early bird registration for companies and members, and join us there! The link for registration is below:

### [Houston SPWLA Chapter Society of Petrophysicists & Well Log Analysts - \(spwla-houston.org\)](#)

Speaking of wearing many hats, I recently had the opportunity to share a good conversation in Bogota, Colombia, with members of the SPWLA local chapter there. I went there representing the Hydrocarbon Resources SIG, where I am currently working as an Advisor and Past VP. I want to acknowledge my employer, **DeGolyer and MacNaughton**, for sponsoring this activity, as well as **Ecopetrol** and **Halliburton**. I also want to thank all the **SPWLA Colombia Chapter** team members for the warm welcome and attention, especially their President, **Maria Florencia Segovia**, who did an extraordinary job of coordinating all the organization and helping me with the logistics and invitation to local SPWLA members. We also had **Nelson Suarez**, Latin America RD, in attendance, always supporting the region and visiting local chapters. The topic presented was **"The Importance of Petrophysics in Resources and Reserves Estimates."** The pictures below show some of the experience and the good technical and networking time we enjoyed. I encourage you to attend your local chapter activities. They are a great opportunity to learn something new, polish your technical and networking skills, meet new colleagues, and see long-time acquaintances.

I also want to share with my fellow members my recent participation in the main geology/geophysics world conference of the year, also known as "IMAGE," hosted in Houston, Texas. It was well attended, as usual, with several business opportunities for companies and regulatory agencies, governments, and more. As usual, it is always advisable to learn what others are doing and how that can help SPWLA. The last two pictures show some of my experiences there. Definitely visiting the ANCAP-Uruguay booth and many others in that pavilion encouraged me about the future of this business. However, the energy transition was also well covered in several technical sections and activities.



## Regional Understandings—North America 1

Best wishes to all my fellow SPWLA members, especially those in my North America region, in the final months of this year. Let's stay strong, continue being involved in your local and international activities, professional, and student chapters, **volunteer, and join SPWLA initiatives if you have not done so, and let's bring our society to the next level!**

Feel free to reach me at my official email address below for any recommendations, ideas, questions, etc. I am working with others on additional initiatives for our members—more details to be shared in upcoming columns. I also encourage local professional and student chapters to reach out if they need my support or to advertise anything happening in their local professional and student chapters!

Javier Miranda  
2023–2024 North America Region 1 Regional Director  
[Director-NA1@spwla.org](mailto:Director-NA1@spwla.org)



Having some fun at the SPWLA Houston Chapter networking event hosted on the last Thursday of the month.



Part of the SPWLA Colombia Chapter members attending the workshop "The Importance of Petrophysics in Resources and Reserves Estimates" on October 5, 2023.



Here with SPWLA Colombia Chapter board officers, including their President Maria Florencia Segovia (third from left to right) and SPWLA Latin America Director Nelson Suarez (second from left to right).



We enjoyed a great conversation about the importance of petrophysics in resources and reserves estimation with SPWLA members from operating and service companies, academia, and representatives from the Colombian Ministry of Mines and Energy.

## Regional Understandings—North America 1



Outside our workshop meeting room at one of Ecopetrol's offices in Bogota, Colombia.



The learning and networking experience did not stop in the classroom, with some of us taking the conversation to the next level over some pizza and drinks.



Riding the "GeoRex," one of the main attractions at the conference.



Having a great conversation with my colleagues from ANCAP-Uruguay about potential opportunities there.



**Mathias Horstmann**  
2023–2025 Europe  
Regional Director

### **Dear SPWLA Community,**

Happy fall, y'all! It's getting chilly outside, but activities are heating up in Europe's chapters! I hope you enjoyed one of the many happenings around Europe since activity is peaking after the summer break.

Recent events included the quarterly meeting of the Dutch Petrophysical Society (DPS) with a new energy session providing an overview and status update of the TU Delft Geothermal Research Well. Then, DPS will maintain its stream related to decarbonization and addressing the challenges of global climate change with a session on CCUS in December. Updates will be given at [dps-nl.org](https://dps-nl.org).

In early September, the London Petrophysical Society (LPS) also hosted a very future-oriented full day on "Petrophysics for the Energy Transition." It was a fantastic lineup in a hybrid in-person/online event in London's iconic Burlington House of the Geological Society. There were great talks on petrophysical considerations and CO<sub>2</sub> capture, storage, and monitoring challenges. A session on the geology of subsurface fractures bridged CCS to geothermal exploration, as its relevance is valid for both applications. This quality seminar concluded with cases of subsurface evaluation for

nuclear waste containment. For the last event of the year, LPS will host on December 7 another One-Day Seminar on Petrophysics 101. More information can be found at [lps.org.uk](https://lps.org.uk).

Also, the Norwegian Formation Evaluation Society (NFES) continued their monthly technical meetings with talks on methods to identify vertical reservoir pressure communication in September and updates on NMR fluid substitution during October. NFES, as the Norwegian SPWLA chapter, has its upcoming One-Day Seminar 2023 in November. Stay tuned for the detailed agenda at [nfes.org](https://nfes.org).

The Aberdeen Formation Evaluation Society (AFES) was also active in the fall term, with Dr. Rodney Garrard (NAGRA) touring the UK. Before heading to London in September, he presented his Distinguished Talk on "Subsurface Evaluation for Nuclear Waste Storage." In conjunction with the Annual General Meeting of our Scottish chapter, another in-person monthly talk took place at the beginning of November, hosting Distinguished Speaker Soji Adedamola with his case study on an "Integrated Approach to Leak Detection Using High-Definition Electromagnetic Technology, Production Logging, and Ultrasonic Logs." Details for these and upcoming events may be found at [afes.org.uk](https://afes.org.uk).

After the participation of the SPWLA France Chapter in a joint event with EAGE and SPE France about geothermal energies with Distinguished Speaker Chiaki Morelli presenting, they continued their cycle on dynamic petrophysics from core to log in September with a remote presentation by Distinguished Speaker Artur Posenato Garcia on a "New Workflow for Assessment of Fluid Components and Pore Volumes From 2D NMR Measurements in Formations With Complex Mineralogy and Pore Structure" and an on-site event visiting the IFP laboratories (CAL-X, NMR, Coreflood, and Micromodels). For the rest of the year, they will explore a theme called "O&G Petrophysics and Neighborhood" techniques of carbon capture and storage evaluation in November and nuclear measurements from tool vendors in the mining, nuclear, and O&G industries in December. More information and updates can be found at [spwla-france.fr](https://spwla-france.fr).

### **European Chapter President Meeting**

Looking ahead in general, after a catch-up call with all the European chapter presidents, we aligned on important topics closing out the year and have begun focusing on 2024. I have become a source of support and a link between the chapters and the Board of Directors, and I will try to visit the European chapters, preferably during their larger events or full-day seminars. Active advocacy for SPWLA through such direct representation engagements, together with available digital tools, hopefully, increases awareness and influences the local communities about SPWLA and its chapters in Europe.

We agreed to build a list of relevant academia and research institutes in Europe to counter the trend of apparently less academic teaching related to formation evaluation and subsurface geoscience. We aim to install university agents to engage with students and young professionals regularly to encourage participation in the ISPC'24 and support the possible foundation of (student) chapters. Connecting with new talents assures petrophysics stays important, not only to classic O&G, but also increases its visibility and contributions in our evolving energy framework.

## Regional Understandings–Europe

We also discussed jointly organized regional (topical) conferences – how to scale events and possibly team up with other organizations to develop first-class forums for the latest knowledge exchange in Europe in 2024/25 and beyond.

I was really pleased to hear participation is at least steady or increasing during all events around Europe, emphasizing how important our community is, be it virtual or in person. So, I'd like to thank all the European chapter committees and members for their commitment during 2023 and in 2024 to come!

Keep well and stay tuned – all the best,  
Mathias

Mathias Horstmann  
2023–2025 Europe Regional Director  
[Director-Europe@spwla.org](mailto:Director-Europe@spwla.org)

## Regional Understandings—Middle East/Africa



**Jennifer Duarte**  
2022–2024  
Middle East/Africa  
Regional Director

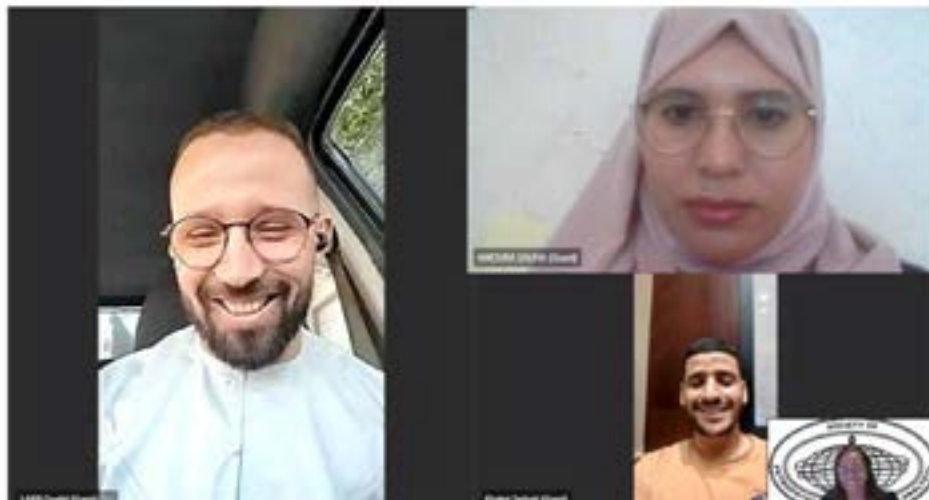
Dear SPWLA Members,

I'm pleased to share some exciting news in this month's column. Our society is expanding in our region by opening a new local chapter – **SPWLA Algeria**. I would like to take this opportunity to thank the group of volunteers under the leadership of Khaled Sedrati (SPWLA Algeria President) for agreeing to oversee the new chapter's operations in Algeria. This has only been made possible by the collective dedication of these volunteers. After submitting their chapter bylaws, the board voted in favor of this expansion. This expansion means that more of our region's residents will have the opportunity to be a part of our SPWLA community.

However, opening a new chapter is not just about increasing membership numbers. It's about diversity, inclusivity, and welcoming individuals from all backgrounds and experiences. I attended its first chapter meeting online to discuss with the new board the chapter's objectives for the rest of this year and next year. Below is a picture of the SPWLA Algeria Board: **Khaled Serrati** (President), **Saliha Amoura** (VP), and **Oualid Laieb** (Secretary and Treasurer).

In the upcoming months, you can expect to see more information from the new chapter about the planning of its activities, including knowledge-sharing technical sessions. If you are in Algeria and would like to become part of the SPWLA Algeria Chapter, please reach out.

Lastly, the year is almost over, and I want to finish my column by thanking all the local chapters in the Middle East and Africa for their great contribution to our society.



SPWLA Algeria Board meeting (from left to right): Oualid Laieb, Saliha Amoura, Khaled Serrati, and Jennifer Duarte.



In-person meeting (from left to right): Khaled Serrati and Jennifer Duarte.

Until next time,

Best Regards,  
Jennifer Duarte  
SPWLA Middle East and Africa 2022–2024  
Director\_me@spwla.org

November 2023

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In this edition:

SPWLA Paper of  
the Quarter Series

## SPWLA Paper of the Quarter Series

The SPWLA Paper of the Quarter Series highlights relevant and impactful papers published by the SPWLA. We encourage readers to nominate any papers they have enjoyed and would like to see summarized in the next issue. Nominations should be sent to [SPWLAYP@spwla.org](mailto:SPWLAYP@spwla.org).

### Title

Probe Screening Techniques for Rapid, High-Resolution Core Analysis and Their Potential Usefulness for Energy Transition Applications

### Authors

Emmanuel Okwoli and David K. Potter

### Summary

The paper describes probe core analysis techniques and their ability to gather high-resolution, rapid, and cost-effective reservoir characterization data. The paper specifically talks about probe permeability, acoustics, luminance, and magnetics.

The authors describe setups of various probe methods. For example, Fig. 1a below shows the setup of a probe permeameter. It is comprised of an unsteady-state pressure decay permeameter, where the probe tip is sealed onto the core sample (in this case, the surface of the slabbed core). At points along the core surface, the valve is opened, and the pressure decay of nitrogen is recorded, which is then converted to formation permeability. The permeameter delivers the permeability value of highly permeable rocks in a few seconds, while the value of low-permeability rocks may take several minutes since the nitrogen gas will take longer to penetrate into the sample.

Figure 1b shows the probe luminance values from linear X-ray images on a core slab from a North Sea well. The luminance values represent the penetrability of the rock to X-rays with higher luminance corresponding to lower density and vice versa. The luminance values in the figure correlates reasonably well to wireline bulk density. The further advantage of this probe method is that it can make high-resolution continuous measurements and therefore can identify and quantify small-scale features like the barite baffles present in this core sample.

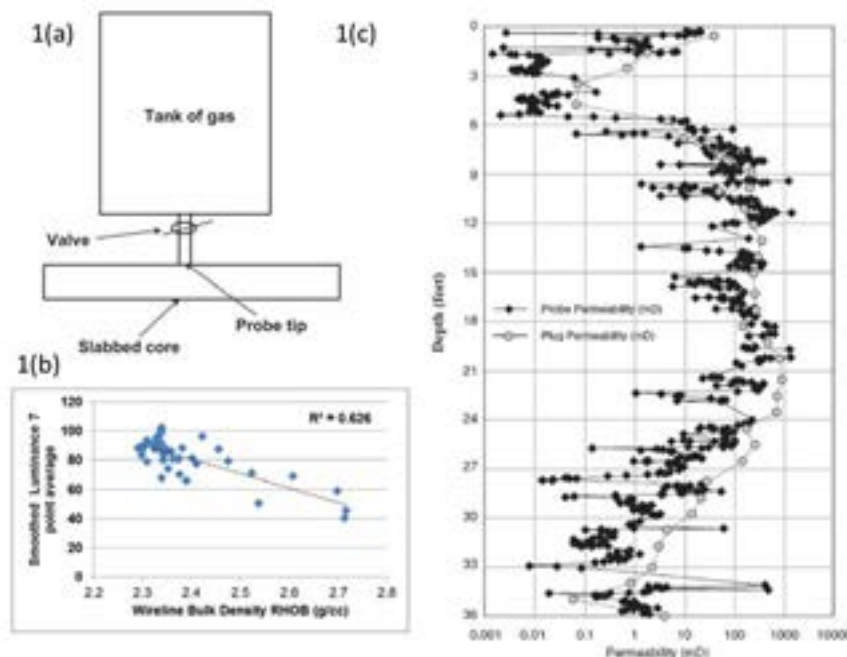


Figure 1c shows another application where probe permeability measurements are compared to the core plugs' air permeability. A very similar trend and strong correlation is observed between the two. A key observation is that the core plug values tend to be higher on average than the probe values at corresponding depths. The authors believe this is because the core plugs were cleaned by hot Soxhlet cleaning, and some of the permeability-controlling clays are likely to have been washed out of the samples prior to the permeability measurements. This would have led to higher permeability values than for the uncleaned slabbed core with the original clay content.

To conclude, probe measurement techniques can provide an alternate and complementary reservoir characterization tool, which does not need core plugs (nondestructive) and at the same time provides reliable, high-resolution, relatively cheap, and fast data.

This article summarized: Okwoli, E., and Potter, D., 2023, Probe Screening Techniques for Rapid, High-Resolution Core Analysis and Their Potential Usefulness for Energy Transition Applications, *Petrophysics*, **64**(5), 640–655. DOI: 10.30632/PJV64N5-2023a3. It can be found on [spwla.org](http://spwla.org) and [onepetro.org](http://onepetro.org).

*This article was discovered in the archives of Philippe Theys, a prolific author and SPWLA member who wrote the Le Log column for Petrophysics in the 1990s. Although written in 2006, it is still relevant today.*

### Importance and History of Log Contextual Information

By Philippe Theys

#### Shakespeare, a Master in Data Interpretation

The amateur of classics certainly remembers Laurence Olivier screaming, “A horse! A horse! My kingdom for a horse!” in the movie *Richard III*. Without any additional information, the viewer systematically concludes that the man is a monster. The ancestor of the data interpreters, Shakespeare, has done a good job of altering our perception as historical data mining reveals a much gentler king. The famous author is not unlike today’s geoscientists, who dramatize and caricature data so that it is more easily digested by non-technicians. Is it possible not to misjudge reality? Yes, by collecting all the facts and verifying the sources.

We stay with history but abandon England and the House of York and show the importance of contextual information in logs. If contextual information is not recorded and made available to the data user, log data become rapidly useless, especially years after the time of acquisition when it is not possible to get in touch with the logging engineer. Through the processing of log interpreters, data may sometimes tell the opposite of what it is supposed to say.

Steps in the history of logging are narrated. Little by little, contextual information has been added.

#### What is Contextual Information?

Before we explore the way it was slowly introduced in the industry, it may be necessary to set the problem. Contextual information is all the data around the main data; the latter is generally displayed versus depth. Computer technologists call contextual information metadata. A quick example: A porosity logging tool is run in a deviated well. At 12,456 ft MD, the value is 23.45 p.u. A few questions need to be asked. Is this a density-, neutron-, NMR-, acoustic-derived porosity? Is it corrected? If yes, what are the corrections? Is it calibrated? If yes, what are the calibration coefficients? Was the tool properly centralized? With what? What is the size of the centralizing device? Is there some signal processing? What are the processing options? Where is the volume investigated by the logging tool located? Is depth documented? Is the depth-measuring device calibrated? Is depth stretch-corrected? Is there a stable procedure to acquire depth? How were deviation and azimuth measured? If this is through a magnetic survey, how was magnetic declination corrected for? What is the geodetic reference? Which logging company ran the log? Who ran the log? What was his level of training? Etc.

While the first log was like magic, and the whole process is much of a black box, today, the informed user can reach a better understanding of data through the perusal of contextual information. This information allows a buildup of confidence in the data and a subsequent reduction of the risks.

#### A Day in the Fall of 1927

The circumstances of the first log are known but not universally. Some magazines mention that Conrad and Marcel Schlumberger ran the first log. Fortunately, several witness accounts are available, in particular, the narrations of Henri Doll, the first field engineer, and of Roger Jost, who was with Karl Scheibli as part of the three-man team who performed that premiere. Roger’s story appeared in a 2006 issue of *Petrophysics* [1].

We find the team in a small village of Alsace on September 5, 1927. Imagine the three men sent to run a prototype tool put together in a matter of days. They have no operating manual, no maintenance manual, and no hotline to seek advice. The field engineer is really green because this is his first job. This is the ultimate real-time job, where instant solutions are needed at a diabolical frequency. Indeed, there is no standard to tell how to present the data. Nevertheless, the deliverable, whose copy can be seen in many places, was outstanding: name of the well, name of the rig, and correlations with external information taken from cuttings. From a close look at this document, one can recognize one name, Henri-Georges Doll, written with a slightly different style. It is difficult to be sure if this was added sometime after the job, but a long-standing tradition of having the name of the father (or the mother) printed on the log is established. A few lines in the account of Jost are critical, “Doll writes down the values given by the potentiometers. Two quick computations on his sliding rule and the triumph of this first measure



## Importance of Contextual Information

point resounds. It works! The verification is correct.” In summary, the measurement correctness is checked step by step. It is noticeable that this information is not added to the diagram delivered to the client. It will take decades before quality control curves are displayed on the logs or delivered to the data user.

### First Repeat of Anomalies

The first repeat of anomalous readings antedates the first log. A disturbance was suspected in Saint-Bel in 1913 as Conrad Schlumberger was checking a surface survey. The measurements were repeated.

### The First Wellsite Witness and the First Repeat Section [2]

Dr. Mekel of Royal Dutch Shell made a field visit in Alsace in 1928, in the company of Conrad Schlumberger, with Deschâtre and Sauvage as field engineers. Dr. Mekel of Shell then qualifies as the “earliest wellsite witness.” It appears that Dr. Mekel also requested a repeat survey. This is the world’s first repeat survey made as an official log quality product! The first condition for an acceptable log is that it should wiggle and repeat. This is necessary but not sufficient. More controls will follow.

### The Need for Tool Sketch and Clear Scales

After these extremely innovative years, well-documented by a number of books and documents, there was a period where the technology and methods became more controlled. Unfortunately, few records are available from the 30s. Considering that the first measurements were only of an electrical nature, the flexibility to derive all required information came from varying the spacing between electrodes. It is easy to imagine how important it was to have these spacings described on the log. For instance, a sonde wired with the “Oklahoma” configuration would give curves different from the one wired with the “Kansas” configuration [3]. For reasons related to intellectual property protection, such details did not make it to the log presentation. Similarly, scales and units remained rather obscure for decades. Permeabilities and porosities were plotted in millivolts (because they were derived from spontaneous potential). Resistivities were shown in ohms per cubic meter by Schlumberger and in impedance-ohms by Halliburton. It was only in the late 70s that a tool sketch would be a common feature of the log and that units would be rationalized.

### Overlapping the Same Interval

In the late 40s, the recording of overlapping zones between two runs was very important [4]. By this process, the stability (or lack thereof) of readings with a change of mud salinity or borehole size was checked. Field engineers were spending large amounts of time explaining invasion and hole effects.

### The First Quality Curve

The first quality curve—a curve that is not directly used by the log analyst—appears to be delta-rho, developed with the second-generation density tool [5] in the 60s. It resulted from the development of a dual-detector density device, bringing two densities, one strongly affected by the near-borehole domain, the other one affected by both near borehole and formation. Delta-rho informs the log user how the densities differ.

### Traceability Before the Computer

Before the introduction of the computer, a huge amount of esoteric but critical information was just momentarily kept in the brain of the field engineer, soon to be forgotten on the next job. It includes but is not limited to the position of dials on panels, selection of memory lengths, adjustment of the power sent to the tool, and alignment of galvanometers.

### Here Comes the Computer

In the late 60s, the encoding of logging information started. At the beginning of the digital era, only depth-sampled data were flowed to tapes. This information was absolutely useless, unless graphical data (prints or film) were available. All parameters, mud data, header information, and processing options still belonged to the graphical record. But, in the 70s, all information was finally recorded to a digital file. It is at this point that traceability has been made possible.

With the computer, all parameters can be stored. If the data user wants to really know what has gone wrong (or right) during a logging job, he can obtain the full digital file, a record of all the data entries and changes performed during the job. Nevertheless, it is up to the data acquisition company to deliver this important information.

### A New Look at Depth

While depth has been used on the first log and is almost always present on a log, it has not gotten the attention it deserves until recently. In the 90s, it was found that depth was the only measurement for which logging companies were not delivering information on calibrations, instruments used, and correction parameters. It is, therefore, not surprising to observe large differences between logging companies, different conveyance modes, and the driller! The Data Quality conference in Taos in 1996 marked a turning point and requested the delivery of all details on the depth measurement.

### What About Complete Information on Positioning and Uncertainties?

At a point when terabytes of data are delivered to users, there are two categories of data that are still poorly covered: complete positioning information, allowing the log analyst to know where is the volume of rocks that has been surveyed before she starts making inferences about it and uncertainties of the performed measurements. Almost 90 years after the first log, the quest for complete log contextual information is still on!

### References

- [1] Le log, July–August 2006, *Petrophysics*.
- [2] Steve Kimminau, after consulting the book written by Allaud and Martin, *L'histoire d'une Technique*.
- [3] *Science on the Run*, Geoffrey Bowker, The MIT Press.
- [4] Jean Gartner, personal communication.
- [5] John Wahl and Jay Titman, personal communication.

### What Is a Unitization and Why You Should Care if You Are in the Oil and Gas Industry?

Gonzalo J. Peñaloza, Geoscience Advisor

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The following briefly introduces the concept and importance of unitization in the context of oil and gas reservoirs. As a remark, this is an extremely complex matter, which comprises multiple possible scenarios that depend on the country(ies) where the process takes place, the existing contracts and legal framework, the nature of the reservoir fluids, or the size of the field, among other characteristics. It is beyond the scope of this communication to explore in detail any of the possible scenarios but is meant to provide a reasonable introduction to this relevant and sometimes unknown aspect of our industry.

#### Why to Unitize?

Field unitization is the process of combining smaller portions of a hydrocarbon reservoir that straddles one or more license boundaries into a single unit for the purpose of optimizing oil and gas exploration and production. This is an important aspect of the oil and gas industry, as it allows companies to manage the development and production of a field more effectively by uniting smaller portions of the same reservoir into a single unit rather than through the corresponding adjacent contracts (MacLeod, 2010). In this way, a new contract for the unit shared reservoir is created, in which the equity share of all the intervenient parties is agreed upon in a technical and commercial negotiation.

A unitized reservoir allows companies to reduce costs and improve profitability by ensuring that resources are used in the most effective way possible. The costs and risks of exploration and production are equitably shared among multiple parties. This is particularly important in cases where a field is large, and the development and production costs are high. By uniting smaller portions of the same reservoir into a single unit, companies not only reduce the overall financial burden on any one party but also ensure that the development and production of a field is conducted in an environmentally responsible manner while controlling and mitigating the environmental impacts of their operations (SPE, 2020). This helps to protect the environment and ensure that the field is developed and produced in a sustainable manner.

A unitization is a commercial negotiation that is, in most cases, based on subsurface technical data. Subsurface data are naturally incomplete and uncertain, leading to a spread of possible equity share estimations and the consequent negotiation positions between the parties. The most common unitization basis of determination is in-place hydrocarbon volumes at standard conditions (i.e., STOOIP, GIIP); however, other alternatives are sometimes considered (estimated ultimate recovery, volume at reservoir condition, etc.). The choice of the basis of determination could respond to legal constraints or may be a subject of negotiation between the intervening parties.

#### Technical Expertise and International Variations in Unitization

The complex nature of the technical discussions during a unitization requires the intervention of experienced subsurface professionals—especially petrophysicists—able to transversely integrate data from several sources and disciplines, understanding the uncertainty of each input and their impact on the subsequent calculations and commercial negotiations, to build a robust technical case for each party to support its equity share proposal. After a unitization takes place, the equity share of each party in the unitized field is either agreed upon by commercial negotiation or resolved by a dispute that could incorporate a decision from an expert. Ultimately, in the case of no acceptance by one or more parties, a unitization may escalate into a judicial litigation to resolve the dispute.

There are several countries where oil and gas fields that straddle across license boundaries must be unitized by law, and the correspondent authority has the power to require the unitization of any field that straddles across license boundaries to optimize the recovery of oil and gas and ensure that resources are used efficiently. Conversely, there are countries where the unitization of oil and gas fields that straddle across license boundaries is not mandatory by law. In other countries, such as Mexico or Brazil, the unitization of oil and gas fields may be required under certain specific circumstances but is not always mandatory (Asmus et al., 2006). It is important to

note that even in countries where the unitization of oil and gas fields is not required by law, companies may still choose to unitize fields to optimize oil and gas recovery and ensure that resources are used efficiently.

### Unitization Contracts

Field unitization is typically done using contracts or agreements between the various companies involved in the development and production of the reservoir. These contracts or agreements outline the terms and conditions under which the reservoir will be developed and produced, including the allocation of costs among the companies (AIEN, 2020). The most common contracts in a unitization process are the unitization agreement (UA) and the unit operating agreement (UOA), sometimes combined into a single unitization and unit operation agreement (UUOA). Depending on the relative timing of the unitization regarding the joint venture agreement (JVA), the latter may include the same provisions as the UOA, and therefore, the contract combination may be slightly different.

In most cases, the UUOA is a complex contract that generally includes:

- A section related to commercial matters and provisions
- A section related to legal provisions
- A section related to unit operation provisions
- One or more annexes related to both unitization and redetermination procedures
- One or more annexes related to technical procedures to estimate the equity share for each contract

### Final Remarks

It is important to highlight that a unitization is the equivalent of a “snapshot” taken at a specific moment in the development of a field, and thus, it reflects the understanding of all the intervening parties on the equity split of the reservoir based on the available information at that very specific moment in time. To accommodate for the incorporation of updated data (i.e., newly drilled wells, new seismic surveys, additional production, laboratory data, etc.), one or more *redeterminations* may be considered along the project lifetime to update the equity share of the parties accordingly. Note that the resulting equalizations will always be retroactive to the date of the *determination* (unitization date) and may imply a massive cash flow and/or production share fluctuation for any intervening party.



The main driver during a unitization shall be the creation of an equitable shared unit reservoir, to be developed in an efficient and responsible way over a long period of time, and preferably avoiding significant equity fluctuations as the result of future redeterminations. An effective unitization team should include experts from various fields to ensure that all the legal, commercial, and technical aspects related to determining a fair equity share in the unit contract are thoroughly addressed.

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AIEN, 2020, Unitization and Unit Operating Agreement, URL: <https://www.aien.org/forms/store/ProductFormPublic/UUOA2020>.

Asmus, D., and Weaver, J., 2006, Unitizing Oil and Gas Fields Around the World: A Comparative Analysis of National Laws and Private Contracts, *Houston Journal of International Law*, **28**(3), U of Houston Law Center No. 2006-A-5. URL: <https://ssrn.com/abstract=900645>.

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SPE, 2020, Introduction to Unitization and Redetermination, in *Who Owns the Oil? The How and the Why of Unitization*, virtual, URL: <https://streaming.spe.org/who-owns-the-oil-the-how-and-why-of-unitization?>.

### Sharing Knowledge and Perspective – Call for Memos

Readers, please share your depth and breadth of knowledge and experience to strengthen the community, better educate the end users of our products and learn from cross-functional collaborators.

The *SPWLA Today* newsletter has opened a new section meant to exchange:

- (1) Basic knowledge
- (2) “War stories” – success or misuses/mistakes
- (3) Exposure to new technologies or field of applications
- (4) Viewpoints
- (5) Summary of key papers
- (6) A space to cross-functional colleagues to present their fields and challenges

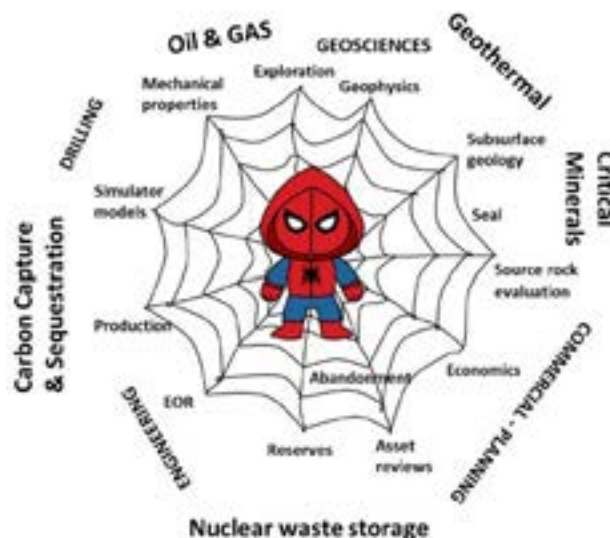


Fig. 1—Web of connection and interconnection of the petrophysicist, who is a scientist, a magician, and a diplomat all-in-one or, in other words, a super spiderman/spiderwoman (Inspired by Dawson Grove, 1980, *The Log Analyst*, 21(3), and Ko Ko Ki, retired principal petrophysicist).

Under the form of a short (1–2 page) shareable memo, welcomed topics include:

- General topics bypassed by seasoned petrophysicist but of value to generalists
  - o Openhole vs. casedhole/production logging
  - o Wireline vs. LWD; LWD vs. MWD; Mud log vs. Mudgas
- Clarification of jargon and even perhaps attempt to correct improper terminology
- Log (first principle, applications, limitations/concerns)
- Core analysis (first principle, applications, limitations/concerns)
- Technology/workflow – Challenges (uncertainties, thin beds, etc.) and new fields of applications
- Integration of petrophysics with other disciplines
  - o Geosciences (geochemistry, reservoir quality, rock physics, stratigraphy, assessment, etc.)
  - o Drilling (pore-pressure, fracture gradient), Engineering (geomechanics, completion, etc.)
  - o Planning – Commercial – Management
- War stories – success/failure; “opinioned” viewpoints
- Old but recurring topics such as VCL vs. VSH, (PHIT-SWT) vs. (PHIE-SWE)
- And everything else about petrophysics you have passion for sharing with others

We recommend interested contributors contact the editorial office ([editor@spwla.org](mailto:editor@spwla.org)) and Philippe Gaillot ([Philippe.gaillot@exxonmobil](mailto:Philippe.gaillot@exxonmobil)) to express early interest and avoid duplicates. If successful, at some point, all memos will be compiled into an online reference volume.



# CALL FOR PAPERS

## PETROPHYSICS BEYOND PETROLEUM – STATE OF TECHNOLOGIES

Introduced almost 100 years ago, petrophysical/well-logging technology has made remarkable advances and played a key role in the oil industry's success in providing the energy needed for the tremendous economic growth of the 20th century. With an impending transition away from fossil fuels, the application of these techniques in non-petroleum energy systems is of interest. Two areas that have already drawn attention are monitoring CO<sub>2</sub> sequestered in the geology in carbon capture and sequestration (CCS) projects to mitigate climate change and characterization of geological sites for burying high-level radioactive waste from nuclear power plants. A realization is growing that the currently identified volumes of minerals required in electric vehicles (EVs), photovoltaics (PVs), and geothermal for the clean energy transition are insufficient, and thus subsurface mining would be needed. Additionally, hydrogen has been of much interest as a clean fuel, with geologic hydrogen generating a significant buzz; the US Department of Energy has just announced \$20 million in funding for research on technologies to "Explore the Potential of Geologic Hydrogen."

While promises have been noted in applying current well-logging techniques in some of the above problems, a major question arises on the current state of the petrophysics/well-logging techniques used in the petroleum industry: Will they be optimally usable in these low-carbon applications? A special session at the SPWLA 64th Annual Symposium explored a few of these issues and indicated a need for a fuller discourse that includes non-industry experts. The proposed special volume of *Petrophysics* will provide an avenue for such a discourse, with details on the science, applicability, strengths, and limitations of current petrophysical techniques if applied to low-carbon energy options and the potential technological advances needed. This volume is expected to become a reference document to encourage the industry, academia, and other players, such as the US Department of Energy or the International Atomic Energy Agency, to engage in the R&D necessary to address the question above.

The following guidelines should help:

1. Previously published conference proceedings and peer-reviewed articles are allowed, either reworked or reprinted.
2. Copyright transfer from the journal/other venues must be obtained by the author(s) before submission, except for SPWLA publications, where copyright transfer comes from the author(s).
3. Original material is, of course, allowed, provided approvals for publication are obtained before submission.

**Please refer to the SPWLA Instructions for Authors for more information about submission requirements and associated publication fees (<https://bit.ly/46Ahlpv>).**

Articles should be submitted to Editorial Manager (<https://bit.ly/3FpOoAI>) by **December 31, 2023**.  
Make sure to select "**Petrophysics Beyond Petroleum – State of Technologies**"  
for the "Article Type" when submitting your manuscript.

# CALL FOR PAPERS

## DEAR MUD LOGGING PETROPHYSICS ENTHUSIASTS

Mud logging is a well-known service that has been providing valuable and trustable drilling and subsurface information for decades. However, the seamless integration of advanced technologies and data analytics is transforming this service, contributing to the oil and gas industry with improved efficiency and precision that is more quantitative than ever before.

This journal targets the methodology of real-time, pre- and post-well mud logging gas and cuttings service on exploration and development wells. Mud logging also acts as an interdisciplinary field, integrating surface and downhole measurements to provide new insight into geochemical analysis.

Artificial intelligence and machine-learning algorithms are pivotal in interpreting vast data sets, allowing predictions of, for example, GOR and fluid properties during drilling. This supports rapid decision-making and improves reservoir understanding.

The digitalization of organic and inorganic analysis, from cores to cuttings, improves the real-time identification of geological boundaries and formation tops. Formation evaluation from the elemental, mineralogical, organic carbon, and reservoir fluid data collected by mud logging enhances the insight and understanding of conventional and unconventional reservoirs.

Recent developments contribute to competencies in new energy domains like hydrogen and geothermal, in which studies of volatile components, fluid inclusion, and liquid chromatography are evolving.

Modern mud logging minimizes risks with service automation, remote monitoring, and more accurate control systems. This also enables operation from anywhere worldwide, improving communication and collaboration, increasing accessibility, and reducing the need for on-site personnel. Adding to the total value is the fact that mud logging is typically a very cost-efficient service.

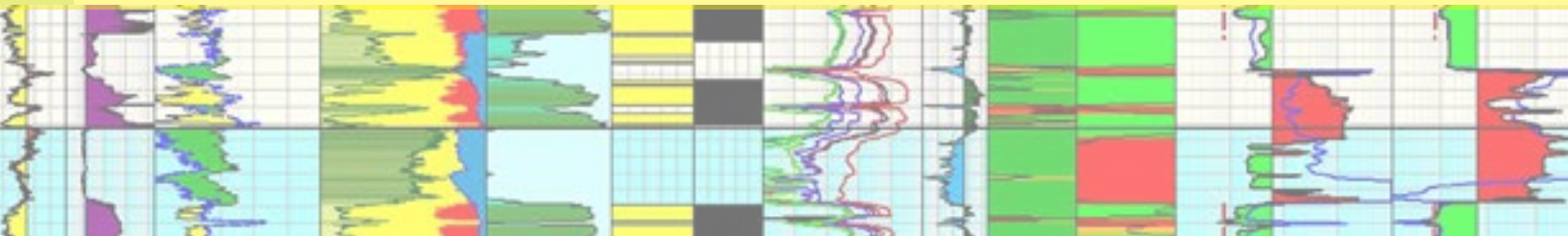
Please join the Mud Logging special issue of the *Petrophysics* journal and share your experience and how this data is transforming the way you work. It's a new landscape for mud logging in which geoscience meets engineering in the oil and gas industry.

### PLEASE SEE BELOW THE GUIDELINES FOR APPLYING:

1. Previously published conference proceedings and peer-reviewed articles are allowed, either reworked or reprinted.
2. Copyright transfer from the journal must be obtained by the author(s) before submission, except for SPWLA publications where copyright transfer comes from the author(s).
3. Original material is allowed, provided approvals for publication are obtained before submission.
4. Please refer to the Instruction for Authors for more information about submission requirements and associated publication fees.

The deadline to submit manuscripts to **Editorial Manager** is January 8.

Make sure to select "2024 Mud Logging Special Issue" from the drop-down menu for article type.





## Petrophysics in Latin America Special Issue Call for Papers

Dear Latin American petrophysics enthusiasts,

We have planned a **“Petrophysics in Latin America” Special Issue** for the *Petrophysics* journal in **October 2024** with the help and support of Stephanie Perry (VP Publications for SPWLA) and Elizabeth Naggar (Managing Editor of *Petrophysics* journal).

We are announcing a call for papers on the following topics in petrophysics and formation evaluation technologies focused on the Latin America region:

- History
- Applications in Exploration, Appraisal, and Development
- Interpretation in Conventional and Unconventional Reservoirs
- Petrophysics in Resources and Reserves Evaluation
- Data Analytics and Machine-Learning Applications
- Reviews
- Tutorials
- Public and Private Reference Databases

The following guidelines should help:

1. Previously published conference proceedings and peer-reviewed articles are allowed, either reworked or reprinted, if they are focused on fields and/or reservoirs in the region.
2. Copyright transfer from the journal/other venues must be obtained by the author(s) before submission, except for SPWLA publications, where copyright transfer comes from the author(s).
3. Original material is, of course, allowed, provided approvals for publication are obtained before submission.

Please refer to the SPWLA Instructions for Authors for more information about submission requirements and associated publication fees (<https://bit.ly/46Ahlpv>).

Articles should be submitted to Editorial Manager (<https://bit.ly/3FpOoAl>) by **February 1, 2024**.  
Make sure to select “Latin America Special Issue” for the “Article Type” when submitting your manuscript.  
Also, we encourage you to forward this message to all interested parties.

Best regards,

**Javier Miranda**

**Clara Palencia**

**Nelson Suarez**

Guest Editors, *Petrophysics*



## SPWLA SECOND BOARD OF DIRECTORS MEETING

REMOTE

September 13, 2023

President Jennifer Market called the meeting to order at 6:05 am. In attendance: President-Elect Iulian Hulea, Vice President Education Kelly Skuce, Vice President Finance, Secretary and Admin Jing Li, Vice President Social Media Chelsea Newgord, Regional Director Middle East/Africa Jennifer Duarte, Regional Director N. America 1 Javier Miranda, Regional Director N. America 2 Clara Palencia, Vice President Technology Robert “Bob” Gales, Regional Director Asia Pacific/Australia Yuki Maehara, and Executive Director Sharon Johnson. Absent: Vice President Technology-Elect Harry Xie, Regional Director Europe Mathias Horstmann, Vice President Publications Stephanie Perry, Vice President Information Technology Tom Bradley, and Regional Director Latin America Nelson Suarez Arcano.

**A motion made by** Vice President Technology Robert “Bob” Gales to waive the reading of the minutes from the July BOD meeting was seconded by President-Elect Iulian Hulea. This motion passed by majority vote.

**A motion made by** Regional Director Middle East/Africa Jennifer Duarte to accept the petition letter and Chapter Bylaws for establishing the Algeria Chapter of SPWLA was seconded by President-Elect Iulian Hulea. This motion passed by majority vote.

**ACTION ITEM:** Regional Director Middle East/Africa Jennifer Duarte to send a welcome letter to the newly approved Algeria Chapter leadership.

**A motion made by** President-Elect Iulian Hulea to adjourn the meeting was seconded by Regional Director N. America 1 Javier Miranda at 9:42 am.

Respectively Submitted by  
Sharon Johnson  
Executive Director

**NEXT MEETING: Friday, November 3, 2023, 6 am CST.**

## Chapter News

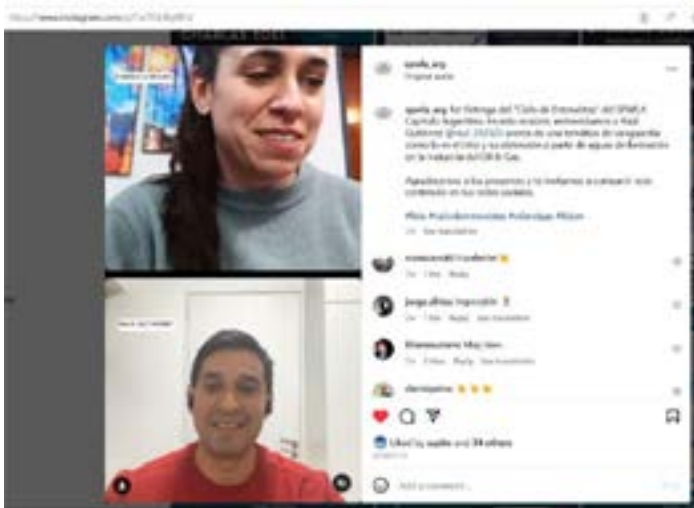
### ACOUSTIC SIG

As of the submission date for the November newsletter, the Acoustics SIG is hard at work planning the Fall Topical Conference on “Exploring the Synergies Between Borehole Imaging and Borehole Acoustics,” in partnership with the Borehole Imaging SIG. The conference will take place on November 8 and 9 at the Haliburton North Belt Campus in Houston and promises to be 2 days of interesting and thought-provoking presentations and panel discussions on a wide variety of topics surrounding the synergies between borehole imaging and borehole acoustics technology. Abstract submission has closed, and the organizing committee is finalizing the slate of presenters and panelists. We will have both in-person and remote attendance options, and registration will be open by the time you read this! We hope to see you there!

### ARGENTINA CHAPTER

#### Recent Events

**23 August 2023**—(Live Instagram) Speaker Raul Gutierrez (CGC S.A.) presented “Unleashing Future Energies, Exploring the Convergence of Lithium and the Oil and Gas Industry.” The interview was highly engaging, with active participation from the individuals who attended the live Instagram event. Although it was our first time organizing such an event, it was a great success.



**30 August 2023**—(online event via Teams) Speaker Raul Gutierrez presented “Lithium From Oilfield Brines.” At this online event, Raul delved into his knowledge of lithium in greater detail and saw significant participation. Questions were fielded at the end of the presentation.



**13 September 2023**—A presentation on “Wireline Solutions for Mature Fields” was presented by Diego Lachter and Juan Torres, covering the benefits and advancements in casedhole pulsed-neutron and PLT tools, respectively. This event was held online and also garnered significant participation and interest.



**27 September 2023**—Speakers Ulises Bustos (SLB) and Diana Masiero (Y-TEC) presented “Nuclear Magnetic Resonance: Principles, Well-Logging Applications, and Laboratory Measurements.” We successfully met the challenge of orchestrating our inaugural hybrid event since 2019. It was a concerted effort, resulting in commendable outcomes. The presentations by Ulises Bustos and Diana Masiero were truly outstanding. Our deep appreciation

goes to the YTec team for generously granting us access to their laboratory facilities and sharing their wealth of experiences and knowledge. Additionally, we extend our heartfelt thanks to our skilled moderators, Paula C. Bedini and Nicolas Carrizo Paez, for their proficient oversight of the event. We wish to acknowledge the invaluable contributions of the diverse teams within the Argentina Chapter who played pivotal roles in the event’s organization, including the dedicated efforts of Camila Juan Suriano, Lorena Caviglia, Luciana Sassali, Marta D’Angiola, and Alberto Ortiz. Lastly, we extend our gratitude to all the participants, both in person and virtually, whose presence greatly enriched the success of this event.



## BANGKOK CHAPTER

### General News

#### 2023 Bangkok Chapter Committee Members are:

<b>Chapter President</b>	Andrew Cox
<b>Technical Coordinator</b>	Ryan Lafferty
<b>Sponsorship</b>	Marvin Rourke
<b>Secretary</b>	Ronald Ford
<b>Treasurer</b>	Mesinee Pullarp
<b>Web Coordinator</b>	Alex Bevis
<b>Media Coordinator</b>	Ryan Banas
<b>Student Liaison</b>	OPEN

**Website:** [https://www.spwla.org/SPWLA/Chapters\\_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx](https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx)

**Email:** [bangkok.chapter@spwla.org](mailto:bangkok.chapter@spwla.org)

### Recent Events

**28 September 2023**—“Effects of Potential Determining Ions on Dissolution of Dolomite During Low Salinity Waterflooding” was presented by Nuttapol Junput, petrophysicist (Chevron). Khun Nuttapol gave an excellent presentation on his research into the potential use of ionic solutions to improve oil recovery in carbonite reservoirs. A number of insights were provided into how to select the most effective solution. Thanks to Khun Nuttapol for his talk.

**26 October 2023**—“LogSight: Automated Well log Interpretation – A Case Study in Offshore and Onshore Thailand” was presented by Sirichai Mahamat, petrophysicist (PTTEP). Khun Sirichai presented his work on an automated well-log interpretation algorithm. Proven to be an efficient and accurate system, it has been implemented by PTTEP as a powerful new tool for the petrophysicists.

### Upcoming Meetings

30th November	Pierre Berger	Independent
December	Break	
25th January	TBC	-

### Special Announcement

SPWLA Bangkok Chapter will be hosting the Asia Pacific Regional Conference on October 6–9, 2024. The call for abstracts has just been released, with submissions due March 29, 2024. Please forward your latest and greatest work.

**2024 SPWLA BANGKOK**  
6<sup>th</sup> to 9<sup>th</sup> October



**Call for Abstracts**  
**SPWLA – Asia Pacific Regional Conference 2024**

**“Traditional and Transitional Petrophysics”**  
*“Enhancing and Integrating Petrophysics into the challenges of Today and Tomorrow”*

**Theme of the conference:**  
Ideas, technology or case studies that are directly applicable to the Asia Pacific region.

**Submit your abstract to:**  
[ap2024@spwla.org](mailto:ap2024@spwla.org)

**Deadline for submission:**  
29<sup>th</sup> March 2024.

**Presentation Options:**

1. Full paper with presentation, abstract in conference brochure, and option to be published in OnePetro.
2. Conference presentation only, with abstract in conference brochure.
3. E-poster presentation, with abstract in conference brochure, and option to be published in OnePetro.

**Details:**  
Maximum of 500 words. Please provide title, full name of authors and affiliation, name of presenter and contact email address. Please state if the abstract has been previously published or presented elsewhere.

**Conference Schedule (Notional)**  
Sunday 6<sup>th</sup> – Field Trip (optional)  
Monday 7<sup>th</sup> – Technology Day  
Tuesday 8<sup>th</sup> – Technical Session 1  
Wednesday 9<sup>th</sup> – Technical Session  
Thursday 10<sup>th</sup> – Golf Day (optional)




Nuttapol Junput (left) received a certificate of appreciation from Andrew Cox (right).



Nuttapol Junput, petrophysicist (Chevron).



SPWLA crowd – Jasmin City Hotel, Bangkok – September 28, 2023.



Sirichai Mahamat, petrophysicist (PTTEP).



**Special thanks to our Corporate Sponsors!**

Please check our local website for the latest information on events and activities for the Bangkok Chapter on the SPWLA main page:

[https://www.spwla.org/SPWLA/Chapters\\_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx](https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx)

or visit us on LinkedIn (SPWLA Bangkok Chapter)

**BOREHOLE IMAGING (BHI) SIG**

**General News**

The SIG is constantly gaining new members. Currently, we have 167 members.

**Upcoming Events**

Together with the Acoustics SIG, we are organizing a Fall Topical Conference at the Halliburton North Belt Campus – Auditorium in Houston on November 8–9.

The title of the event is:

**SEE AND HEAR THE FORMATION:  
EXPLORING THE SYNERGIES BETWEEN  
BOREHOLE IMAGING AND BOREHOLE ACOUSTICS**

This workshop will take the format of presentations and open discussions between experts from operator companies, service companies, and universities on a wide variety of topics surrounding the synergies between borehole imaging and borehole acoustics technology, including but not limited to:

- Integrated fracture analysis using borehole images and sonic data
- Geomechanics analysis from the combination of image features, rock mechanics, and borehole stresses
- Looking beyond the wellbore: Structural and stratigraphic interpretation combining borehole image data and acoustic far-field imaging
- The application of machine-learning and multiphysics approaches to borehole acoustics and image data. Could it allow us to do things we cannot do now?
- Role of borehole acoustics and image in CCS and geothermal technologies/workflows
- Novel applications and new technical developments in either field

Remote attendance options will be available for those not able to travel. Also, there will be opportunities for companies to exhibit their products. More details to follow. Details regarding the final agenda, registration, presentation duration, breakout/discussion format, etc., will be available shortly.

For the SPWLA Annual Conference 2024, the BHI SIG submitted a proposal for a special session and a workshop about borehole image log analysis.

**BRAZIL CHAPTER**

**General News**

Our monthly meetings are being held online every third Tuesday of the month at 4 pm (Brasilia Time). Anyone wishing to participate is welcome. We also post chapter updates and meeting links on our LinkedIn page (SPWLA Brazil Chapter). Check us out. For further information about the chapter, please contact our secretary, Leonardo Gonçalves ([leonardo.g@petrobras.com.br](mailto:leonardo.g@petrobras.com.br)). Membership to our chapter is free and can be claimed by filling out the form available at <https://lnkd.in/g4KQjYf>. Meetings are held in Portuguese or English, depending on the preference of the speaker. Even if it is held in Portuguese, questions in English are also welcomed!

**SPWLA 65th Annual Logging Symposium**

SPWLA Brazil is honored to announce that we will host the SPWLA 65th Annual Logging Symposium that will take place in Rio de Janeiro in 2024. We are still starting the organization, so stay tuned to our LinkedIn page for new information. SPWLA Brazil would like to thank the SPWLA board and the entire petrophysics and formation evaluation community for their trust. Brazil will certainly have the best event ever!

### Webinar Format and YouTube Page

As of 2023, SPWLA Brazil has changed the format of its monthly technical meetings. They will now be webinars streamed through our YouTube page:

<https://www.youtube.com/@spwlabrazil/streams>

In this way, the talks will be available to be watched after the presentations, reaching a larger audience and expanding our mission to disseminate petrophysics and formation evaluation in Brazil.

### Recent Events

**21 August 2023**—We had Adam Haecker, petrophysicist and director of geoscience (Milestone Carbon), who gave the talk entitled “CCUS Petrophysics: How Is It Different? How Is It the Same?” This webinar was done in partnership with Petrobras and was broadcast live via a specific link. It was not recorded and is not available on our YouTube page.



Invitation to August webinar of SPWLA Brazil Chapter.

**19 September 2023**—Ronaldo Herlinger, Jr., senior petrophysicist (Petrobras), presented the talk entitled “Investigation of Residual Oil Saturation in the Barra Velha Formation: A Study Integrating Petrography, RCAL, SCAL, and mCTs.” You can watch this webinar using the link below! <https://www.youtube.com/watch?v=DitGZMZgV74>



Invitation to September webinar of SPWLA Brazil Chapter.

### Upcoming Events

The SPWLA Brazil Chapter is still confirming the presentations for November, so stay tuned to our LinkedIn and YouTube pages to stay up to date with our schedule.

### COLOMBIA CHAPTER



### Board of Directors

Miembro	Cargo SPWLA COL	Empresa	Linkedin
Maria Florencia Segovia	President	Ecopetrol	<a href="https://www.linkedin.com/in/maria-florencia-segovia-64bba933/">https://www.linkedin.com/in/maria-florencia-segovia-64bba933/</a>
Ulises Bustos	Vice President	SLB	<a href="https://www.linkedin.com/in/ulises-bustos-33538465/">https://www.linkedin.com/in/ulises-bustos-33538465/</a>
Darling Criollo	Secretary	Halliburton	<a href="https://www.linkedin.com/in/darling-criollo-9b502933/">https://www.linkedin.com/in/darling-criollo-9b502933/</a>
Maria Isabel Sandoval	Treasurer	UIS	<a href="https://www.linkedin.com/in/maria-isabel-sandoval-martinez-8aa40663/">https://www.linkedin.com/in/maria-isabel-sandoval-martinez-8aa40663/</a>
Maika Gambús Ordaz	Vocal1	UIS	<a href="https://www.linkedin.com/in/maika-gambus-1a925443/">https://www.linkedin.com/in/maika-gambus-1a925443/</a>
Victoria Mousalli	Vocal2	UIS	<a href="https://www.linkedin.com/in/victoria-mousalli-26171655/">https://www.linkedin.com/in/victoria-mousalli-26171655/</a>

### Recent Events

The team has prepared meetings to organize and structure the operation of the SPWLA Colombia Professional Chapter. We are generating an agreement with the University of America in Colombia in order to have a physical space to hold events and invite speakers from Bogota since most of the main bases of the oil companies in Colombia are located there.

## Chapter News

The team is growing. We made calls for a new committee in technology and innovation, and new members have joined from companies such as Weatherford, SLB, INTER-ROCK, Hocol S.A., Aera Energy LLC, Perenco, Ecopetrol S.A., Baker Hughes, and Halliburton.



We had our presentation entitled “The Importance of Petrophysics in Resource and Reserve Estimation” with our special Distinguished Speaker Javier Miranda (senior petrophysicist at DeGolyer and MacNaughton, Houston/TX). The event was held in Bogota, Colombia with the support of Ecopetrol, DeGolyer and MacNaughton, and the Society of Petrophysicists and Well Log Analysts (SPWLA).



### Upcoming Events

The team prepares for the closing event of the year in coordination with the technology and innovation committee.

Follow us on our social networks:



### DENVER CHAPTER

The Denver Chapter started their regular meetings for the year 2023/24 in October with Jason Edwards (ROGII) talking to us about the “Geosteering World Cup.” Our first Luncheon was well attended, and it was great seeing everyone back at our typical lunch and learn spot, the Wynkoop Brewery!

In November (second Tuesday), we will welcome Robert Laronga (SLB) to talk to us about “Time-Lapse Pulsed Neutron for CCS: What We Have Learned From all These Monitoring Runs.” We are sure that it will attract many people! See you there.

### EAST CHINA CHAPTER

#### Recent Events

**9–10 September 2023—The 14th UPC International Symposium on New Well Logging Techniques** hosted

by the SPWLA East China Chapter was held successfully at the China University of Petroleum (East China) in Qingdao. The symposium and the launch ceremony of “Geophysical Well Logging” were co-hosted by the National Key Laboratory of Deep Oil and Gas, China University of Petroleum (East China), and the Research Institutes of Petroleum Exploration and Development. The symposium theme was “Opportunities and Challenges for Logging Technology Development in the Context of Digital Intelligence.” Nearly 300 experts and scholars from the United States, Russia, Brazil, Austria, and other countries attended, along with nearly 50 representatives from research institutes, universities, and enterprises in China’s petroleum and petrochemical industry.



The 14th UPC International Symposium on New Well Logging Techniques.

The opening ceremony was hosted by Professor Caili Dai, vice president, and Professor Yong Wang, school leader of China University of Petroleum (East China), who delivered a welcome speech. He pointed out that deep-ultradeep oil and gas, as well as unconventional oil and gas, have become important areas for increasing reserves and improving production and requiring higher demands for the well-logging technology. Artificial intelligence and big data technology have also been developed, and logging technology is facing new development opportunities and challenges. The theme of this symposium was a great fit for international industry intelligence development and played a positive role in promoting oil and gas exploration and development.





Prof. Yong Wang gave a welcome speech.



Prof. Caili Dai hosted the opening ceremony.

Besides, Harry Xie, Vice President Technology-Elect (SPWLA); Taixian Zhong, deputy general manager (Science and Technology Management Department of CNPC); Lirong Dou, president (Research Institute of Petroleum Exploration and Development, CNPC); Bozhi Wu, general manager

(Sinopec Matrix Co. Ltd); Bao Chen, deputy general manager (China National Logging Corporation), and Junjun Li, general manager (Petroleum Industry Press) also spoke at the opening ceremony.



Harry Xie gave a speech.



Taixian Zhong gave a speech.



Bozhi Wu gave a speech.



Lirong Dou gave a speech.



Bao Chen gave a speech.



Junjun Li gave a speech.

This conference facilitated extensive and in-depth academic exchanges on the latest developments and applications of logging technology in recent years, mainly exchanging ideas on various aspects, including logging methods, technologies, equipment, applications, and discipline growth and promoting continued progress.

Professor Shuangming Wang (the Chinese Academy of Engineering) spoke on “Key Features and Green Low-Carbon Development of Oil-Rich Coal,” introducing the green, low-carbon transformation and the development of energy sources under carbon neutrality.



Professor Ning Li gave a keynote report.



Professor Shuangming Wang gave a keynote report.

Professor Li Ning (the Chinese Academy of Engineering) presented “Application of the First-Generation Mobile Integrated Continuous Measurement and Imaging System for Wellsite Rock Samples in the Exploration and Discovery of Oil-Rich Coal,” showcasing progress on a major scientific project.

Professor Bin Tang, vice president (East China University of Technology), presented “Mini D-T Fusion Neutron Source and Uranium Ore Quantitative Logging Techniques,” introducing cutting-edge nuclear logging research.



Professor Bin Tang gave a keynote report.

Ten special presentations were given by well-known experts and scholars from the United States, Russia, Brazil, Austria, other countries, and China. Invited speakers included Dr. Harry Xie, vice president of SPWLA; Prof. Lichun Kuang, director of the Petroleum Geology Committee of the Chinese Petroleum Society; Prof. Xiuming Wang, director of the Well Borehole Geophysics Committee of the Chinese

Geophysical Society; Dr. Tiago de Bittencourt Rossi, Dr. Qiang Zhou from Maxwell Dynamics Inc.; Prof. David Misch from Leobenmüntzen University, Austria; Prof. Hengshan Hu from Harbin Institute of Technology; Prof. Ningde Jin from Tianjin University; Prof. Xiaoming Tang from China University of Petroleum (East China), and so on.



Prof. Lichun Kuang gave an invited report.



Prof. Xiuming Wang gave an invited report.



Prof. Ningde Jin gave an invited report.



Tiago de Bittencourt Rossi gave an invited report.



Prof. Hengshan Hu gave the invited report.



Prof. Xiaoming Tang gave the invited report.

In addition, more than 70 reports were presented and exchanged at the conference. The reports cover a wide range of topics, including acoustic, electric, nuclear, nuclear magnetic, fiber optic and other logging methods, conventional oil and gas and shale and other unconventional oil and gas, natural gas hydrate, mudstone biogas and deep oil and gas interpretation and evaluation, as well as the application of big data, machine learning, and other digital technology in the field of logging and other related areas, which fully demonstrates the latest progress in the study of logging methods, research and development of equipment, information processing and interpretation and evaluation. It fully demonstrates the latest progress of the current research on logging methods, equipment R&D, information processing and interpretation, and evaluation in various specialized directions.

In the meantime, the launching ceremony for the multi-volume theoretical and methodological works on logging *Geophysical Well Logging*, edited by Li Ning, an academician of the Chinese Academy of Engineering, was held on-site. Li Ning gave a notable speech entitled “Great Development of Disciplines Creates Great Undertakings,” introducing the historical development of logging in China and its important position in the petroleum industry. Taixian Zhong, deputy general manager, and Prof. Yong Wang jointly unveiled the new book *Geophysical Well Logging*.



Wang Yong and Zhong Taixian jointly unveiled the new book *Geophysical Well Logging*.

The UPC International Symposium on New Well Logging Techniques began in 2009 and was hosted by the China University of Petroleum (East China). Setting themes around research hot topics, it has grown into a well-known high-level academic exchange forum both at home and abroad. This was the 14th event this year. This conference assisted in bringing

together logging specialists from across the world and provided them with a hopeful vision of how petroleum technology will improve in the future. The 14th UPC International Symposium on Well-Logging Technology is one of the most important academic conferences in China.

#### Upcoming Events

**November 2023**—An Academic Exchange Forum on Well-Logging between Technology Perm State University, Russia, and China University of Petroleum (East China).

**October 2024**—The 15th UPC International Symposium on Well-Logging Technology will be held in October 2024.

### UFRJ STUDENT CHAPTER

#### General News

Our chapter maintains normal activities with 14 active members organized below:

#### Board Members

- President: Gabriel Ferraz
- Vice President: Guilherme Lontra
- Treasurer: Sofia D’Orsi
- Secretary: Diana Tabach
- Professor Advisor: Jorge Picanço

#### Executive Members

- Rodrigo Azambuja
- Iago da Costa
- Sarah Aleixo

#### Marketing Members

- Renan Camilo
- Luís Henrique Trianon
- Marina Alfradique

#### Logistic Members

- Alexandre Nobre
- Vittor Cambria
- Enzo Borges

#### Recent News

**17 October 2023**—The technical visit to the Development and Research Center of Petrobras we had scheduled for September couldn’t be made due to an event that was occurring in Petrobras (celebrating the 70 years of the company), but we managed to reschedule it for

October 17. We visited the petrophysics and geophysics laboratories, followed up by Julio Justen, a geologist who works at CENPES.

**10 and 17 November 2023**—We managed to organize a webinar with our professor advisor, Jorge Picanço, about the petroliferous system and interpretations of petrophysical data. The presentation is going to be on November 10 and 17 at 6:00 pm (18:00 BRT). The event will be transmitted through our channel on twitch.tv (twitch.tv/spwla\_ufrj), with the distribution of certificates for spectators.



Publicity post for the webinar with Jorge Picanço.

**27 October and 3 November 2023**—We are in contact with the Laboratory of Sedimentary Basins Analytics (LABAS) of UFRJ to organize an internal training program about Petrel, a software developed and built by SLB and one of the most used softwares for the exploration and production of oil and gas. The training program will be ministered by LABAS and is going to be an in-person event at their office.

### MALAYSIA CHAPTER

#### Formation Evaluation Society of Malaysia (FESM)

FESM, a local chapter of the Formation Evaluation Society of Malaysia, is based in Kuala Lumpur. Technical meetings

are held monthly. For meeting information, please visit our chapter website at [www.fesmkl.com](http://www.fesmkl.com).

#### General News

FESM held a committee meeting on October 9, 2023, to discuss the recent update of the society, including bank accounts, sponsorship, upcoming events, and the way forward in the next year.

#### Recent Events

FESM held two separate talks in August and September, respectively.

**August 2023**—The first talk series was conducted by Mr. Frederic Robail (PETRONAS) to discuss the use of machine learning for facies distribution of large carbonate reservoir models. A comprehensive case study was given and discussed during the talk. Good points on calibration and prediction standards have been given by Mr. Frederic to showcase the benefits of using machine learning in tying geology from core to well-logs data.

**25 September 2023**—BVW Master Class was given by Steve Cuddy to discuss establishing saturation height function using the bulk volume of water. Credible inputs and step-by-step methods for building the saturation height function were discussed in the talk. Participants were encouraged to test the method using their own data and to discuss the results with Mr. Steve Cuddy.

#### Upcoming Events

**November 2023**—Another talk is planned to be held in November 2023. The talk will be the last talk series for this year, as no talk is planned for the upcoming December. More events will be held next year to encourage more discussion and participation from FESM members.

### FORMATION TESTING SIG

#### Recent Events

**21 September 2023**—The FT SIG Webinar series for the 2023–2024 season started off with excellent presentations from Saudi Aramco and ADNOC. Our first presentation, by Mustapha Berkane (Saudi Aramco), was titled “In-Situ Fluid Characterization Through Formation Tester Flowline Decompression Experiments.” Our second presentation, by Alvaro Sainz (TotalEnergies) and seconded in ADNOC, was titled “Best Practices and Lessons Learnt From a Comparative Study of LWD Formation Pressure Measurement in Static and Circulating Wellbore Conditions in ERD Wells.”

## Upcoming Events

The FT SIG has several events planned over the coming 12 months:

The Webinar series will continue in late November or early December – watch for updates on timing and presentation topics. We are also planning additional webinars during the first half of 2024. These webinars are a great way to see the latest in formation testing from around the world.

**FT Workshop** – There will be an FT workshop at the annual symposium focused on advanced applications. Watch for more updates and info on this as we get closer to the symposium.

**FT SIG Annual Meeting and Technical Conference** – Our annual meeting with technical presentations will be held in Houston in September or October 2024. Planning is still underway; we will send more information and updates as they become available.

## HOUSTON CHAPTER

### General News

The SPWLA Houston Chapter is forging ahead in its commitment to serve the local petrophysics community by delivering informative and engaging technical seminars. Alongside these enriching seminars, our chapter is proud to host a variety of networking events that provide a valuable social platform for local professionals.

We joyfully welcome the pleasant fall weather in Houston. SPWLA Houston remains committed to serving the local petrophysics community with our continuous informative and engaging technical seminars. Additionally, we take pride in offering valuable networking opportunities for local professionals through a variety of events.

The events hosted by the Houston Chapter in the past 2 months include:

A seminar was held on October 12. Artur Posenato Garcia (Chevron), winner of the SPWLA Distinguished Speakers for the year 2023–2024, made a presentation. The seminar was titled “A New Workflow for the Assessment of Fluid Components and Pore Volumes From 2D NMR Measurements in Formations With Complex Mineralogy and Pore Structure.” We extend our gratitude to Geolog for allowing the Houston Chapter to use the office for the event.

To provide more networking opportunities, the SPWLA Houston Chapter continuously hosts networking events on the last Thursday of each month, from 5:07 pm to 8:08 pm, at the same location for easy recall. In the last two months, we gathered on August 31, September 28, and October 26. These

events brought together a diverse group of professionals from the SPWLA community, including petrophysicists, geologists, geophysicists, engineers, managers, and even current and former SPWLA international board members.

We invite you to join us at our monthly networking events on the last Thursday of each month. The upcoming networking event will be on November 30, and you can expect the same time and location. We look forward to welcoming you there for another evening of valuable connections and knowledge sharing!

We are thrilled to announce the upcoming SPWLA Houston Technology Show. This event has always been an exceptional platform for attendees to stay updated on the latest innovations and technological advancements in the realm of formation evaluation and data interpretation and beyond.

Moreover, this full-day event will serve as a great opportunity for exhibitors to showcase their products and services to the formation evaluation community. It’s a chance to network and connect with industry peers in the spirit of the upcoming holidays.

Details about registration and exhibition can be found at <https://spwla-houston.org/event-detail.php?id=15>

The SPWLA Houston Chapter continues to host lunch seminars on various topics, with more in-person events taking place recently. Slots are limited for in-person seminars; please visit [spwla-houston.org](https://spwla-houston.org) for details and registration.

To receive notifications of upcoming events and chapter news, register on the new SPWLA Houston Chapter website and follow us on LinkedIn. You’ll also find sponsorship opportunities and job postings. If you’re interested or would like more information, please contact us. We are always open to new speakers for our seminars and welcome guests to present on topics of interest to the petrophysics audience. Contact our VPs if you have a presentation to share.

We are committed to fostering a thriving community and offering events that cater to both your professional growth and your social connections. Stay tuned as we continue to explore new avenues for learning, networking, and collaboration.

Stay tuned for upcoming news and events! As always, feel free to contact any of the board members if you have questions or comments using the contact information provided on our website: <https://spwla-houston.org/>. Please follow our LinkedIn account as “Houston Chapter of SPWLA” for the latest updates.

### Recent Events

**31 August, 28 September, and 26 October 2023**—We hosted three in-person social networking happy hour events.

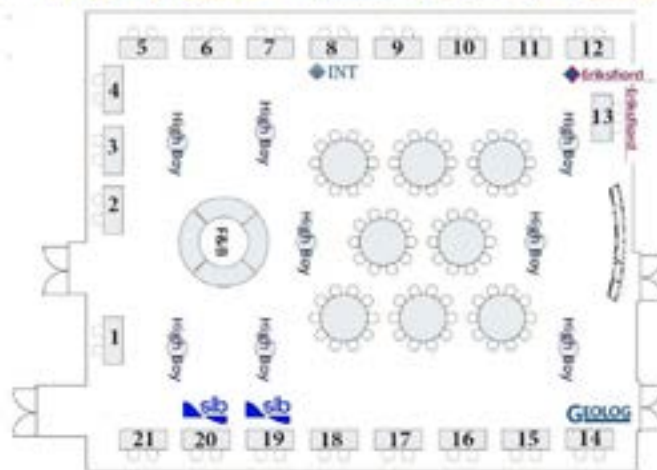
The whole SPWLA community was invited. That was an outdoor party attended by petrophysicists, geologists, geophysicists, engineers, managers, etc. We have current and past SPWLA international board members joining our events. The Houston Chapter hosts a networking event every last Thursday of the month at the same time and location. 5:07–8:08 pm at Cedar Creek Bar & Grill 1034 W 20th St, Houston, Texas, US, 77008. More details are available on the Houston Chapter’s website: <https://www.spwla-houston.org/> and the Houston Chapter LinkedIn profile: <https://www.linkedin.com/company/houston-chapter-of-spwla/>.

**12 October 2023**—Houston Chapter Westside hosted a lunch seminar titled “A New Workflow for the Assessment of Fluid Components and Pore Volumes From 2D NMR Measurements in Formations With Complex Mineralogy and. Pore Structure” presented by Artur Posenato Garcia (Chevron), winner of the SPWLA Distinguished Speakers for the year 2023–2024. We thank Geolog for allowing the Houston Chapter to use the office for the event.

**31 October 2023**—Lunch Seminar Northside: Petrophysics Intelligence and Automation – Evolution of Casedhole Nuclear Surveillance Logging Through Time” was presented by Dale Fitz.

**Upcoming Events**

**8 December 2023**—The SPWLA Houston Chapter invites you to join us at the 2023 SPWLA Houston Chapter Technology Show. The showcase will be held at Hyatt Regency Houston Westside, Texas Ball Room I-IV, 13210 Katy Fwy, Houston, TX 77079, on Friday, December 8, from 7:45 am–3:00 pm (7:00 am for exhibitors). This event presents a great chance for the attendees to learn about the latest innovations and technology advancements in solutions for formation evaluation and data interpretation and beyond. Meanwhile, the full-day event will also provide an opportunity for the exhibitors’ organizations to exhibit their products and services to the formation evaluation community and network in the spirit of the upcoming holidays. Details about registration and exhibition can be found at <https://spwla-houston.org/event-detail.php?id=15>. Early bird MEMBER special only UNTIL Tuesday, October 31.



Register TODAY! EARLY BIRD REGISTRATION SPECIAL until October 31!  
 \$25 for general registration (\$50 after October 31)  
 \$750 for vendor with one table (\$1,200 after October 31)  
 \$1,200 for vendor with dual table (\$2,200 after October 31)



Artur Posenato Garcia made a presentation about 2D NMR measurements applied in formations with complex mineralogy and pore structure. Artur is the winner of the SPWLA Distinguished Speakers for the year 2023–2024. SPWLA Houston Chapter VP Westside Neal Cameron greeted the speaker.



The success of a fantastic networking event hosted by the SPWLA Houston Chapter on August 31.



Houston Chapter networking time on September 23.

We warmly invite the entire SPWLA community to join us at our monthly networking events, which take place on the last Thursday of each month. The Houston Chapter hosts networking events every month at the same time and location. Don't miss this opportunity to connect with others in the SPWLA community. We look forward to seeing you there!



Bernd Ruehlicke, the President of the Houston Chapter of SPWLA, warmly greeted the guests during the networking event.

**SPWLA Houston Chapter Board for 2022–2024**



Bernd Ruehlicke  
PRESIDENT  
[president@spwla-houston.org](mailto:president@spwla-houston.org)



Amer Hanif  
VICE-PRESIDENT NORTH SIDE  
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Warm and insightful SPWLA social events. We extend a warm welcome to the SPWLA international board members who joined the event on September 23.



## INDIA CHAPTER

**S. K. Singhal Takes Over as President of the SPWLA India Chapter**

Shri S. K. Singhal, executive director and chief logging services (ONGC), has taken over as President of the SPWLA India Chapter. Shri Singhal, a versatile logging engineer now technocrat having vast experience and expertise in all facets of petrophysical data acquisition, resource planning and management, corporate administration, etc., replaces Shri M K Tiwari at the helm. His excellent organizational skills and attention to microdetails were demonstrated during the successful conduct of the 5th SPWLA India Symposium 2023. The introduction of student engagement programs across the nation as part of the event was a testimony to his penchant for knowledge sharing and broadening vistas.

The new EC body SPWLA India Chapter for 2023–24:

EC Members (2023–24)	
S K Singhal	President
Rakesh Guru	VP (Membership)
Yogesh Bahukhandi	VP (Research)
Joseph Zacharia	VP (Technology)
Kumar Saurabh	VP (Tech Evaluation)
Sanjay Vohra	VP (Education)
MAA Srinivas	VP (Publications)
Vivek Garg	Secretary
Rajnish Kumar	Treasurer
R S Chauhan	Jt. Secretary (Membership)
Neeta Sinha	Jt. Secretary (Membership)
Arpit Singhal	Jt. Secretary (Technology)
Naman Wadhwa	Jt. Secretary (Technology)
Sonia Malik	Jt. Secretary (Education)
Kuldeep Singh	Jt. Secretary (Education)
C S Sajith	Jt. Secretary (Publications)
Jadhav Viresh Kumar	Jt. Secretary (Publications)

**Technical Session Conducted in Q1 FY 2023-24**

SPWLA India Chapter organized a Technical Session on August 4, 2023. Two technical presentations were presented during the proceedings. A brief write-up of the technical presentations and author details are mentioned below:

**Navigating the Low Carbon Energy Future: The Role of Petro-physicists by Ilius Mondal (ONGC Mumbai):** The study delves deeply into the pivotal significance of petrophysics in the context of transitioning towards a low-carbon energy future. It meticulously examines the multifaceted role of petrophysics in influencing critical aspects, including carbon capture, renewable energy potential, critical mineral prospecting, and nuclear waste management. By delving into these dimensions, the study elucidates the intricate interplay between petrophysical insights and the pursuit of sustainable and environmentally responsible practices. The research underscores the indispensability of petrophysics as a foundational framework, fostering a comprehensive understanding of subsurface processes and their implications for fostering a greener and more resilient future.

**State-of-Art Logging Technologies Provide Comprehensive Reservoir Evaluation Behind Casing in the Absence of Openhole Data: Case Study From Western Offshore India by Harsh Vardhan (Baker Hughes):** A case study of careful planning of an optimal and suitable design of the log suite to meet the requirements in the absence of any openhole log data was presented. In the absence of any openhole log data, an initiative was taken out to explore technological options for estimating the saturations in a low-porosity formation in the casedhole section of the well for the required workover. Geochemical logs were recorded for mineralogy and lithology characterization of the formation by elemental analysis for accurate well-saturation estimations. A casedhole neutron log was recorded for evaluation of neutron porosity. Four component dipole waveform data were used to generate images of geological structures near the well and calculate the acoustic properties of the formation. Multidetector pulsed-neutron logging data provided current formation saturation, which helped in recompleting the well in hydrocarbon-bearing zones.



Speakers during their presentations.



EC Members 2023–2024.

**JAPAN (JFES) CHAPTER**

**The 28th JFES Annual Symposium**

The 28th Annual Symposium was held in person with a streaming event on September 13–14, 2023 (ahead of the Annual Symposium, HAHZ SIG WS was held at the same place). We welcomed over 120 audience members, nine invited talks, and a keynote speech from the SPWLA President, Jennifer Market, for a series of technical presentations, which were followed by lively discussions. We also celebrated the success of the symposium at a networking dinner at a nearby venue. The following presenters won the Best Presentation Award and Student Award:

**Best Presentation Award:**

*Dissolution Behaviors of Naturally Altered Basalts in a Brine at 100°C for In-Situ CO<sub>2</sub> Mineralization*

Jiajie Wang (Tohoku University), Noriaki Watanabe (Tohoku University), Masahiko Yagi (JAPEx), Tetsuya Tamagawa (JAPEx), Hitomi Hirano (JAPEx)

**Student Award:**

*Permeability Enhancement and Void Formation in Peridotite by Dissolution of Olivine Using Chelating Agents*

Luis Salalá (Tohoku University), Noriaki Watanabe (Tohoku University), Jiajie Wang (Tohoku University), Atsushi Okamoto (Tohoku University), Noriyoshi Tsuchiya (Tohoku University)

Their remarkable work stood out among a highly competitive pool of submissions. The judges were highly impressed by the paper’s rigorous methodology, comprehensive analysis, and potential to reshape the future of petrophysics and CCS/CCUS perspective in the world.



Group photo.

JFES was founded in 1994. We will reach the 30-year mark of activities in 2024.

**2023–2025 JFES Board Members**

The 2023–2025 JFES Board Members were approved at the 28th JFES Annual Symposium by the attendees. The following board members were elected. Yuki Maehara was also elected Regional Director, Asia Pacific/Australia of SPWLA

President:	Masatoshi Nishi	INPEX
Vice President:	Yuki Maehara	slb
VP-Tech:	Yoshinori Sanada	TAISEI
VP-PR:	Tomomi Ninomiya	slb
VP-IT:	Kengo Tsuzuki	JX
Secretary:	Kentaro Hasebe	INPEX
Treasure:	Akira Fujimoto	JOGMEC



Day 1, on presentation at JOGMEC TRC.

## KAUST STUDENT CHAPTER

## Recent Events

**26 September 2023**—The KAUST SPWLA Student Chapter was privileged to host Simone Di Santo from SLB Dhahran Carbonate Research Center. He visited the state-of-the-art ANPERC labs, had meetings with students and faculty, and presented his knowledge-sharing seminar on dielectric processing with forward modeling improved geosteering and formation evaluation. This seminar was the first in a series of educational seminars proudly organized by the KAUST SPWLA Student Chapter. Stay tuned for future events.



Directors:		
	Chisato Konishi	OYO
	Taisuke Mizunaga	MOECO
	Takayuki Wada	WJEC
	Takeaki Otani	JAPEX
	Kenji Osawa	GERD
	Tsuyoki Fujii	GSC
	Yasuhiro Yamada	Kyushu-U.
	Lindan Xia	slb
	Yuri Kanai	slb
	Takashi Kuratomi	JAPEX
	Kian Wei Tan	Halliburton
	Machiko Tamaki	JOE
	Moe Kyaw	JAMSTEC
	Hiroki Goto	AIST

## Upcoming Events

**6 December 2023—122nd JFES Chapter Meeting:** We are pleased to announce that the forthcoming 122nd JFES Chapter Meeting will be held on December 6 with the details following. We encourage you all to peruse the program below and register your attendance from the link that will be provided later. This event is designed as a hybrid (JAPEX HQ and online).

Date and Time: December 6, 15:30–17:30 (JST)

Venue: The meeting room at JAPEX HQ

Online Participation: The access link will be sent to registrants.

## Presenter 1

**Title:** “Benefits and Challenges of DAS in Geothermal Areas: Development of New Exploration Methods”

**Speaker:** Mr. N. Aoki (JGI)

**Language:** Japanese

## Presenter 2

**Title:** “Importance of Stress Evaluation in CCS (tentative)”

**Speaker:** K. Kashihara (JAPEX)

**Language:** Japanese



(From left to right) Samuel Fontalvo (President), Simone Di Santo (invited speaker), Maria Camila Lopez (Secretary), and Mohammad Taufik (Treasurer). Photo taken on the knowledge-sharing session organized by the KAUST SPWLA Student Chapter in KAUST, Kingdom of Saudi Arabia.



Knowledge-sharing session organized by the KAUST SPWLA Student Chapter in KAUST, Kingdom of Saudi Arabia. Standing from left to right are Samuel Fontalvo (President of the KAUST SPWLA Student Chapter) and Simone Di Santo (invited speaker).

### SPWLA-KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS (KFUPM)

#### General News

The general meeting took place on August 30 to discuss upcoming events and encourage students to register for SPWLA membership through a campaign. Planning for a field trip, boot camp, and seminars during the current term was discussed.

#### Recent Events

**Seminars:** Several seminars have been presented by the SPWLA-KFUPM Chapter, including:

**2 March 2023—Revolutionizing Formation Evaluation With Machine Learning:** Mr. Yacine Meridji, senior petrophysicist (Saudi Aramco), presented a talk on the ability of machine-learning techniques to solve such problems and provide solutions in formation evaluation for some exploration wells, development wells, and data legacy.



Mr. Yacine Meridji.



**23 March 2023—The Influence of Wettability and Capillary Pressure on Underground CO<sub>2</sub> Storage:** Speaker Dr. Ahmed Al-Yaseri, research engineer (Center for Integrated Petroleum Research (CIPR) in KFUPM), explored the role of wettability and capillary pressure in underground CO<sub>2</sub> storage and their impact on structural and residual trapping during geosequestration. The presentation introduces structural and residual trapping as the two important storage mechanisms and their association with capillary forces, assuming the forces hold the buoyant CO<sub>2</sub> back. These capillary forces are a function of CO<sub>2</sub>-brine interfacial tension ( $\gamma$ ) and the contact angle between CO<sub>2</sub>, brine, and the rock surface. Therefore, precise characterization of the wettability of the CO<sub>2</sub>-brine-rock system and CO<sub>2</sub>-brine interfacial tension at reservoir conditions is essential as they influence the capillary sealing efficiency of caprocks, which, in turn, impacts the structural and residual trapping during CO<sub>2</sub> geosequestration.



**30 March 2023—Reservoir Fluid Geodynamics Applications on Reservoir Connectivity Assessment and Flow Assurance:** Speaker Mr. Endurance O. Ighodalo, senior petrophysicist (Saudi Aramco), presented his work about validating the FHZ-EOS model, establishing fluid typing, correlation, and connectivity across layers. The study confirmed hydrocarbon continuity in undrilled locations and provided valuable insights for improved reservoir connectivity assessment and fluid typing.



Mr. Endurance O. Ighodalo.



**8 May 2023—LWD Lateralog vs. Electromagnetic Propagation Measurement: Which Is Telling the True Resistivity?**  
 Speaker Mr. Ida Bagus Gede Hermawan, senior petroleum engineer/petrophysicist (Saudi Aramco), discussed the electromagnetic propagation (EMP) and LWD laterolog measurements, introducing the factors that affected both tools and showing comparisons between the two measurements via showing case studies and examples.

**Paper Contest**

The SPWLA KFUPM Chapter participated in a paper contest organized by the SPWLA Saudi Arabia Chapter (SPWLA SAC) and sponsored by Baker Hughes. Participants in this competition represented all academic level undergraduate, master's, and PhD. The chapter also took part in the undergraduate division of the international paper competition. Notably, the winner of the undergraduate division for both the national and international competitions came from our undergraduate level. Also, the winner of the local contest for the PhD division came from KFUPM.



Mr. Ida Bagus Gede Hermawan.



**28 September 2023—Football Cup:** We came together at the CPG Family Gathering for a day filled with unity, enjoyment, and cherished moments. This remarkable event was made possible through a collaborative effort involving the IADC KFUPM Student Chapter, SPE KFUPM Student Chapter, ARMA KFUPM, and DGS-KFUPM. The festivities included exhilarating Football Cup matches, epic tug-of-war competitions, and the highly anticipated raffle draw, which left attendees with precious gifts and enduring memories.

**16 October 2023—Registration Campaign:** This event was held to encourage students to register for SPWLA membership. Mr. Jinhong Chen, research science consultant (Aramco), spoke about “Core Analysis of Unconventional Source Rock Shales With a Focus on NMR Methods.”



NFES Technical meeting, September 6, 2023, in Stavanger. Venkat Jambunathan, NFES VP Program, presents the NFES ice bear in gratitude for a well-attended and delivered presentation by Knut Arne Birkedal (left on the left-side picture) and Harish B. Dattir (right on the right-side picture).

**Norwegian Formation Evaluation Society (NFES)**

**General News**

Month	Title	Presenter
Jan 23	Content and distribution matrices - one path to consistent and efficient handling of uncertainty in formation evaluation	Egil Westand
Feb 23	Integrated approach to leak detection using high definition electromagnetic technology, production logging and ultrasonic logs - a case study	Adenij Adedamola
Mar 23	Experience with CO <sub>2</sub> on NCS: Drill pipe conveyed ultrasonic casing-hole logging	Bystein Meling
Apr 23	4D Radar Imaging of wellbore Geometry while drilling	Inge Rye
May 23	Analytical Models for predicting the Apparent resistivity factor and resistivity index at Overburden conditions	Meysem Nourani
Jun 23	Sonoac LWD: Real time backhole VSP while drilling	Neil Russell
Sep 23	A method to identify vertical reservoir pressure communication by combining borehole sonic and high-frequency electrical imaging data	Knut Arne Birkedal Harish B. Dattir
Oct 23	NMR Fluid Substitution - Pursuing the Fundamental Controlling Parameters of a Low-Mobility Reservoir	Søren Amdt Christiansen
Nov 23	NFES Full Day Seminar	

Affiliation	Attendance (incl speaker) at the event	Attendance (incl speaker) via Teams	Attendance (incl speaker) Total
Aker BP	14	3	17
Hullburton	18	7	25
Baker Hughes	13	3	16
Well ID	26	4	30
Stratum Reservoir	26	1	27
Schlumberger	21	3	24
Aker BP S&B	18	7	25
Aker BP	20	11	31

**Recent Events**

**6 September 2023—Monthly Technical Meeting:** We hosted two presenters who provided a very interesting talk with the following title: “A Method to Identify Vertical Reservoir Pressure Communication by Combining Borehole Sonic and High-Frequency Electrical Imaging Data.”

**4 October 2023—**We hosted a very interesting talk given by Søren Amdt Christiansen (Aker BP) with the following title: “NMR Fluid Substitution – Pursuing the Fundamental Controlling Parameters of a Low-Mobility Reservoir.”



NFES Technical meeting, October 4, 2023, in Stavanger. Venkat Jambunathan, NFES VP Program, presents the NFES ice bear in gratitude for a well-attended and delivered presentation by Søren Amdt Christiansen (to the left)

**Upcoming Events**

**1 November 2023—NFES Full-Day Formation Evaluation Seminar 2023:** Please follow us for further information on [nfes.org](https://www.nfes.org) and our [LinkedIn](#) profile for more details. The Norwegian Formation Evaluation Society, a chapter of SPWLA, is pleased to invite you to a non-commercial, full-day formation evaluation seminar to be held at Solastranden Gård on Wednesday, November 1. We kindly ask for your participation and financial support to make the event a success.



Seminar duration: November 1, 2023, 09:00 am–16:00 pm. Coffee/tee, lunch, and refreshments (after lunch)

**PDDA SIG**

**SPWLA PDDA Topical ML Conference**

The 2023 SPWLA Topical Machine-Learning Conference was a great success. This conference featured a hybrid format, both in person and online, and was hosted at the Halliburton North Belt Campus in Houston over 1.5 days from October 10 to 11. Attendees were pleased with how well the hybrid format worked. There’s a continued strong interest in #datadriven petrophysics and #machinelearning applications.

This dedicated Topical Machine-Learning Conference successfully brought together experts and novices from both industry and academia to explore data-driven formation evaluation. We extend our heartfelt thanks to the organizers of the event, including PDDA SIG (Hyungjoo Lee from Helmerich & Payne, Lei Fu from Aramco Service Company, Wen Pan from Shell, Jaehyuk Lee from Baker Hughes, Michael Ashby from Devon Energy, and Yanxiang Yu from Amazon), and Fransiska Goenawan from Halliburton. We would also like to express our gratitude to all the speakers and participants, as well as to Halliburton, for generously supporting this second hybrid topical conference at their campus. Your ideas, suggestions, and comments will be considered as we plan for next year’s events.

Thank you for making the 2023 SPWLA Topical Machine-Learning Conference a resounding success. We look forward to future endeavors and collaborations in this dynamic field.

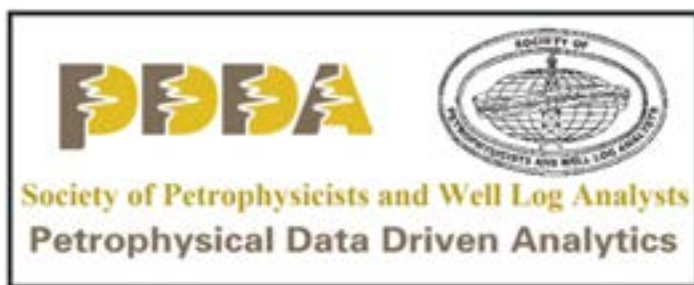


The 2023 SPWLA Topical Machine Learning Conference. Can you spot Siska here?

**Sponsorship Opportunities**

There are multiple interesting sponsorship opportunities announced there. Contact our board in case you have an interesting data set or a presentation you would like to share or become a sponsor for the PDDA SIG or our annual machine-learning competition.

**Please stay tuned and check us out for upcoming news!  
As always, feel free to contact any of the board members  
if you have any questions or comments using our contacts  
included below.**



**More details are available on the PDDA SIG website**  
[https://www.spwla.org/SPWLA/Chapters\\_SIGs/SIGs/PDDA/PDDA.aspx](https://www.spwla.org/SPWLA/Chapters_SIGs/SIGs/PDDA/PDDA.aspx)  
**and the PDDA SIG LinkedIn profile**  
<https://www.linkedin.com/groups/13605420>  
**Stay always tuned!**

**Permian Basin**

**Recent Events**

**22 August 2023**—Our last technical talk was August 22 with Josh Dark and Nuny Rincones (ConocoPhillip) presented “Optimizing Field Development Across Northern Delaware Basin for Wolfcamp C.”



Here is a photo of our board members and friends after last month's talk:



(Left to right) Josh Dark and Nuny Rincones, Christopher Smith (Advanced Hydrocarbon Stratigraphy), Vice President, Sebastian Ramiro-Ramirez (Diamondback Energy), Treasurer, Veronica Montoya (Axiom Petrophysics LLC), President. **Missing:** Islam Mitwally (FractureID), Social Media Communications, and Jennifer Reeves (Applied Petroleum Technology (APT)), Secretary.

**24 October 2023**—Zoya Heidari presented “Advanced Formation Evaluation of Organic-Rich Mudrocks, Honoring Rock Fabric and Geochemistry.”

### SAUDI ARABIA CHAPTER

#### Recent Events

**30 August 2023**—SPWLA SAC hosted a technical lunch and learn session focusing on “Innovative Techniques for Calibrating Geomechanical Models Using Data From MicroFrac Tests.” Geomechanics plays a pivotal role in assessing formation integrity throughout well construction, completion, and production, with example applications in evaluating borehole stability and sanding, fracture design, and storage of gases, including CO<sub>2</sub>. In this knowledge-sharing session, Prajit Chakrabarti, a geomechanics domain lead (Baker Hughes Saudi Arabia), delved into the functionalities and measurements of MicroFrac tests, such as minimum horizontal stress, with case studies illustrating the importance of downhole MicroFrac measurements in geomechanical modeling for various engineering and geoscience applications. This event, held at Aramco EXPEC-1, attracted more than 40 participants, including young professionals, as well as rock geomechanics subject matter experts, with insightful discussions. Lunch was sponsored by Baker Hughes Saudi Arabia.



The SPWLA SAC lunch and learn technical meeting was held on August 30, 2023.

#### Upcoming Events

**7–8 November 2023**—The 13th Topical Workshop by SPWLA SAC: “Carbon Capture and Storage (CCUS) in Saline Aquifers” will be held in Dhahran, Saudi Arabia. Carbon capture and storage (CCUS) in saline aquifers, a critical element in achieving net-zero emissions, plays a pivotal role in reducing greenhouse gas emissions. While it has become a common industry practice, significant technical challenges persist. Among these challenges is the selection and evaluation of optimal CCUS project sites. Furthermore, once a site is chosen, there is a need for a thorough characterization to ensure the permanent and maximum storage capacity of the injected CO<sub>2</sub> within the target formation. Continuous monitoring of the injected CO<sub>2</sub> is essential for verifying the achievement of CCUS objectives. Join us at the 13th SPWLA SAC Topical Workshop in Dhahran, Saudi Arabia, as we explore these important aspects of CCUS in saline aquifers.

### TULSA CHAPTER

In October, the Tulsa Chapter held its first meeting of the year as part of its plan of “occasional” gatherings that meet the needs of the few remaining members in the area. Ray Sorenson led the group down memory lane with a presentation on “The Early Years of Formation Evaluation.” The chapter intends to hold several more meetings during the year that will focus on presentations by local members on historical aspects of petrophysics.

UNIVERSITAS PERTAMINA STUDENT CHAPTER

General News

The Integration Cabinet has entered its third month of management. The SPWLA UPer SC Integration Cabinet has carried out several activities. It is hoped that the activities that have been carried out can help the SPWLA UPer SC management develop.

IPW (International Petrowell Event), our annual event, is still in the preparation stage. We're committed to growing and improving our officers' skills in order to prepare them to face a new phase in their lives. For one period, the SPWLA Universitas Pertamina Student Chapter will conduct interesting work programs that align with our purpose. To gain more information, please follow our official Instagram account (@spwla.upsc).

Recent Events

**14 September 2023—SPWLA Gathering Vol.A:** A fun gathering that created memorable experiences and fostered social connections. This event was held at Taman Langsat and attended by the SPWLA Cabinet.



SPWLA Gathering Vol.A at Taman Langsat.

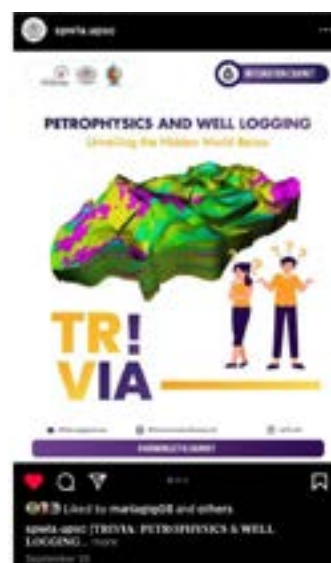
**15 September 2023—Petrowell Gathering:** After the election of the president for 2023/2024, we prepared a virtual event at the Universitas Pertamina. Naufal Athallah, former president of our Propagation Cabinet, helped us learn how to strengthen social bonds and share our common interests. We hope that every applicant who enrolls in this organization can maintain and develop their skills to face another journey.



Petrowell gathering on the official Instagram account of SPWLA UPer SC.

**30 September 2023—Trivia: Petrophysics and Well Logging:**

Content from Educational Affairs presents facts about petrophysics, a branch of geophysics and geology that deals with the study of rock properties and their interactions with fluids like oil and gas. This content will be announced every week and began in late September on our official Instagram account. The goal is to provide insight and teach many aspects of the energy industry that are essential for understanding subsurface reservoirs and making informed decisions about resource extraction.



Trivia: Petrophysics and Well Logging on the official Instagram account of SPWLA UPer SC.

UNIVERSITY OF HOUSTON STUDENT CHAPTER

Officer Team Election 2023–2024

As the new academic year commenced, it was time to transfer the roles. Elections were held on September 8 to formulate a new team of officers to ensure things ran smoothly.



First General Meeting

The new officers were introduced at the First General Meeting on September 22. This included a talk by Dr. Mike Myers (associate professor of petroleum engineering at the University of Houston) about his experience as a petrophysicist over the years and why it is important. It was a successful meet-and-greet event!



First General Meeting.

Recent Activities

**13 October 2023**—To provide further learning opportunities, SPWLA-UH organizes training sessions for students. These include help sessions, where students can interact and learn about what their fellow students are working on and enhance their petrophysical skills. On October 13, a social event was hosted to celebrate Halloween, providing a fun opportunity for the students.



**19, 20, and 27 October 2023**—Two help sessions were hosted on October 19 and 20 (petrophysics and well logging), which were a great opportunity for the students to learn more and enhance their petrophysical skills. Nu-Tech hosted a training session on October 27, providing an introduction to its database. Nu-Tech also agreed to provide academic licenses to their platform.

SPWLA UIS STUDENT CHAPTER (COLOMBIA)



**Board of Directors**

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- **Vice president:** Julian David Anaya F.  
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- **Fiscal:** Stefany Gabriela Peñaranda G.  
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- **Secretary:** Anngy Daniela Román O.  
Email: secretaria.spwlouis@gmail.com
  
- **Treasurer:** Lizeth Vanessa Blanco D.  
Email: contador.spwlouis@gmail.com

**Recent Events**

**24 June–1 July 2023—Field Trip – School Drill:** From June 24 to July 1, a field trip to the drill school located in Villavicencio, Meta, Colombia was carried out, in which 25 undergraduate students from the petroleum school participated, along with a teacher from the school. This activity lasted a week, during which three certified courses were offered. The students learned about drilling equipment and were accompanied by different engineers who explained the operation of each of the equipment.



Members of SPWLA UIS at the Drill School in Villavicencio, Meta, Colombia.



Members of SPWLA UIS at the Drill School in Villavicencio, Meta, Colombia.

**Elections for New Board of Directors**

**31 August 2023—**The elections for the new board of directors were held, where the chapter members chose the people who would occupy the board positions for the next year. The new members of the board of directors are:

- President:** Karen Julieth Rojas Orduz
- Vice President:** Julian David Anaya Florez
- Attorney:** Stefany Gabriela Peñaranda Gonzales
- Secretary:** Anngy Daniela Román Ortega
- Treasurer:** Lizeth Vanessa Blanco Dueñas



Members of SPWLA UIS in the booth at the first international week of subsurface energy resources.



Members of SPWLA UIS.

### International Week of Subsoil Energy Resources

**11–16 September 2023**—The first International Week of Underground Energy Resources was held from September 11 to 16 and organized by the School of Petroleum Engineering of the Universidad Industrial de Santander. The SPWLA UIS Student Chapter supported the logistics of this event and also had a booth where students from the School of Petroleum Engineering were informed about the topics that SPWLA works on, the way to acquire membership, and invited them to join this chapter. There was also a space to connect with the graduates of the School of Petroleum, who were introduced to some members of SPWLA UIS and were told a little about the chapter, the topics that are worked on, and the work that has been done. Finally, a playful activity was carried out with the graduates.



Activity with petroleum school graduates.

**EIP Entrepreneurs Challenge**

During the International Week of Underground Energy Resources, several members of the chapter participated in the EIP Entrepreneurship Challenge in three categories. The group that participated in the “Circular Economy in the Hydrocarbon Industry” category took first place, and the other two teams that participated in the “Education and Communication for Energy Transition” and “Energy Coexistence” categories took second place.



First place winners of the category “Circular Economy in the Hydrocarbon Industry.”



Second place winners of the category “Education and Communication for Energy Transition.”



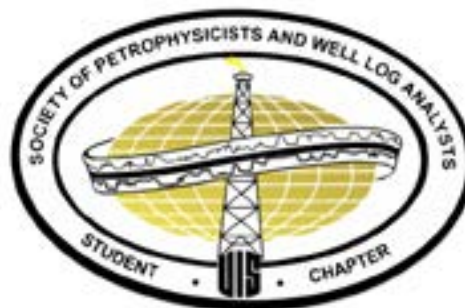
Second place winners of the category “Energy Coexistence.”

**Celebration of Love and Friendship**

**October 2023**—At the beginning of October, the members of the SPWLA UIS chapter gathered to celebrate a day of love and friendship, where there was sharing, gift-giving, and other activities to strengthen friendship and trust.



Love and Friendship SPWLA UIS.



**SPWLA UIS/ Social Networks**

**LinkedIn:**

<https://www.linkedin.com/company/spwla-uis-student-chapter/>

**Instagram:**

<https://www.instagram.com/spwlauiis/?hl=es-la>

**YouTube:**

<https://www.youtube.com/c/SPWLAUIS>

**Facebook:**

<https://es-la.facebook.com/SPWLAUIS/>

## Welcome New Members – August 15, 2023 – October 15, 2023

**Abdollahian, Amirhossein**, University of Electronic Science and Technology of China, Chengdu, China  
**Adasme, Bryan**, Universidad De Chile, Santiago, Metropolitana, Chile  
**Akcay, Caner**, Middle East Technical University, Ankara, Turkey  
**Almuawa, Ali**, KFUPM, Al Hasa, East Province, Saudi Arabia  
**Binti Japperi, Nur Shuhadah**, University of Aberdeen, Aberdeen, United Kingdom  
**Chaparro, Diana**, Weatherford, Bogota, Colombia  
**Corcoran, Joel**, Goel EP Ltd., Whitby, North Yorkshire, United Kingdom  
**Cruz, Uriel**, Baker Hughes, Ciudad Del Carmen, Campeche, Mexico  
**Delgado, Paola**, SLB, Buenos Aires, Argentina  
**Deng, Tiannan**, Sichuan University, Chengdu, Sichuan, China  
**Domnisse, Robin**, University of Texas at Austin, Austin, TX, United States  
**Freitas, Ricardo**, Chevron, Midland, TX, United States  
**Fults, Robin**, Dominion Energy, Salt Lake City, UT, United States  
**Ginn, Christopher**, Oxy, Tomball, TX, United States  
**Godoy, Elizabeth**, SLB, Cambridge, MA, United States  
**Goin, Elyse**, Best Core Services, Bakersfield, CA, United States  
**Ke, Yuxin**, Yangtze University, Jingzhou, China  
**Kumar, Nishant**, Halliburton, Kuala Lumpur, Malaysia  
**Liu, Yongzan**, Schlumberger-Doll Research, Cambridge, MA, United States  
**Meng, Fan**, Southwest Petroleum University, Chengdu, Xindu, China  
**Morcote, Anyela**, Pologas, Houston, TX, United States  
**Naufal, Aulia**, Imperial College London, East Jakarta, Indonesia  
**Retzius, Maya**, NTNU, Stavanger, Rogaland, Norway  
**Shi, Yin**, SLB, Kuala Lumpur, Malaysia  
**Teixeira De Gouvêa, Rodrigo Cé**, Universidade De São Paulo, São Paulo, Brazil  
**Dan, Wei**, CNOOC RI, Beijing, Chaoyang, China



