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NEWSLETTER

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conroe-2023/

64th Annual Symposium

Society of Petrophysicists and Well Log Analysts
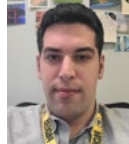
June 10-14, 2023
Conroe, TX

INSIDE THIS EDITION

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.

CALENDAR OF EVENTS

March 6–9, 2023
Intermediate and Advanced NMR Interpretations
Instructor: Brian Stambaugh
Online Training Webinar
www.spwla.org

May 4, 2023
Formation Testing SIG Meeting
Borehole Acoustics: The Road Ahead
Houston, TX
Formation Testing SIG Webpage

June 10–14, 2023
SPWLA 64th Annual Symposium
Margaritaville Lake Resort
Lake Conroe, TX, USA
www.spwla.org

September 13–14, 2023
The 28th Formation Evaluation Symposium of Japan
JOGMEC-TRC
Chiba, Japan
www.spwla-jfes.org

About the Cover

Lake Conroe is the site of the SPWLA 64th Annual Symposium, kicking off on June 10. Register today to learn about all the latest advances in petrophysics, mingle with colleagues, and enjoy some Texas hospitality.

Tegwyn JP Perkins
2022–2023
SPWLA President

Hello, and welcome to my fifth column as SPWLA President for the *SPWLA Today* newsletter.

First, here is some exciting news! We can now confirm that the American Rock Mechanics Association (ARMA) and SPWLA have entered into a non-exclusive agreement that will enable professional collaboration and participation in joint opportunities to promote rock mechanics and petrophysics to benefit members of both organizations. More information will be published on the website and LinkedIn and in the next edition of *SPWLA Today*.

When I wrote my last article, authors had just been notified as to whether their abstracts had been accepted for the annual symposium or not. Now, a full technical program has been published on SPWLAworld.org, and a slate of excellent workshops has been collated for the weekend immediately prior to the symposium. I'd like to thank VP Technology, **Iulian Hulea,** and co-chair, **Robert (Bob) Gales**, for their dedication to the technical arrangements for the society's annual showpiece.

In the last month, we have opened the call for abstracts for the International Student Paper Contest that will be held the Sunday before the symposium commences. Students that are part of a student chapter will have to compete at the local level before potentially being submitted to the international event. However, if students are unaffiliated with a student chapter, then they can enter directly. Abstracts can be submitted through this link: SPWLAworld.org.

I need to say something about volunteering. It's March, and that can mean only one thing! It's the SPWLA International Board of Directors elections. All members who have paid their annual dues by February 1 are entitled to vote, and I warmly encourage everyone to accept this privilege. The slate of nominees for the elections is collated by the Nominations Committee and led by the immediate Past President. This year that is **Katerina Yared**. You should have received both the nominees' biographies and position statements and your electronic voting form by now. Please vote.

Whilst I'm on this subject, I want to thank everyone who has ever volunteered for any position within the SPWLA. All positions, whether it's on the board or one of the many committees, chapter, and special interest group boards, are volunteer positions. Members freely give their time and energy to work for the greater good of the society. **One word of warning**—for SPWLA to continue its educational works, we are heavily dependent on everyone committing to their roles—hence, I will caution anyone who puts their hand up to serve to ensure that they have the time to commit. I have been lucky in that respect. My management (the incomparable **Derek Crombie**) at Geoactive has been happy to contribute both my time and a travel budget whilst I have been a board member.

As a reminder to everyone, the **2023 SPWLA Symposium** will be held at **Margaritaville Lake Resort** in **Lake Conroe, Texas, USA,** on **June 10–14, 2023**, and will be hosted by the **SPWLA Houston Chapter**. As well as being a North American Regional Director, **Javier Miranda** is also the Chair of the Organizing Committee for SPWLA 2023. All committee chair positions have now been filled, but we are still looking for support positions. Please contact Javier at director-na1@spwla.org if you are interested in joining. Here is an aerial view of the 2023 symposium headquarters:

I look forward to seeing you in June at the symposium and in my column in May.

Cenedl heb iaith, cenedl heb gallon.
A nation without language is a nation without heart.

Kind regards,
Tegwyn JP Perkins
President 2022–2023
President@spwla.org

Stephanie Ellen Perry
2022–2023
Vice President Publications

Dear Colleagues,

Thank you for your continued interest, contributions, and inquiries into our community newsletter. We appreciate all your ideas and involvement. As always, we hope that the updates from and happenings in the chapters and the organization as a whole are helpful to the SPWLA's ongoing efforts and vision for 2023. I direct your attention to the column by the VP Finance and new content from the "The Bridge" section in this month's issue as great examples and a starting point for your reading. We also thank the current SPWLA President Elect for her contribution in this issue and thoughts that impact so many aspects of our community in the future. We hope you all remain engaged and look forward to hearing from you if you have an idea or news you'd like to share with us all.

Sincere regards,
Stephanie Perry

It is with great excitement that we can announce that the Brazil Chapter has won the bid to host the 2024 SPWLA Annual Symposium in Rio de Janeiro in June 2024, and the Dubai Chapter has won the bid to hold the 2025 symposium in Dubai. Both chapters put together excellent bids with very attractive proposals for locations, hotel amenities, field trips, and spouse and social events. We'd like to thank everyone involved for the work that went into preparing these bids – it isn't a small task. We'll publish the organizing committees in the next issue (as some positions are being finalized at the time of print).

Jennifer Market
2022–2023 President Elect

Why Rio de Janeiro?

Rio De Janeiro (and the Brazilian host chapter) were selected to host the SPWLA 65th Annual Logging Symposium in 2024, the year in which the Brazil Chapter celebrates 10 years of existence. It will be the first SPWLA international symposium held in Brazil. The Brazil Chapter has more than 100 local members, and the board comprises professionals from operating companies, service providers in the logging industry, and universities.

Throughout its existence, the SPWLA Brazil Chapter has organized more than 100 technical meetings to disseminate knowledge of petrophysics and formation evaluation for the oil and gas industry and geosciences. These meetings included the presentation of numerous Brazilian and foreign professionals working in the industry or doing research at universities. In 2015, they organized, together with three other associations, the first edition of the Brazilian Petroleum Conference. In 2022, they had the first event organized entirely by the Brazil Chapter, the Brazilian Meeting of Petrophysics of Mature Fields, held in a virtual format and included more than 200 participants with the sponsorship of nine companies.

The Brazil Chapter maintains close ties with the SPWLA Student Chapter of the Federal University of Rio de Janeiro, founded in 2016. The Student Chapter helped organize the Brazilian Meeting of Petrophysics in Campos Maduros and organizes their events alone or in conjunction with other chapters. Therefore, we will certainly be able to count on their help while organizing the international symposium.

In recent decades, Brazil has stood out as one of the major countries active in the oil and gas industry and one of the 10 largest oil producers worldwide. The discovery of the Campos Basin's turbidite reservoirs and the Santos Basin's presalt carbonates were responsible for countless technological advances in exploration and production, revolutionizing several areas of geosciences and engineering, especially concerning petrophysics and formation evaluation. In the onshore scenario, the return of production by large operators has fostered a new market of mature fields, providing the development of companies focused on this market and reinvigorating this area. Furthermore, the discoveries in Guyana open up new possibilities for exploration, making the Brazilian Equatorial Margin a new exploratory frontier. Notably, the Brazilian oil and gas industry stands out as one of the most prolific in the world.

Rio de Janeiro was chosen for its relevance in the oil and gas industry and its undeniable cultural and socio-environmental importance. Home to the headquarters of several operators and service providers in petrophysics and formation evaluation, Rio de Janeiro regularly hosts numerous events related to the oil and gas sector, such as the Rio Oil and Gas and the Brazilian Petroleum Conference. Furthermore, as the most prominent tourist destination in the entire southern hemisphere, Rio de Janeiro has hosted events of global proportions, such as the 2014 FIFA World Cup and the 2016 Olympics, giving the city a solid tourist infrastructure. In addition to its importance in the oil and gas sector and tourism, Rio de Janeiro was central in the discussions of the United Nations on the environment and climate, hosting the United Nations Conference on Environment and Development (ECO-92) and the United Nations Conference on Sustainable Development (Rio+20), attended by the leaders of the leading global economies.

Rio de Janeiro stands out as one of the most beautiful cities in the world, with a geography that combines forests, beaches, and the blue sea. Brazil's natural beauty permeates the city, and all tourist attractions are accessible via the subway system. Furthermore, being the capital of Brazil for almost 200 years, until 1960, the city exudes culture and has dozens of tourist attractions for all tastes. Furthermore, with an international airport and the fact that Brazil does not require visas from tourists from any other country, Rio de Janeiro is a highly accessible city for visitors worldwide. All these characteristics make Rio de Janeiro the ideal host for the 2024 SPWLA 65th Annual Logging Symposium.

Why Dubai?

Dubai is hyperconnected to the world and pro-business. It is a central hub for business and travel from Asia/Pacific, Europe, North America, and the subcontinent. It has an open and inclusive culture, embracing the customs of its diverse residents and visitors. It is a hub for the Middle East energy sector, along with its neighboring Emirate, Abu Dhabi. Visa restrictions are minimal, and it is well suited for an international conference.

The Dubai Chapter is a small but strong, long-lasting one, and together with neighboring chapters and the energetic support of the regional operators and service companies, it is well situated to host an excellent conference. Dubai is one of the top cities in the world for hosting conferences, and its many hotels and venues are ideally suited to holding a top-rate symposium. The field trips and partner events are plentiful (and you don't even have to enjoy sand for all of them!).

With plenty of time to prepare, the 2025 Dubai symposium will surely be one to remember!

Why The Change to Two Year Awards?

The decision to award two years in advance was made by the board of directors as a way forward for the future—by planning further in advance, it allows us to (1) get our symposia dates firmly on the calendars to minimize conflict with our sister societies (who sometimes compete with us for attendees) and (2) have more time to plan/organize the events. For those who have yet to be involved with the organization of one of our annual (or regional) conferences, there is an extensive amount of planning and activities that must fall into place in a strict timeline, and having more time to prepare helps level the load on the business office as well as the host chapter.

In Stavanger, at the leadership luncheon, there was much discussion around the tradition of hosting the conference alternately in North America and elsewhere. Nothing in the bylaws requires that this be so, and as we are becoming more successful in globalizing our society, it makes sense to hold more conferences in regions outside North America as it greatly increases the involvement of the local petrophysics community, many of whom could travel regionally but perhaps not globally. While we still strongly support having conferences in North America, we shouldn't shy away from having more than half of our meetings outside.

For those unfamiliar with the annual symposium bid process, the handbook is available upon request, but the essentials are:

- A local chapter (or chapters) expresses an interest in hosting the next annual conference (in this case, 2026).
- An organizing committee is formed, including local chapter members as well as the regional director
- A location is chosen (this doesn't have to be in the "home" of the chapter, e.g., the Aberdeen Chapter hosted in Edinburgh and the Norwegian Chapter hosted in Reykjavik).
- A bid book is compiled (there are templates shared with the chapters expressing an interest), which consists of
    - An overview of the location and why it would be a great place for a conference
    - Travel connectivity details (e.g., is it easy to get to from anywhere in the world, are visas hard to acquire, etc.)
    - Description of social events, partner activities, field trips, etc.
    - A quote from a hotel (or multiple hotels) detailing the pricing for the meeting rooms, catering, audio visual, etc.
    - Sponsorship indications from local/regional companies and universities
- The board reviews the bids (this has traditionally been in December, approximately 18 months before the conference but will now move to March, approximately 32 months before the conference. The bidding committees have the opportunity to address the board and "pitch" their bid and answer any questions.
- Approximately a fortnight after the bid review, the local chapters are notified of the outcome of their bid.
- The winners then begin to work in detail with the President-Elect and the business office to get more detailed quotes, sign contracts, make deposits, etc.
- In the run-up to the conference, the host chapter works extensively with the board and the business office to create a fantastic conference.
- We all meet at the symposium and toast the organizing team on the brilliant results of their work and have a splendid conference.
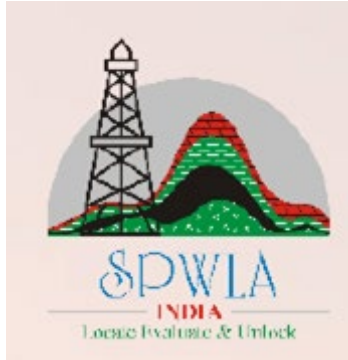
In addition to the annual symposia, don't forget about our top-notch regional conferences. Our next one is the 5th SPWLA India Symposium, to be held in Mumbai on 15–16 April and is shaping into a great event. The past India conferences have all been highly attended fruitful gatherings with great presentations and discussions on pertinent topics of the day. This year's event is no exception, with the theme of "Ideate, Innovate, Integrate – Petrophysics: The E&P Gateway from Discovery to Recovery and Beyond," enticing attendees from all phases of the energy cycle. Please attend in person, as it is sure to be an unforgettable event.

Jennifer Market
SPWLA President-Elect 2022–2023
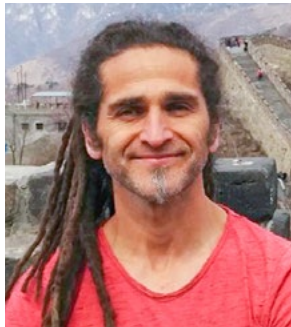
Iulian N. Hulea
2022–2023 Vice President
Technology

Dear Colleagues,

Greetings from your VP Technology! As we get closer to our yearly symposium, this is a good moment to share a brief overview of the activities leading up to it. A lot of effort goes into preparing a successful symposium with an attractive technical program, as highlighted by the timeline below!
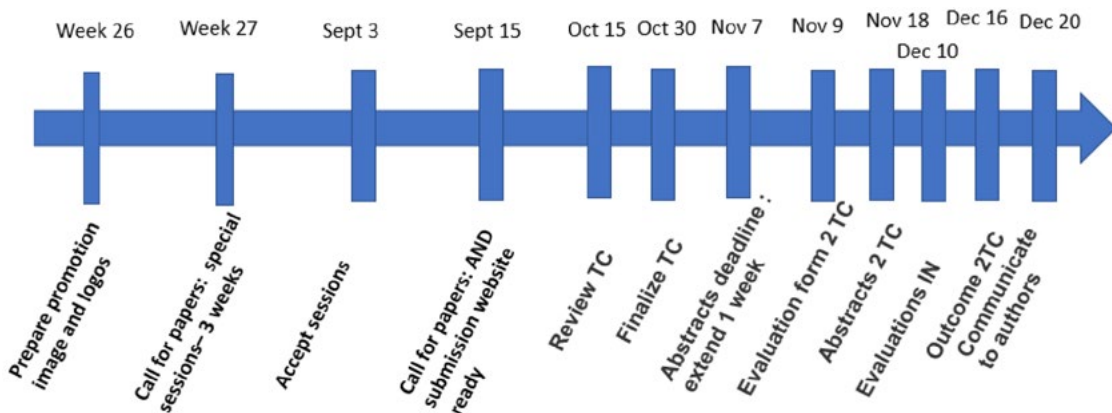

Fig. 1

The symposium preparation effort was kicked off with a Call for Special Sessions (see Fig. 1). This offers any member the opportunity to pitch a technical session focused on a technical topic or technology of particular interest to them and others. Following the Call for Special Sessions, we announced the Call for Abstracts on September 15 and received a total of 330 submissions!

During the abstract review process that followed, a group of dedicated volunteers came together to grade each abstract. I use this opportunity to thank and acknowledge each member of the "TC," the SPWLA Technical Committee, once more. Many thanks to **Adam Haecker, Alessandra Simone, Austin Boyd, Chicheng Xu, Chris Skelt, Don Clarke, Essi Kwabi, Giuseppe Galli, Harry Xie, Hendrik Rohler, Irada Yusufova, Javier Miranda, Joe Comisky, John Zhou, Kavita Agarwal, Kelly Skuce, Lalitha Venkataramanan, Lori Halton, Marco Pirrone, Marie Van Steene, Mark Ma, Marvin Rourke, Mathilde Luycx, Matthew G. Reppert, Michel Claverie, Nazanin Jahani, Sanaz Javid, Shelby Plitzuweit, Stephanie Perry, Tom Bradley, Zoya Heidari, Vanessa Mendoza, Sami Eyuboglu, Nelson Suarez Arcano, Matt Blyth, Mark Bacciarelli, Keith S. Boyle, Muhammad A. Gibrata, Maria Fernanda Gonzalez, Amer Hanif, and Robert Gales**. They volunteered their time and expertise over the end-of-the-year holidays to ensure an impartial and high-quality review process. Without their help, this step could not have been completed!

I would like to acknowledge, in particular, two individuals from the TC group: Mathilde Luycx and Hendrik Rohler. Mathilde's solution to embed the figures directly into the abstracts' PDFs made evaluating the abstracts easier; Hendrik was the first to complete his TC task and agreed to review even more! Thanks again for your hard work!

To normalize the abstract evaluation process, all TC reviewers followed standardized metrics based on five categories (see Fig. 2). Pr. Carlos Torres-Verdín, 2021–2022 VP Technology, and I first introduced and adopted this grading methodology last year during the 2022 Stavanger Symposium. Although no commitment has been made, I hope that these metrics are adopted and/or improved and that future SPWLA symposiums continue to leverage a unified methodology when evaluating abstracts. To make the abstract selection even more transparent in the future, I also would like to propose that standardized metrics (such as the ones in Fig. 2 or an altered version) are published by the future VP Technology at the time of abstract submissions.

The reviewing process was completed on schedule with a remarkable average of 11 reviews per abstract, each abstract having also been reviewed by Bob Gales and myself. I would also like to thank Bob for his contribution as a Technical Program Co-Chair. Thank you for making yourself available and having a constructive attitude!

Review number distribution
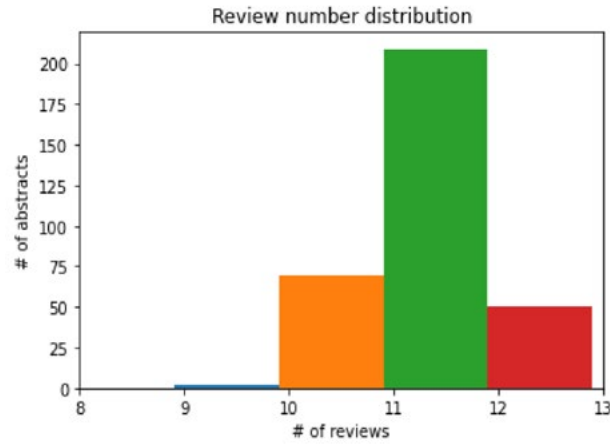
Fig. 2

Once the grades from all reviewers are submitted, deciding which papers should be accepted becomes a straightforward quantitative process. At a high level, the figure below shows the number of submissions, the accepted number of abstracts, as well as the percentage of abstracts accepted per technical session. Relative to the general themes, certain special sessions were highly successful in converting the submitted abstracts into an acceptance. This observation requires an important clarification: each abstract is evaluated in the same way, an abstract's theme does not influence its ranking, and special sessions' contributions do not follow a parallel evaluation process.
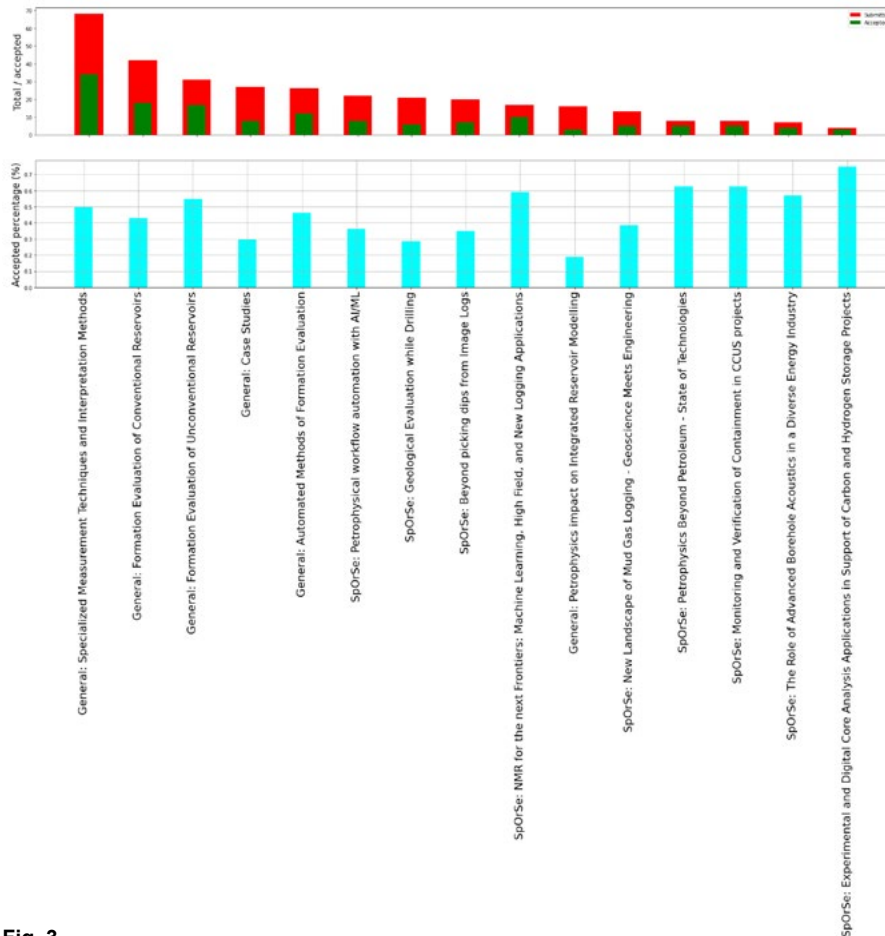
Fig. 3

Following the abstracts' selection, the Special Sessions listed below will be part of the Technical Program (see Fig. 3).

1. NMR for the Next Frontiers: Machine Learning, High Field, and New Logging Applications
2. Beyond Picking Dips From Image Logs
3. Petrophysical Workflow Automation with AI/ML
4. Geological Evaluation While Drilling
5. Monitoring and Verification of Containment in CCUS Projects
6. Petrophysics Beyond Petroleum – State of Technologies

Abstracts submitted to Special Sessions that did not meet the minimum of five papers accepted for oral presentations were incorporated into the general themes.

We are now focusing on the final steps of the symposium preparation process, which is aggregating the papers into scheduled technical sessions and reviewing the proposed workshops.

To conclude this column, I would like to remind all of you that our organization is as strong/weak as its volunteers. I encourage you to volunteer for the Technical Committee, any other committee, the special interests groups, as well as the local chapters; together, we are stronger!

Thank you again, and I am looking forward to meeting you in Texas in a few months!
Iulian

(Fig. 1) Call for Proposals of Special Sessions SPWLA ALS 2023.pdf
(Fig. 2) Abstract Evaluation Metric
(Fig. 3) https://www.spwlaworld.org/technical-program-2023/
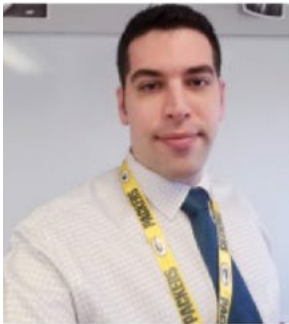
**Adam Haecker
2021–2023 VP Finance,
Secretary, and Administration**

Hello Intrepid Petrophysicists,

As I write this, the Kansas City Chiefs have just won the Super Bowl. I am sure all our international members around the world really had a lot of emotional investment in it. Congratulations to at least one of the Kelce brothers for taking home the championship. Things continue to run smoothly at the SPWLA. We are on track to have our first profitable year since the plague struck (Fig. 1). Not just breaking even but honestly putting money in the bank for a rainy day. Note we are still in fiscal year 2022 since our fiscal year ends in May. Still not as profitable as before the pandemic, but a marked improvement, to be sure. Meanwhile, expenses are flat at ~USD $600K (Fig. 2). Therefore, when revenue is up and expenses are flat, we are making money as a society. This means we can put it back towards helping all our wonderful members. Unlike some organizations, we don't have a lot of overhead, so we can put our money where it counts. We are hopefully on track to put away around USD $200,000 into the society's coffers.
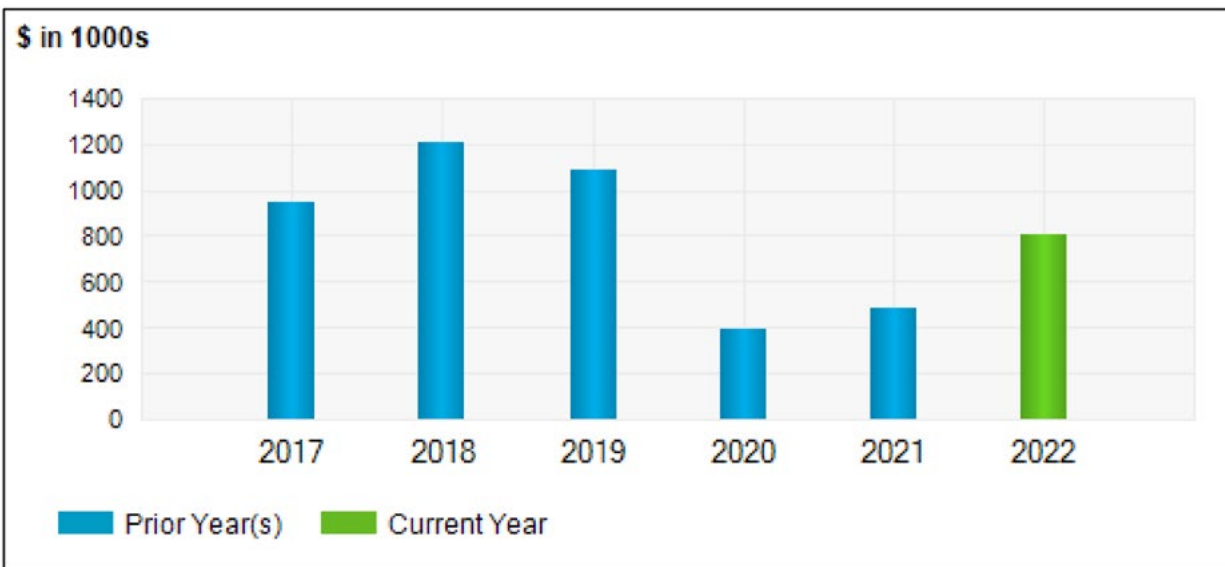
Fig. 1—Graph of revenue in the thousands for the last 6 fiscal years.
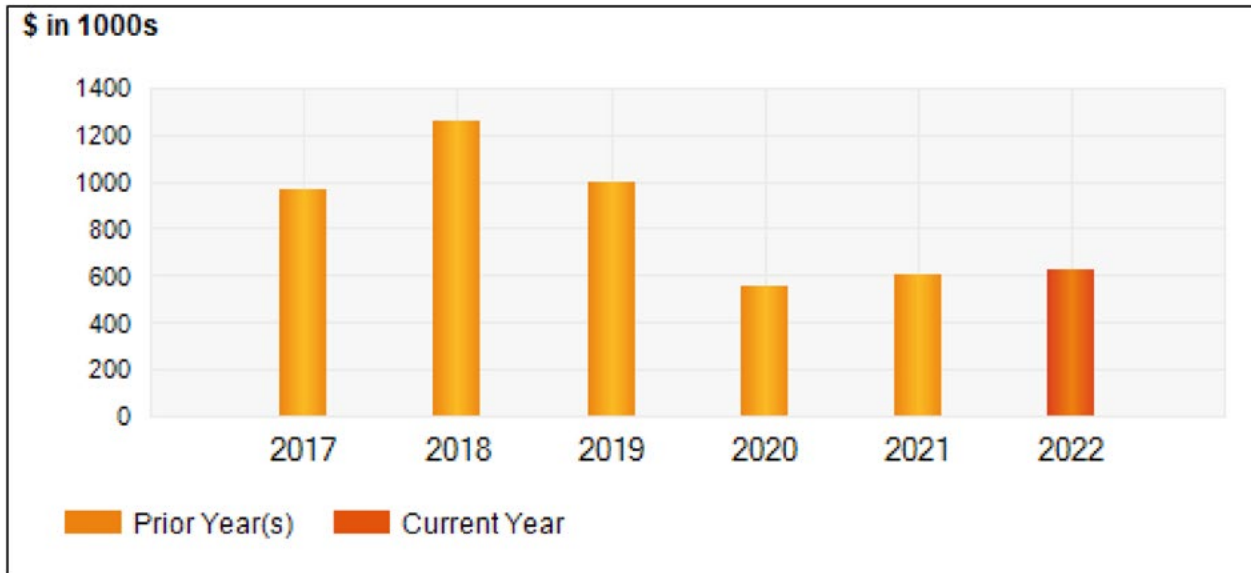
Fig. 2—Graph of expenses by year for the past 6 fiscal years

As you can see, most of our revenue continues to come from the symposium, and most of our expenses are related to programs for members and operations as well as the symposium expenses (Figs. 3 and 4). We also have large expenses related to maintaining our office. However, the staff and office are constantly at work for the members. It is truly money well spent to have such a faithful and hardworking staff. Other forms of income the society receives are related to royalties on publications and revenue from instructor-led courses that the society hosts. If you see an advertisement for a petrophysics course on LinkedIn, please reshare it. There is someone out there wanting to learn petrophysics who just might benefit from that instruction.
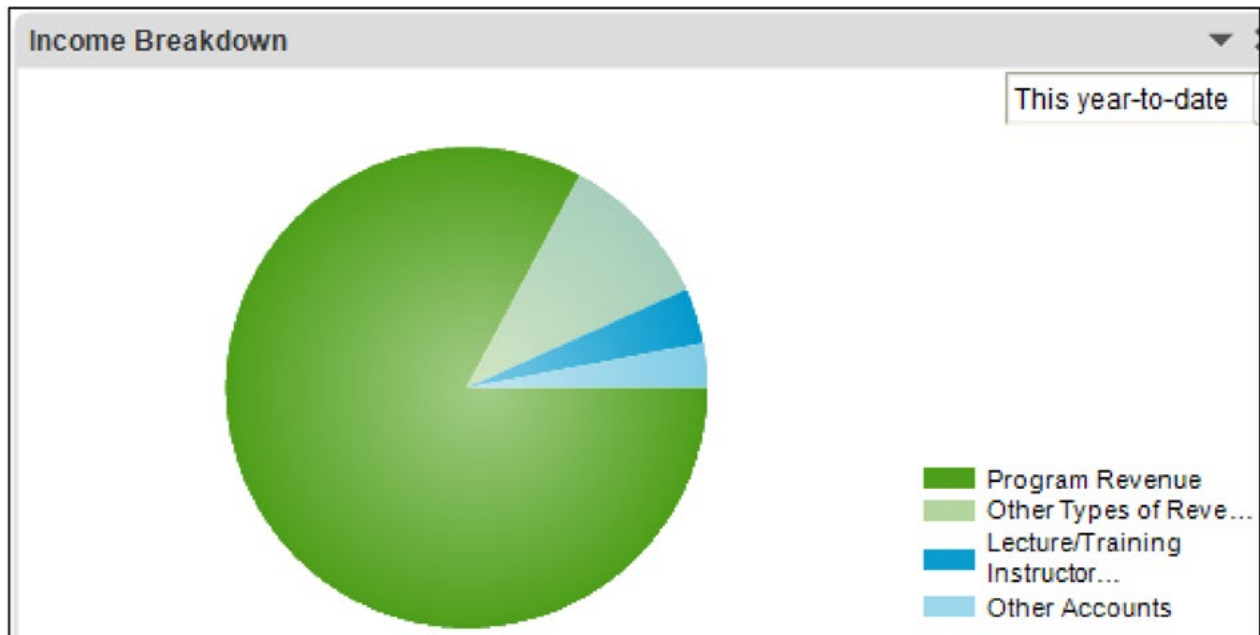
Fig. 3—Income breakdown by category.
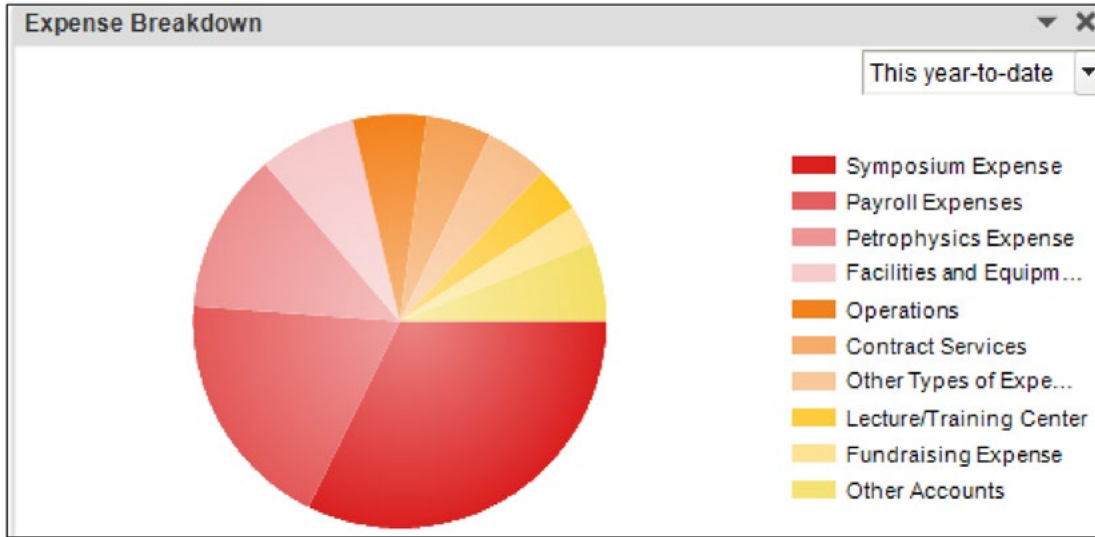
Fig. 4—Expense breakdown by category

Finally, to celebrate the Chiefs' win, I will just leave this here. Luckily, I don't think there are many of our members in the Philadelphia area. Otherwise, I might have to go into witness protection.

Adam Haecker
VP of Finance, Secretary, and Administration

Kelly Skuce
2022–2024 Vice President Education

Hello SPWLA Colleagues,

Welcome to the first VP Education column of 2023! The new year has been very busy with SPWLA Distinguished Lecture webinars and upcoming training courses.

I have been doubling up on lectures every month since November to try and get all the speakers onto the slate before June.

There are several upcoming training courses, which will have already been put on the calendar before this column goes out.

- Practical Geomechanics by Tom Bratton – February 14–16
- NMR Fundamentals by Brian Stambaugh – February 27–28
- NMR Intermediate and Advanced Interpretations – March 6–9
- Plus, other upcoming courses on Python and petrophysics and cement evaluation

The other big deal this February and March are the Internal Student Chapter Paper Competitions. SPWLA Student Chapters around the world are all vying for the top spot in their respective Bachelor's, Master's, and PhD categories. The top three papers in each category are all submitted to the International Student Paper Competition before March 31, 2023. Selected papers are then invited to present at the 2023 SPWLA Annual Symposium in Lake Conroe, Texas.

All details can be found on the SPWLA World website at: https://www.spwlaworld.org/international-student-paper-contest-2/

Good luck to all the students, and I hope to see you all in Lake Conroe in June!

Keep on learning,
Kelly Skuce
VP Education 2022–2024

Date	Milestone
Feb 10 2023	Student Chapter submit ISCPC proposal to VP-Education (papercompetition@spwla.org)
Mar 31 2023	Student Chapter complete ISCPC and nominations; Student submit paper (abstract) to ISPC (online)
Apr 14 2023	ISPC Committee rank and select student papers; ISPC Chair invite selected students to ISPC Final
May 28 2023	Student submit presentation file (MS PowerPoint) to ISPC Final (online)
Jun 1 2023	ISPC Chair announce ISPC Final schedule of presentations
Jun 11 2023	ISPC Final

Mathilde Luycx
2021–2023 VP Social Media

Dear Colleagues,

A lot has happened and is happening within SPWLA since the beginning of the year. This period is the busiest of all. Many SPWLA volunteers—too many to name them all, but with special mentions for the Houston Chapter organizing committee and its president, US Regional Director Javier Miranda, the VP-Technology team led by Iulian Hulea and Bob Gales, SPWLA President Tegwyn Perkins, and SPWLA Coordinators Sharon and Stephanie—are focused on wrapping up the organization ahead of the symposium. Many, many thanks to all volunteers who are helping with the planning of #spwla2023!

To continue with acknowledgments and thanks to SPWLA volunteers, VP Publications Stephanie Perry and Managing Editor Elizabeth Naggar also wished to acknowledge the associate editors of the *Petrophysics* journal who volunteer their time and expertise to review, edit, and enrich its technical papers! The #thankyou note was posted on February 13 to all SPWLA social media pages (LinkedIn link here). If you haven't had the chance yet, you can add your own thanks in the comments section or, better yet, directly acknowledge your friend/colleague if you know them!

#spwla2023 Special Announcements

I would like to encourage everyone interested in the upcoming SPWLA Annual Symposium in Lake Conroe, TX, USA, to follow **#spwla2023** on your preferred social media platform. The exhibition floor (https://www.spwlaworld.org/exhibition/) is quickly filling up, and so far, the following companies have retained a booth: Baker Hughes, Eriksfiord, Intertek, GEOLOG International, Geoactive Limited, GEOFRANCE, H2 Laboratories, KAPPA Engineering, Halliburton, Openfield Technology, Petromac Ltd (Petromac Wireline Express), Rogii, Scientific Drilling, and SLB. The symposium's success also relies on sponsorship commitments (https://www.spwlaworld.org/sponsorship/) to support various symposium activities, for example, social events, and enhance the experience of all symposium attendees. As of February 12, four companies are official sponsors of #spwla2023: **Baker Hughes, Halliburton, Maxwell Dynamics, and SLB**. Many thanks to them!

If you think your company might be interested in a sponsorship opportunity, have them reach out to sharon@spwla.org.

Finally, students who won their chapter's Internal Paper Contest (ISCPC) have until March 1 to submit their abstract for the **International Student Paper Competition** #ispc here. Students not affiliated with a student chapter can submit their abstract on the same page, also by March 31.

SPWLA SocialMedia • You
SPWLASocialMedia at SPWLA International
2d • 🌐

#spwlastudents members & chapters 🧢 🎓
The abstract submission deadline to participate in the #spwla international student paper contest is March 31! Follow #ispc for all news!

Some additional abstract guidelines:
✅ Text of abstract with 200 to 500 words
✅ Graph/Figure summarizing the central result

More information is available here: https://buff.ly/3AbHgUQ

INTERNATIONAL STUDENT PAPER CONTEST
#SPWLA2023 #ISPC

Feb 10 2023	Student Chapter submit ISCPC proposal to VP-Education (papercompetition@spwla.org)
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Jun 11 2023	ISPC Final

MORE INFORMATION @ SPWLAWORLD.ORG

I am very much looking forward to seeing many of you at #spwla2023 and would like to end this column by encouraging all to volunteer. SIGs, local chapters, the *Petrophysics* journal, or the SPWLA International committees are always looking for help and new perspectives! What is the easiest way to do this? Log on to your SPWLA member account on this page!

Mathilde Luycx
Vice President of Social Media 2021–2023
VP-SocialMedia@spwla.org

Javier Miranda
2022–2024 North America 1
Regional Director

Time really flies, and here at the SPWLA, we keep moving on different fronts to have a society our members are pleased with! Hard work and perseverance pay dividends, and after so much work, I am happy to see our annual conference plans are looking better each day. We see some sponsors already. Thank you to those who have committed so far. The **SPWLA Annual Symposium** is the best venue to reach out to petrophysicists and other decision makers/influencers in data acquisition, reservoir characterization, and other important fronts of our industry. Do not miss your chance to showcase your company, technology, and work during what promises to be the biggest SPWLA conference in years. We are in full motion now, working behind the scenes to have everything for you when we meet on June 9. Speaking of which, I would like to **THANK** all the extraordinary group of volunteers in our organizing committee who are putting together a tremendous effort and time to contribute to the symposium planning. Please accept my apologies if I am pushing too much or flooding your email inbox with requests, recommendations, and tasks to do. The table below shows their names and affiliations to properly recognize them for their volunteer efforts and their employers for their support of our society. Of course, additional volunteers are always welcome, especially as we get closer to June. In fact, we have incorporated some new ones after my last column. Experience in previous conferences indicates a minimum activity, if any, during the first couple of months of the planning stage. However, that changes dramatically, and energy, time, commitment, and stress increase exponentially when we are within a couple of months of the conference date or deadlines approach, as we have seen in January and February.

We will have a golf tournament before the workshops (Friday, June 9) right at the Margaritaville course. A subcommittee led by Adam Hacker and Zach Liu is preparing a great networking event. Workshop (Saturday, June 10, and Sunday, June 11) plans are also finalized with our final selection, including an assorted variety of quality courses, a field trip, and a core viewing visit right before the conference. Thanks to Tegwyn Perkins, Iulian Hulea, Bob Gales, Lori Hathon, Anish Kumar, and Sharon Johnson for all their hard work in preparing all pre-conference activities. Thanks also to the SPWLA Special Interest Groups (SIG) leadership across our society, who took the initiative in preparing the content, agenda, and other details for the eight workshops we will host. The pre-conference registration brochure will be released soon with more details about all these activities. The technical program is now ready, with authors working on their manuscripts to complement their final presentations in June. Iulian Hulea, our VP Technology, will cover more details about this in his column. The opening session speaker for the conference has now been secured thanks to Luis Quintero's efforts. Matt Blyth, Sharon, and I also continue working on getting additional sponsors and participants in the exhibition. Please refer them to us if interested. Grant Goodyear has already put together a couple of activities for spouses/guests they will enjoy, including a popular chocolatier and winery tour.

By the time you read my column, two-thirds of our first quarter will be gone, and with that, spring activities in our local professional and student chapters will be at full steam. The Houston area is booming with new local SPWLA events every month, both technical and networking. Bernd and his team keep preparing seminars and happy hours that are well attended by local or visiting members. More recently, I have seen the North side of the chapter highly active, led by their new VP, Amer Hanif (Baker Hughes), who jumpstarted seminars in that area of town after almost 3 years dormant. Baker Hughes has also played a key role in this, not only offering their facilities but also sponsoring the seminars. Thanks to them for their support! I have attended all of them, and I was happy to see some familiar faces, including a couple of former SPWLA International Presidents there, now retired but still active. **Picture 1** shows the latest technical seminar there by Mitch Pavlovic (OXY): "Using Petrophysical Rock Types for Variable Electrical Properties (m and n exponents) in Archie Water Saturation Modeling."

I am also delighted to see more in-person events being planned for the student chapters at The University of Texas at Austin and the University of Houston. UT Austin is ready to host their internal paper competition to select their representatives for the international student paper competition (ISPC) in June. It's no surprise to see why some who prepare in advance do better in these competitions. Some student chapters have changed leadership over the last few months, and with in-person events now being the norm, it is imperative to have your contact information updated to keep good communication across our society. I try my best by bugging students and professors; however, it is easier if you contact me with any updates. That also facilitates the process of obtaining financial support for your student chapters.

I want to encourage you to go out and attend the many technical and networking activities being organized by professional and student chapters in your region to support not only SPWLA but also to increase your knowledge and network. As my good friend Jesus Salazar (former SPWLA International President) says, "Don't wait until you need a network to start building one." Several local members and current and past international SPWLA board officers usually attend these activities. Feel free to participate and talk with them face to face. Nothing beats that! **Picture 2** shows the most recent networking event in Houston.

Speaking of networking and technical activities, I also enjoy my time as a member of other professional and local societies. One of them is the Geophysical Society of Houston (GSH). I recently attended their rock physics seminar in January at the GSH Geoscience Center. Believe it or not, we have more in common than you might think. I take these opportunities not only to learn something but also to look around at how they are doing, what we can learn from them to improve our society, and how to establish an additional collaboration that benefits our members. **Picture 3** shows the entry hall of the GSH Geoscience Center with some nice historical pictures, including copies of well-log and seismic acquisition trucks back in the early 1900s. **Picture 4** shows a computer terminal used several years ago, and **Picture 5** displays a great collection of geoscience artifacts in the GSH museum.

In case you have not done so, I invite you to make plans to attend the annual symposium in Margaritaville Resort at Lake Conroe, Texas, on June 10–14, 2023. Hotel registration at a special rate is open now. Do not wait until the last minute to secure your room! Please look at our promotional video in the link below if you have not. Elliott, my 14-year-old son, helped me prepare it: https://drive.google.com/file/d/1wm5CnTyvNmXicFaL0YnxfzgGiE5bsg-5/view

I continue looking for volunteers to activate the Dallas Chapter. Please contact me if you live in the greater Dallas metro area and are interested in working as a chapter officer. Keep in mind that local chapters are the foundation of our society! Feel free to reach me at my official email address below for any recommendations, ideas, questions, etc.

Finally, I am pleased to see the result of the hard work completed by the SPWLA Nominating Committee to present us with an excellent slate of candidates for the upcoming election. It will be tough to decide, though, with so many great members/colleagues/friends on this list. I am hopeful for the future of our professional society when I see such a competitive group of candidates! Some of them started serving SPWLA all the way from school or early career, working as volunteers in local chapters and activities, publications, and many other fronts. Best wishes to you all. No matter the outcome of the upcoming election, I am sure SPWLA will win!!! To all my fellow SPWLA members, please vote for the candidate you prefer. It is one of the highest privileges as a member!

My best wishes go to all our members, especially in my North America region. I hope to see many of you during our most important conference in June!

Javier Miranda
2022–2023 North America Region 1 Regional Director
Director-NA1@spwla.org

Organizing Committee Members	Name	Affiliation
General Chair – Principal contact for SPWLA BoD	Javier Miranda	DeGolyer and MacNaughton
Assistant General Chair	Bend Ruehlicke	Eriksfiord
Sponsorship/Social Functions Chair	Matt Blyth	Schlumberger
Conference Advisor	Luis Quintero	Halliburton
Exhibits Chairperson	Clara Palencia	Intertek
Finance Chairperson	Ronke Olutola	Woodside Energy
Transportation Chairperson (field trips/partner events)	Neal Cameron	Geolog
Fieldtrip Chairperson	Lori Hathon / Anish Kumar	University of Houston / SLB
Partner/Guest Activities Chairperson	Grant Goodyear	Baker Hughes
Printing/Signs Chairperson	Jiaxin Wang	Halliburton
Publicity/Social Media Chairperson	Joshua Bautista-Anguiano	Joshua Bautista-Anguiano
Technical Arrangements Chairperson	Jeff Crawford	Halliburton
Student Poster Chairperson	Artur Posenato Garcia	Chevron
Website/IT Chairperson	Tegwyn Perkins / Julie Perkins	Geoactive Ltd
Golf Tournament Chairperson	Adam Haecker	Milestone
Golf Tournament Sub-Committee	Angela Schwartz, Zach Liu, Neal Cameron	
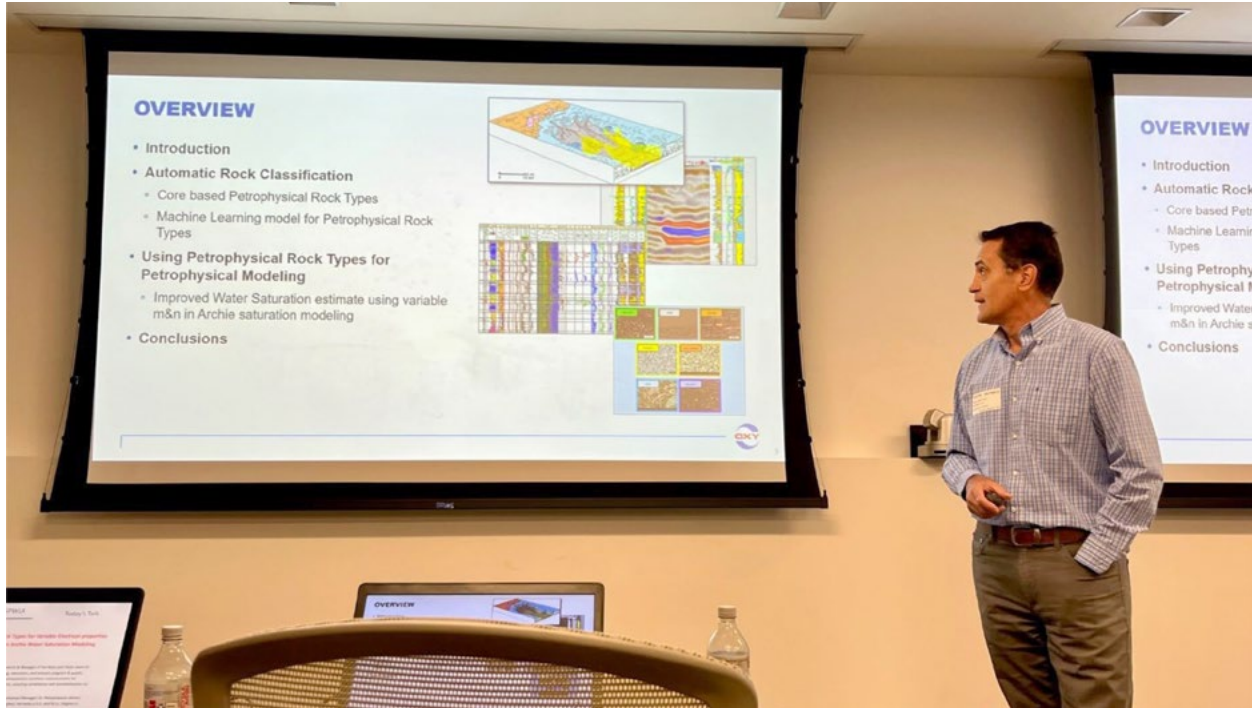
Picture 1—Houston Chapter Northside January Seminar by Mitch Pavlovic from OXY.

Picture 2—Houston Chapter Networking event in late January. Here with some members of the local board, including their President at Cedar Creek. Upcoming social events will also be hosted in the same place, conveniently located and with easy access to members across the Houston metropolitan area.

Picture 3—Geophysical Society of Houston (GSH) Geoscience Center entry hall.

Picture 4—A computer terminal used by geophysicists displayed at the GSH Geoscience Center.

Picture 5—A great collection of geoscience artifacts displayed in the GSH museum.

Eva Gerick
2021–2023 Europe
Regional Director

Dear SPWLA Community,

February in Europe means the New Technology Webinar @ LPS. And this year, it was as exciting and varied as every year. New twists on classics like cores and cuttings, advanced workflows like inversion and fractal modeling, new technologies focusing on wellbore risk management and reservoir monitoring, as well as technological advances for downhole geomechanics. I hope many of you used the opportunity to dial in, as it was a fully virtual session and available to all our members.

Now, fast forward to March—if you're an active SPWLA member, you probably have already received the election ballot for Board Members 2023–2024/25. Looking through the list of candidates, I personally think the Nominating Committee has done an impressive job at making sure the Board stays diverse and fresh—lots of "new" names from colleagues who have been active as presenters, Distinguished Speakers, or Chapter Presidents and would like to take their involvement now to the Board level.

And I'm delighted to say that with (in no particular order) Supriya and Mathias, we have two very strong candidates for the upcoming Europe Regional Director position. And I can only encourage you to look at their bios and mission statements and cast your vote for Europe 2023–25!

All the best,
Eva
2021–2023 Europe Regional Director
Director-Europe@spwla.org

Best Paper and Poster Presentation Winners for Stavanger, SPWLA2022

Please join us in congratulating the winners of the best paper and poster presentations of #spwla2022 at the SPWLA 63rd Annual Symposium!

Best Paper Presentation:
Full-Waveform Inversion of Fiber-Optics VSP Data From Deviated Wells
By Olga Podgornova, Pierre Bettinelli, Lin Liang, Joel Le Calvez, Scott Leaney, Marco Perez, and Ahmed S. Soliman

First Runner-Up of Best Paper Presentation:
Fracture Characterization Combining Borehole Acoustic Reflection Imaging and Geomechanical Analyses
By Xiao-Ming Tang, Pei-Chun Wang, Shengqing Li, Lei Xiong, and Hanlin Zhang

Best Poster Presentation:
Sourceless LWD Borehole Acoustics: Field Testing the Concept
By Alexei Bolshakov, Kristoffer Walker, Andee Marksamer, Lorelea Samano, and Andrew Reynolds

First Runner-Up of Best Poster Presentation:
Quantifying Interfacial Interactions Between Minerals and Reservoir/Fracturing Fluids
By Isa Silveira de Araujo and Zoya Heidari

The Need for Oil and Gas Professionals in Carbon Storage and Utilization
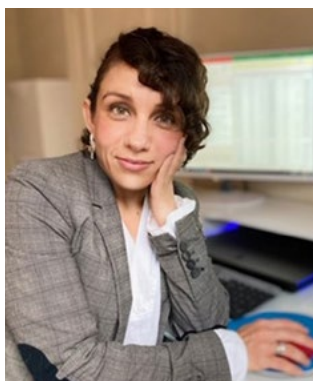
Clara Palencia

Lately, I have had the opportunity to be part of conversations about the future of our industry in terms of jobs and career paths. Although this type of conversation is not new for experienced oil and gas professionals (I would say it has been a part of my professional life going on 20 years), it is quite interesting to see how the topics change from time to time, depending on politics, environmental, and socioeconomic discussions. Since I decided to study petroleum engineering in 1997, I have been listening to these stories about how oil will go away, and yes, times are changing. Renewable energy technology is advancing, but yet oil still is and will be an important part of our lives.

The greatest challenge of the 21st century is providing clean, plentiful, reliable, and affordable energy and ensuring sustainable growth and development for humanity. At the same time, the global community has committed to limiting the increase in the global average temperature to well below 2°C above pre-industrial levels, which means a substantial reduction in global greenhouse gas emissions. Based on the Environmental Protection Agency (EPA), CO_2 corresponds to 65% of global greenhouse gases, and burning fossil fuels produces 70% of the CO_2 emissions worldwide. The conundrum is that current and anticipated legislation suggests that a mandatory CO_2 emissions reduction is inevitable, but forecasters expect the world's energy demand to increase by nearly 50% by 2030.

There isn't a single solution for reaching this international energy and climate goal, and it is not a secret that solar and wind power generation technologies currently do not exist to replace fossil fuels; therefore, long-term underground CO_2 storage is the only practical solution for heavy industries to keep providing energy to the world and simultaneously meet their net-zero commitments by 2040 or 2050. So, now is the time for CCUS, the acronym for carbon capture, utilization, and storage, which, in very simple terms, is a collective word used to describe various methods of trapping the carbon dioxide (CO_2) produced by burning fossil fuels, and either storing it permanently in depleted oil and gas reservoirs, coalbed methane, shale gas reservoirs, and aquifers or utilizing it in a process, such as injecting the gas to pressurize the oil, improving its mobility and allowing it to flow more easily which can boost production.

What about the role of petrophysics and geoscience?

Now, when we hear about these processes, we almost immediately think about porosity, permeability, saturations, sealing conditions, capillary pressure, water salinity, pressure, and temperature conditions, among others. All of these sound pretty similar to those concepts we have been studying and working on for years. We need to drill wells, have core and log data, and ensure well integrity, and although we are not looking for oil, we need to find the reservoir and the conditions to store CO_2 in the subsurface for a long-term plan.

Who can tell us more about this?

Based on the motivation of tackling this topic, we invited three CCUS professionals with different experiences and working at different types of companies within the CCUS sector in the oil and gas industry: Dr. Kathleen Davis, with more than 25 years of experience and currently working as a subsurface technical manager with Projeo Corporation, Courtney Rubin, with more than 12 years in the industry, currently working as a technical sales engineer and account manager for Coring Services at Baker Hughes, and Adam Haecker, with more than 15 years of experience and working at Milestone Carbon as the director of geoscience. We highly appreciate their positive response to collaborate for this interview and their passion for helping the new generation to get the right tools for going to the market and adding as much value as possible.

1. Based on your experience, how do you feel about the activity increasing in the oil and gas industry due to CCUS?

Dr. Kathleen Davis:

To meet the spirit of the CCUS investment provided by the Inflation Reduction Act of 2022 (IRA), it is important to keep in mind the end goal of the industry, which is to accelerate and support the energy transition. The individual impacts need to be evaluated on a project-by-project basis, and it makes sense that some increased activity in oil and gas will occur, especially where combined hydrocarbon production and CCUS facilitate efficiency increases or responsible development in existing hydrocarbon plays. The thing that needs to be guarded against is CCUS becoming a crutch that slows other energy transition or emissions reduction targets, which applies to more than just the hydrocarbon industry. The overall emissions targets and energy transition goals apply to all industries.

Courtney Rubin:

My career from the service side of the industry has a unique viewpoint of the CCUS market as we are being approached by a growing number of clients who are being challenged to deliver new strategies and business plans to quantify and reduce their carbon footprint. The tax incentive is another key factor in the growing market. The increasing activity is proving both exciting and challenging to navigate as clients and partners begin to develop their plans and the expertise that is needed to safely and efficiently execute these projects.

Adam Haecker:

Activity is picking up. It feels like the shale revolution 10 years ago. People are doing new science; there are unknowns, business is uncertain, and it is an exciting time. I am seeing land rushes in certain areas, which are probably obvious to most. It will be interesting if history repeats itself, and the majors take too long to build a position. Companies like Talos, CRC, Denbury, Oxy, and Milestone are already carving a niche for themselves. The difference this time, though, is the majors and large chemical conglomerates control the product. Acreage is not the only thing you need to win business; you need pipelines and emitter engagement as well.

2. Today, there are only around 22 commercial CCUS operations worldwide—nowhere near the amount required to improve global emissions—but momentum is growing. What do you think would accelerate the progress of CCUS over the next 5 years or a decade, and how can the industry and academia help with this?

Dr. Kathleen Davis:

There are two critical barriers to accelerating CCUS development: the regulatory pipeline and the distribution of critical knowledge. Both industry and academia have roles to play in correcting these issues and will factor most significantly in critical knowledge distribution. Historically, the oil and gas workforce has been concentrated in just a few places and is largely served by a limited number of universities focused on petroleum industry education. This system has created an imbalanced distribution of knowledge workers, with much of the workforce concentrated in traditional hydrocarbon provinces. The carbon storage potential stretches well beyond these traditional locations, and that is relevant to CCUS, as much of the background required in the petroleum industry translates easily to CCUS. The scale of the knowledge workforce required to service both CCUS and oil

and gas is much larger than can be serviced only by the traditional industry pipeline schools. To prepare students to enter CCUS, more universities will need to be brought on board. The industry can also support this pipeline through increased outreach and by forging new relationships with universities and vocational training programs in regions outside of the established petroleum centers and in the new carbon storage centers. This will also facilitate bringing a more diverse pool of talent into the CCUS industry, allowing the industry to draw on a much larger potential workforce base, which will help support the comprehensive regulatory framework that carbon storage operates under.

Courtney Rubin:

We are on the right path as an industry to continue to increase the number of commercial operations domestically and worldwide. I see clients struggling with the Class VI permit requirements, so I think a more efficient permit process would help clients solidify their plans and gain the momentum needed for more large-scale projects and infrastructure.

Adam Haecker:

Over 74% of the world's greenhouse gas emissions come from the energy sector. This is one reason large segments of the population have such a negative view of the oil and gas industry. If we consider just energy use in industry as a sector to sequester, 24.2% of the pie, that is ~10 billion tons/year that we as an industry need to sequester.

Most CO_2 sequestration sites are limited to around 1 to 1.5 million tons per year per well. The injection of 1 million tons is equivalent to injecting 53.3 MMSCF per day. To put that in perspective, according to Enverus, there are only six wells in the continental US producing more than 53 MMSCF per day, five are in Wyoming and one in Louisiana. There are also 26 in Alaska in Prudhoe Bay. I bring up all this information to show that 1 million ton/year wells will probably be the benchmark going forward. If we drill a few 1 million ton wells every year, we will probably not even keep up with growth in CO_2 emissions. We would need 1,000 such wells to sequester the already 10 billion tons. The industry has between 40 to 200 wells globally on the drawing board, depending on which rumors you believe right now. There is still quite a lot of room for new growth.

To answer the final part of the question, we need academia to help us find ways to standardize some data for the EPA. Further, I think as the weight of data stacks up, we will see convergence in things like relative permeability, where similar rocks have very similar curves. Academia can help us by understanding how things like mechanical properties change due to the injection of acid gas as well. There are many other areas for our academic friends to contribute as well. Finally, the only way to accelerate progress is for states to get primacy. As states get primacy, the permits will come more readily. At least, we hope!

3. Does CCUS bring up new opportunities to the oil and gas industry in terms of career paths for petroleum engineers, geologists, petrophysicists, and geoscientists in general? What would be your advice to those who are making career decisions right now?

Dr. Kathleen Davis:

Although, in many ways, the CCUS industry provides similar career paths to the oil and gas industry, there are some notable changes that provide different options for people just starting out. Because of the regulatory framework of the industry, the demand for simulation professionals (engineering, geological, geochemical, and hydrological) starts at the beginning of the project life cycle, which is new, and which opens up more opportunities for these specialties. While the industry is still relatively young, almost all projects are intense capital projects and require ongoing detailed subsurface characterization. Furthermore, because of this intense capital environment, I would recommend that new professionals in all disciplines be prepared to understand the financial landscape of the industry, preferably through formal coursework during their degree programs.

Courtney Rubin:

I'm seeing a lot of opportunities within our industry for professionals to find a seat at the table in this growing market. The forefront of a successful CCUS operation begins with the subsurface, so there's a lot of potential for engineers and geoscientists to excel and problem solve in the CCUS space.

Adam Haecker:

Absolutely, it creates more career paths for burgeoning engineers, scientists, and petrophysicists. What none of these projects are yet is cookie cutter. You will not see petrophysics going by the wayside like it did in shale development because it is essential to have a strong petrophysics and engineering background when writing Class VI UIC permits. Also, everyone is still trying to figure out where the good land is, so they need us. I think if you get an opportunity to jump into CCUS, you should explore it as a growth industry. If you don't, you can always go back to drilling up inventory in the "core of the core" that is left, right?

The skills you need to work in CCUS are, in no particular order, a good understanding of gas chemistry, capillary pressure, salinity, permeability, facies, mechanical properties, core testing, logging, correlation, machine learning, etc. If these skills sound familiar, they should. They are the exact same skills one needs to prospect for hydrocarbons. A CCUS project is akin to a wildcat well project. You are often in areas where people may have never drilled, or at least not for the last 50 years, trying to scrounge together enough data to see if you have a prospect. We aren't just going to do CCUS in data-rich areas like the Gulf Coast or Permian Basin.

As a final comment, I want to highlight that although the name CCUS is "new," CO_2 has been injected as an enhanced oil recovery (EOR) technique since 1920. We have the experience and the know-how to develop these projects. Momentum for CCUS projects is growing across the globe, and many of the job opportunities will need the subsurface skills and experience of oil and gas professionals.

SPWLA FOURTH BOARD OF DIRECTORS MEETING
REMOTE
January 13, 2023

President Tegwyn Perkins called the meeting to order at 8:00 am. In attendance, President-Elect, Jennifer Market, Vice President Technology, Iulian Hulea, Vice President Education, Kelly Skuce, Vice President Finance, Secretary and Admin, Adam Haecker, Vice President Publications, Stephanie Perry, Vice President Information Technology, Harry Xie, Vice President Social Media, Mathilde Luycx, Regional Director Europe, Eva Gerick, Regional Director Middle East/Africa, Jennifer Duarte, Regional Director Latin America, Nelson Suarez Arcano, Regional Director N. America 2, Matthew Blyth, Regional Director N. America 1, Javier Miranda, and Executive Director, Sharon Johnson. Absent, Regional Director Asia Pacific/Australia, Ryan Lafferty.

A motion made by President-Elect Jennifer Market to waive the reading of the minutes from the November BOD meeting was seconded by Vice President Information Technology Harry Xie. This motion passed by majority vote.

A motion made by President-Elect Jennifer Market to accept the new provisional agenda template proposed by President Tegwyn Perkins for all BOD meetings was seconded by Regional Director N. America 2 Matthew Blyth. This motion passed by majority vote.

Meeting Visitors 2024–2025 Host Symposium Bids:
Brazil Chapter President, Lucas Abreu Blanes de Oliveira, presented a bid to host in their region. Dubai Chapter President, Ahmet Aki, presented a bid to host in their region.

ACTION ITEM: All Board Members to vote on the 2024 and 2025 Symposium host locations.

From the two wonderful bids presented, the results are: Brazil Chapter agrees to host the 2024 Annual Symposium, and Dubai Chapter agrees to host the 2025 Annual Symposium.

Respectively Submitted by
Sharon Johnson
Executive Director

Next BOD meeting: March 17th in person at the SPWLA Business Office Houston or Remote via GoToMeeting.

ABU DHABI CHAPTER

Recent Events

February 2023—The chapter hosted Steve Cuddy as an expert petrophysicists to conduct an online session for the members. The first event of 2023 included an extended Q&A session where the members lively interacted with Steve, highlighting specific topics and sharing interesting concerns regarding the saturation-height modeling of the Middle East carbonates.
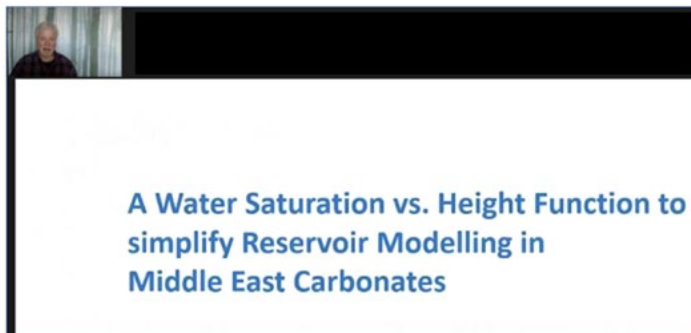
BANGKOK CHAPTER

General News

The SPWLA Bangkok Chapter is pleased to welcome Marvin Rourke, Panasa Panpheemachai, and Kulkunya Aungsuroch to the steering committee.

2023 Chapter Committee Members are:
President: Andrew Cox
Technical Coord: Numan Phettongkam
Treasurer Panasa: (Ammy) Panpheemachai
Social Media: Alexander Beviss
Secretary: Ronald Ford
Sponsorship: Marvin Rourke
Student Liaison: Kruawun Jankaew
Communications: Kulkunya (Fon) Aungsuroch

Please visit https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx for local chapter news and information on upcoming meetings. Email: bangkok.chapter@spwla.org

Recent Events

November 2022—Live Meeting (Bangkok). November was the last meeting for 2022. We were fortunate to have Ryan Banas (PetroRes Consulting) speak about an "Automated Approach to Correlating and Depth-Correcting Well-Log Data." The process is especially useful when analyzing legacy data for entire fields with hundreds or thousands of wells, but it also has applications in developing data archiving. This subject generated a lot of interest, and the meeting was well attended.

January 2023 – Live Meeting (Bangkok). Kampanart Jankham (PTTEP) presented his work on thin-bed interpretation techniques to calculate R_t and, thus, more realistic water saturation. He included a detailed discussion of a local case study showing the identification of new reserves and increased production, including a cost-benefit analysis of running these new, expensive logging tools. Because the vertical resolution of conventional logging tools is not able to capture true formation properties, the vertical and horizontal resistivities of triaxial induction tools allow the calculation of the true resistivity of the sand reservoirs.

February 2023—Student Presentations (from Chulalongkorn University). SPWLA was pleased to host technical presentations by two master's degree students this month, talking about their theses:
1. "Effects of Clay Minerals on Oil Recovery Mechanism in Low Salinity Waterflooding in Shaly-Sandstone Formation" by Mr. Tri Yudha Putra.
2. "Simulation on Application of Nanoparticle With Surfactant for Enhanced Oil Recovery" by Mr. Le Truong Sinh

In spite of the daunting titles, both talks were well presented and received. Thanks to Prof. Jirawat Chewaroungroaj at Chulalongkorn for coordinating with the students for this event.

Ryan Banas (PetroRes Consulting) and Andrew Cox (chapter president) in November 2022.

Kampanart Jankham (PTTEP) in January 2023.

Mr. Le Truong Sinh (Chulalongkorn University) presented in February 2023.

Mr. Tri Yudha Putra (Culalongkorn University) presented in February 2023.

Please check the local website for information on events and activities for the Bangkok Chapter on LinkedIn (SPWLA Bangkok Chapter) or on the SPWLA main page, under chapters: https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx

BOREHOLE IMAGING (BHI) SIG

General News

The SIG is constantly gaining new members.

Upcoming Events

We plan to have our next online SIG meeting in May and will send out the relevant information ASAP. Furthermore, a BHI SIG conference in the fall is in planning. If you would like to present a topic at the next meeting or would like to contribute in any other way, please let us know, and we will try to get back to you soon.

At the SPWLA Annual Symposium, the SIG will organize a workshop about borehole image log analysis as well as a special organized session.

BRAZIL CHAPTER

General News

Our monthly meetings are 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). 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 just beginning to organize, 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 make this 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 (see our LinkedIn page). 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.

DUBAI CHAPTER

General News

Dubai Chapter continues with online meetings similar to 2022. Anyone interested is welcome to visit our profile on LinkedIn SPWLA Dubai Chapter or email us at dubai@spwla.org to join our virtual events and are welcome to ask any questions regarding our chapter.

Recent Events

15 February 2023—Our first online meeting of 2023 was held. Professor Fikri J. Kuchuk presented "Pressure Transient Pressure Behavior of Naturally Fractured Reservoirs."

Upcoming Events

Our next presentation for 2023 will be held in April. A flyer and information will be posted on the SPWLA Dubai Chapter LinkedIn Profile.

EAST CHINA CHAPTER

Recent Events

3–5 November 2022—The 13th UPC International Symposium on Well-Logging Technologies hosted by the SPWLA East China Chapter was successfully held at the China University of Petroleum (East China). The symposium co-organizers included the Petroleum Well-Logging Committee of the Chinese Petroleum Society, the Borehole Geophysics Committee of the Chinese Geophysical Society, China National Logging Corporation (CNLC), Sinopec Matrix Co. Ltd, etc. The symposium theme was the "Current Status and Challenges in Electrical Logging." More than 1,500 people attended the meeting, and 60 academic reports were presented by global well-logging specialists, so this meeting provided a wonderful platform for international well-logging industry communication.

Group photo of domestic and overseas delegates attending the conference online.

The opening ceremony was hosted by Professor Hua Liu, dean of the School of Geoscience, and Professor Caili Dai, vice president (China University of Petroleum, East China), who delivered a welcome speech at the opening ceremony. She pointed out that facing the exploration and development needs of deep, ultradeep, and unconventional oil and gas, the petroleum industry has increasingly higher requirements for logging technology. The rapid development of logging technology provides important technical support for the exploration and development of complex and unconventional oil and gas reservoirs. The theme of this symposium had a great fit for international industry intelligence development and played a positive role in promoting oil and gas exploration and development.

Professor Caili Dai delivered a welcome speech at the opening ceremony.

Professor Hua Liu hosted the opening ceremony.

Besides, Jennifer Market, SPWLA President-Elect, Qiyue Hu, general manager (China National Logging Corporation), Bozhi Wu, general manager (Sinopec Matrix Co. Ltd), and Professor Ning Li (the Chinese Academy of Engineering) also spoke at the opening ceremony.

Jennifer Market gave a keynote speech at the opening ceremony.

Professor Ning Li gave a keynote speech at the opening ceremony.

Qiyue Hu gave a keynote speech at the opening ceremony.

Bozhi Wu gave a keynote speech at the opening ceremony.

Fourteen special presentations were given by well-known experts and scholars from the United States, Russia, Singapore, other countries, and China. Invited speakers included Professor Lichun Kuang (Petroleum Geology Committee of Chinese Petroleum Society), Dr. John Zhou (Maxwell Dynamics, Inc), Sofia Davydycheva (3DEM Holding LLC), Dr. Harry Xie (SPWLA VP Information Technology, Core Lab), Professor Xiaoming Tang (China University of Petroleum, East China), Professor Cheng Zhai (China University of Mining and Technology), Arthur Walmsley and Supriya Sinha (Halliburton), Liang Lin (Schlumberger-Doll Research Center), Gabriel do Nascimento Freitas (SPWLA Brazil), Jiefu Chen (University of Houston), Professor Jiaqi Xiao (Qilu University of Technology), Professor Jie Wu (Xi'an Shiyou University), Professor Aleksandr Shumilov (Perm State University, Russia), and Professor Hongnian Wang (Jilin University).

Dr. Sofia Davydycheva, president and CEO (3DEM Holding LLC.), presented "3D Electromagnetic Modeling and Inversion of UDAR Measurements: Latest Developments."

Sofia Davydycheva gave the invited report online.

Professor Xiaoming Tang (China University of Petroleum, East China) gave a presentation on "Reservoir Fracture Evaluation Method Combining Single-Well Acoustic Imaging and Rock Mechanics Analysis."
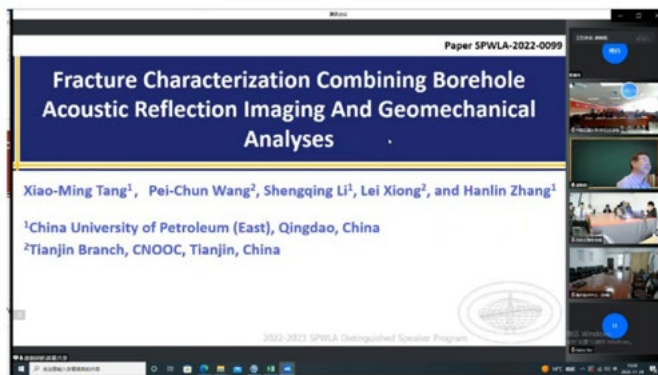
Professor Xiaoming Tang gave the invited report online.

Dr. John Zhou, president (Maxwell Dynamics, Inc.), reviewed the development of international academic exchange on electrical logging and looked ahead at the developing trend.

Dr.John Zhou gave the invited report online.

Dr. Harry Xie (SPWLA VP Information Technology) gave a speech on "Porosity, Permeability, Saturation Experimental Measurement of Unconventional Core." He also introduced the SPWLA 64th Annual Symposium and welcomed global well-logging experts and scholars to attend this symposium.
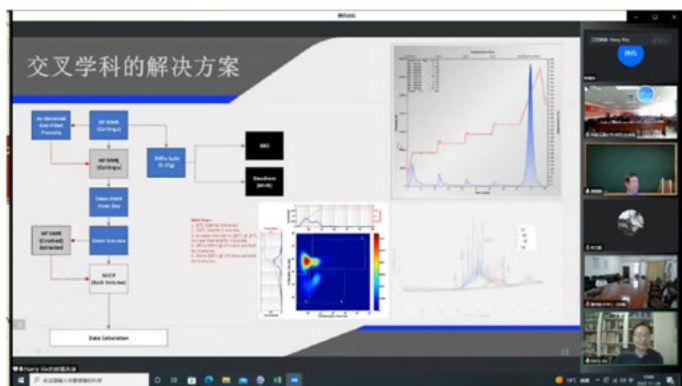
Dr. Harry Xie gave the invited report online.

Professor Cheng Zhai, China University of Mining and Technology, gave a presentation on "Current Status and Trend of Accurate Detection Technology for Safe Mining of Coal Reserves." Dr. Arthur Walmsley and Supriya Sinha (Halliburton) gave a presentation on "Past, Present, and Future Applications of Ultradeep Directional Resistivity Measurements: A Case History From the Norwegian Continental Shelf." Dr. Liang Lin, research scientist (Schlumberger-Doll Research Center), give a presentation on "Advances in Bborehole Electromagnetic and Acoustic Measurement Interpretation." Gabriel do Nascimento Freitas, SPWLA Brazil Chapter President, gave a presentation on "Challenges in Formation Evaluation of Presalt Brazilian Carbonates." Jiefu Chen, associate professor (University of Houston), gave a presentation on "Machine-Learning-Assisted Joint Geophysical Inversion for Crosswell Monitoring." Professor Jiaqi Xiao (Qilu University of Technology) gave a presentation on "Review of Key Technologies of Array Induction Logging." Professor Jie Wu (Xi'an Shiyou University) gave a presentation on "Research on Electromagnetic Remote Detection Logging Technology." Professor Aleksandr Shumilov (Perm State University, Russia) gave a presentation on "Innovative Geophysical Techniques for Permanent Type Completion and Long-Term Operating Monitoring of Oil-and-Gas Wells." Professor Hongnian Wang (Jilin University) gave a presentation on "Numerical Simulation and Inversion Imaging of Azimuth While-Drilling Electromagnetic and Ultradeep Looking Forward Resistivity Response." Other representatives from domestic and overseas universities, petroleum services companies, research institutes, and the SPWLA East China Chapter also gave wonderful academic presentations. It was very significant for promoting the development and application of electrical-logging technology.

Lichun Kuang, director of Petroleum Geology Committee of the Chinese Petroleum Society, gave a speech on "Understanding and Characterization of Reservoir Oil-Bearing Property in Shale Oil" and delivered an enthusiastic speech at the closing ceremony. Professor Xiuming Wang, president of the Borehole Geophysics Committee of the Chinese Geophysical Society, delivered a speech at the closing ceremony. They pointed out that this symposium was deemed a great success. Guided by the needs of oilfield engineering, we should put stress on the basic theory and methodology, enhance the research of engineering application technology, and promote the innovation and development of logging technology. Four aspects are highlighted, including the deep-level technical discussion, the theme of the symposium (electrical logging), the combination of old, middle-aged, and young speakers, and many high-level innovation achievements were displayed. They believe that this symposium has a good perspective and will certainly have a positive impact on the oil industry's electrical-logging development.

Professor Lichun Kuang delivered a speech at the closing ceremony.

Professor Xiuming Wang delivered a speech at the closing ceremony.

This symposium made logging technicians around the world more united, innovative, and confident and provided a good vision for the future development of petroleum technology and a better life for all people. The UPC International Symposium on Well-Logging Technologies, hosted for the 13th consecutive year, was one of China's most influential professional conferences.

Upcoming Events
October 2023—The 14th UPC International Symposium on Well-Logging Technology will be held in October 2023.

FEDERAL UNIVERSITY OF RIO DE JANEIRO STUDENT CHAPTER

General News
Our chapter maintains normal activities with 12 active members organized below:

Board Members:
• President: Gabriel Ferraz
• Vice President: Guilherme Lontra
• Treasurer: Sofia D'Orsi
• Secretary: Diana Tabach

Executive Members:
• Bruno Valle
• Teresa Mourão
• Rodrigo Azambuja
• Iago da Costa
• Sarah Aleixo

Marketing Members:
• Renan Camilo

Logistic Members:
• Alexandre Nobre
• Enzo Borges

Recent News
3 February 2023—The student chapter got together to talk about the changes in the positions of president and vice president. Consequently, we discussed the next steps and the challenges for the group in 2023.
In the last week, we received the information that the 65th Annual Symposium will be in Rio de Janeiro, Brazil.

Publication of disclosure about the SPWLA 65th Annual Symposium (2024).

Upcoming Events
We are preparing ourselves for a new members' event that is going to happen soon, so we are focused on preparing a great selection process to attract more people to help in the chapter activities.
Also, we are planning to organize a visit to a company called Petrorio. They are a company with a big reputation and have excellence in their work; therefore, we think that organizing that visit will allow us to acquire a lot of knowledge and experience about some concepts in the oil and gas industry.

FRANCE CHAPTER

SPWLA France board was renewed at the end of 2022, and new officers were elected for the 2022–2024 cycle: Emmanuel CAROLI (TotalEnergies) as President, Samira AHMAD (SLB) as Vice-President, Jérôme LAVAL (IFPEN) as Treasurer, Rose-Marie BELENGUER (TotalEnergies) as Administrative Secretary, Nadège BIZE-FOREST (SLB) as Technical Secretary, Jacques DELALEX (Consultant), Jean-Etienne JACOLIN (SLB), Hafiz HAMZAH (TotalEnergies) and Yahaya MOHAMMED (SLB) as Administrators.

Recent Events

16 December 2022—SPWLA France has changed rhythm and now alternates in-person events and virtual Lunch&Learn meetings every last Friday of the month. We started this new pattern on December 16, 2022 with the SPWLA Distinguished Speaker Mario Pirrone (ENI S.p.A.), who presented his paper SPWLA-2022-0090 titled "CCUS in Mature Fields: How Core-to-Log Data-Driven Analytics Enhances Mechanistic Models for the Purpose of Reservoir and Caprock Mineralogical Characterization (cf. link)."

27 January 2023—The first in-person event of the year has been organized in Clamart at SLB Riboud Product Center (SPRC) about borehole imaging, tools, and interpretation. This event was attended equally by professionals from various companies and a group of IFP School students from geosciences (see picture). Nadège Bize-Forest (SLB) animated the logging tool showroom while, in parallel, Laura Lima Angelo dos Santos (SLB and SPWLA Distinguished Speaker) presented her paper SPWLA-2022-0129, "Unsupervised Facies Pattern Recognition of Brazilian Presalt Carbonates Borehole Images." This half-day session ended with a lunch between members to celebrate this new year and the restart of in-person meetings.

IFP School students' selfie taken in SLB SPRC entry hall in Clamart on January 27, 2023. They look so happy after a morning of logging tool demos and wellbore imagery interpretation by machine learning!

24 February 2023—Virginie Schoepf, senior petrophysicist (OpenField Technology), presented virtually "In-Situ Accurate Flow Diagnostic Using Innovative Ultra Compact Production Logging Tool."

Upcoming Events

31 March 2023—We will finish the quarter on March 31 with a full afternoon from 2:00 to 5:30 pm in Paris at Société Géologique de France around acoustic and anisotropy declined in four to five talks from various companies (IFPEN, SLB, and TotalEnergies).

FORMATION TESTING SIG

General News

It's been a very busy and active start to 2023, and we are really excited about ongoing and upcoming events.

Recent Events

23 February 2023—The webinar series continued with excellent technical presentations on Casedhole Formation Stress Testing using WFTs and Fluid Mapping-While-Drilling for Optimal Well Landing. Thanks to the speakers and participants. These webinars provide an excellent forum for technical discussions and learning about all aspects of formation testing.

Upcoming Events

4 May 2023—Return of the annual in-person FT Conference!! We received over 20 abstracts for the conference. The technical quality and range of FT topics will be extremely good, so join us on May 4 to hear technical presentations, network, and socialize after a three-year gap.

We are planning to increase the number of webinars to monthly or bi-monthly. Check the SPWLA main website for abstract details, specific dates, and registration information.

11 June 2023—Formation Testing Workshop: This one-day event will take place as part of the 2023 SPWLA Annual Symposium. We have an exceptional list of industry experts lined up to provide instruction on theory and practical exercises covering a range of formation testing measurements and applications. The workshop is intended for petrophysicists, reservoir engineers, operations geologists, and others who are directly involved with the acquisition or analysis of formation testing and fluid

sampling data. The class size is limited to 30. Practical exercises will be done using Kappa Engineering software, and temporary licenses will be included.

For additional details on any event, you can email us at formation.testing.sig@spwla.org.

The FT SIG Executive Committee met to see the venue for the FT Conference planned for May 4. (From left to right) Scotty Paul, Steve Smith, Camilo Gelvez Gonzalez, and Gibran Hashmi.

HYDROCARBON RESOURCES SIG

General News

The SPWLA Hydrocarbon Resources SIG has had no active session since the last virtual session in November 2022.

Upcoming Events

The SIG is planning to host a workshop at the SPWLA Annual Symposium in Conroe in June. In addition, the SIG is contemplating a virtual general meeting early in Q2 2023.

Finally, we solicit for new members to join the SIG, given the importance of resources and reserves estimation in our industry.

SIG contact email: reserves_sig@spwla.org

UNIVERSITY OF THE PUNJAB (IGUP) STUDENT CHAPTER

General News

A meeting of the newly elected board members of the SPWLA IGUP Student Chapter Pakistan was held to introduce them and outline their respective responsibilities. The team also introduced the SPWLA and its associated chapter in Pakistan and encouraged freshman-year students to give

their full potential and use this prestigious platform to thrive in the industry and represent both their chapter and country internationally. One of the student members of the SPWLA IGUP received a certificate of recognition after presenting a poster on behalf of the SPWLA IGUP Student Chapter at the International Geomechanics Symposium held in Abu Dhabi. The team also managed to execute a splendidly successful webinar series for students from all across Pakistan. Both a virtual and in-person audience participated in it. The webinar was an eye-opening and introductory talk for the upcoming students. The topic of the talk was "Workflow of Pakistan's Oil and Gas Industry."

The Board of Directors—The names of the elected board of directors with their designation and contact details are as follows:

Sr. No.	Board of Directors	Designation
1	Dr. Muhammad Armaghan Faisal Miraj armghan.geo@pu.edu.pk	Faculty Advisor
2	Miss Maha Ali Haider mahaalihaider26@gmail.com	President
3	Mr. Shan Shahzad shan.mphil.geo@pu.edu.pk	Vice President
4	Miss Pal Washa Shahzad Rathore palwashashahzad97@gmail.com	Treasurer
5	Miss Ayesha Ejaz ayesha.mphil.geo@pu.edu.pk	International Spokesperson Chairperson
6	Mr. Muhammad Hamza hamza-930233@pu.edu.pk	Membership Chairperson
7	Mr. Muhammad Waqas Javed geo747@outlook.com	Event Manager
8	Miss Syeda Fakiha Ali Zaidi fakihaali5@gmail.com	Social Media Chairperson

Recent Events

30 October 2022—SPWLA IGUP Student Chapter (2022–2023) held an online meeting of board members on Google Meet for the introduction of the newly elected directors and discussed the future plans and responsibilities of each director. The following agenda was discussed during the meeting.

- Introduction of all the board members
- Progress report of the assigned tasks
- Discussed the tentative plan for 2022–2023
- Finalization of the first event and assigning the related tasks
- Promotion of the event and designing the poster for an upcoming event
- Assigning duties to each board member and discussing their queries
- Preparation of the newsletter
- Discussed the way forward

10 November 2022—Rimsha Rias presented a poster on behalf of SPWLA IGUP Student Chapter at the International Geomechanics Symposium on 7–10 November, Abu

Dhabi, UAE (Sofitel Hotel). The topic of the poster was "Seismic Interpretation and Petrophysical Analysis of Jabo-01 and Jabo-05 Well, Badin Block, Lower Indus Basin, Pakistan."

20 January 2023—In order to continue the previous webinar series, the dedicated team of SPWLA IGUP Student Chapter (2022–2023) arranged the third educational episode of the webinar series. The webinar's subject was "Workflow of Pakistan's Oil and Gas Industry." One of the most renowned industrialists, Mr. Irfan, who has 12 years of experience and training and works as a geoscientist, gave the discussion. The lecture undoubtedly contributed significantly to the students' understanding of the workings of Pakistan's petroleum industry, and it will undoubtedly allow them to narrow their emphasis on particular topics in line with their interests.

The Director of the Institute of Geology, University of the Punjab, Dr. Naveed Ahsan, gave an introduction note that raised the enthusiasm of the hall.

The Faculty Advisor of SPWLA IGUP Student Chapter, Dr. M. Armaghan Faisal Miraj, gave the welcome note to all the newcomers.

The President of SPWLA IGUP Student Chapter (Miss Maha Ali Haider) gave her remarks at the end of the event and discussed the previously executed successful activities of the chapter. She also urged students to use this chapter as a prestigious platform and represent our country and this chapter both nationally and internationally.

A group photo of all the students who attended the webinar series physically with their faculty advisor (Dr. M. Armaghan Faisal Miraj), the director of the department (Dr. Naveed Ahsan), and the whole team of SPWLA IGUP Student Chapter.

The chief speaker of the third episode of our Webinar Series, Mr. Irfan, gave an informative talk on "Workflow of Pakistan's Oil and Gas Industry."

The devoted team of SPWLA IGUP Student Chapter with (from left to right) Mr. Waqas Javed, Dr. Naveed Ahsan, Dr. M. Armaghan Faisal Miraj, Miss Maha Ali Haider, Miss Ayesha Ejaz, and Miss Syeda Fakiha Ali Zaidi.

At the end of the successful event, the host (Miss Gull Fatima) politely requested the virtual audience to turn on their cameras to have a group screen snap with our virtual participants as well.

More details about the upcoming events will be updated on our social pages:
LinkedIn: https://www.linkedin.com/in/spwla-igup-student-chapter-pakistan-57b116219/
Facebook: https://www.facebook.com/SPWLA-IGUP-Pakistan-107338908181070
Contact Details: spwla.igup.pak@gmail.com

JAPAN CHAPTER

Call for abstracts for the 28th Formation Evaluation Symposium of Japan In-Person Meeting (with streaming) 13–14 September 2023 is now open! The 28th Formation Evaluation Symposium of Japan will be held as an "in-person with streaming" event on both days. All persons involved in oil, gas, new energy, geo-engineering industry, and scientific drillings are invited to showcase their case studies, new technologies, and innovations. There will be no poster session, so abstract submission is for consideration of an oral presentation only. The presentation will be made either in person or via remote format. Each presentation will be a total of 25 minutes, including a 15-minute oral presentation and a 10-minute live Q&A.

General Themes: The symposium committees are soliciting papers on the following:
- Reservoir Characterization of Conventional Reservoirs
- Reservoir Characterization of Unconventional Reservoirs
- Automated Methods of Formation Evaluation
- Specialized Measurement Techniques and Interpretation Methods
- Core and Well-Log Integration
- Case Studies

Special Themes: We set **"CCS/CCUS"** as a special session theme in this symposium, and recent innovations and experiences will be shared with the participants in the JFES symposium. A total of eight invited talks will be arranged by the symposium committee inviting industry leaders from global universities, research institutes, and energy companies. In this special session, JFES will provide petrophysicists, geologists, geophysicists, and engineers with an opportunity to share their expertise and case studies for geothermal energy development.

We are soliciting papers in the following content related to **CCS/CCUS:**
- Formation Evaluation/Reservoir Characterization of the Depleted Oil and Gas Reservoir
- Formation Evaluation/Reservoir Characterization of the Aquifer Reservoir
- Caprock Integrity Analysis Technology and Evaluation
- Well Integrity Analysis Technology and Evaluation
- Reservoir Monitoring Technology
- Geological/Geomechanical Modeling and Dynamic Simulation

The SPWLA Japan Board of Directors also encourages students to participate and present. **Best Student Awards** will be presented to the outstanding presentation. The student awarded would be nominated for the SPWLA Student Paper Contest in the international SPWLA 2024 symposium.

The due date for abstract submission is **31 March 2023**. Those of you interested in the JFES symposium, visit our website for more detailed information. https://www.spwla-jfes.org/ja/call-for-abstracts/

Upcoming Events
April 2023—The 120th Chapter Meeting.

LONDON PETROPHYSICAL SOCIETY (LPS)

General News
Following our AGM on 18 November 2022, the new committee for 2023 has been finalized. We would like to welcome Arathi Mahesh (SLB) and Andrew Mynors (Geolog) as new members. Jack Willis (one&zero) will be the incoming President for 2023–2024.

President
Jack Willis
one&zero

Past President
Ian Draper
Baker Hughes

Treasurer
Dawn Houliston
ERCE

Secretary
Phil Gibbons
GaffneyCline

VP Sponsorship
Andrew Mynors
Geolog

VP External Liaison
Arathi Mahesh
SLB

VP Technology
Kirsty Hitchen
BP

VP Seminars
Alina Khmelevskaya
BP

VP Data Protection and Membership
Rebecca Lee
Halliburton

VP Arrangements
Ollie Tallon
Tullow Oil

Technical Editor
Rebecca Nye
Enovate

Newsletter Editor
Ross M J Kerr
RMJK Petrophysics

Social Media Editor
Hammed Bakare
CNOOC

VP Publications
Sherif Farag
Independent

Recent Events
8 December 2022—The LPS hosted the year's final event for 2022, a full-day seminar on the "Principles and Application of Acoustic Logging." This was followed by the annual President's Evening at the King's Head Pub.

14 February 2023—The first evening lecture of the year was held in the council room at the Geological Society on "Core Scale Measurements of Zeta Potential: Implications for Wettability Alteration by Low Salinity Waterflooding" by Harry Collini (bp, Imperial College PhD Research).

23 February 2023—The annual New Technology seminar (online).

Upcoming Events
The schedule for 2023 events is shown in the table below. Details of events and registration are on the chapter website: https://lps.org.uk/events/

The focus in 2023 for the LPS will be petrophysics theory, methods, and technologies within new energy alongside oil and gas.

Year	Date	Geol Soc	Event	Venue	Comment
2023	14/02/2023	Geol Soc	Evening Lecture	Council Room	
2023	23/02/2023	ONLINE	All Day Seminar	ONLINE - New Tech	New Tech
2023	16/03/2023	Geol Soc	All Day Seminar	Lecture Theatre and Lower Library	Seminar
2023	27/04/2023	Geol Soc	Evening Lecture	Council Room	
2023	11/05/2023	Geol Soc	Evening Lecture	Council Room	
2023	22/06/2023	Geol Soc	All Day Seminar	Lecture Theatre and Lower Library	Seminar
2023	20/07/2023	ONLINE	Evening Lecture	ONLINE	
2023	07/09/2023	Geol Soc	All Day Seminar	Lecture Theatre and Lower Library & ONLINE	Seminar
2023	12/10/2023	Geol Soc	Evening Lecture	Council Room	
2023	16/11/2023	Geol Soc	Evening Lecture	Lecture Theatre and Lower Library	AGM
2023	07/12/2023	Geol Soc	All Day Seminar	Lecture Theatre and Lower Library	Seminar

Upcoming Events
16 March 2023—One-day seminar on permeability (in person and online).

President's evening at the King's Head Pub, Mayfair, London, on December 8, 2022.

Evening lecture by Harry Collini in the council room, Geological Society, Piccadilly, London, on February 14, 2023.

NORWEGIAN FORMATION EVALUATION SOCIETY (NFES)

General News

Starting a new year, the Norwegian Formation Evaluation Society would first like to thank its 2023 sponsors: Aker BP, Equinor, Logtek, and ROGII. Their contributions allow us to continue the monthly technical meetings in their current format—our main forum for technical presentations, professional discussions, and networking. Tusen takk!

To support NFES by becoming a sponsor, please contact our VP Sponsorship, Annette Larsen (vp_sponsor@nfes.org).

Recent Events

January 2023—Monthly Technical Meeting: Just after the season's break, the NFES community met in the Solastranden Gård for the first monthly technical meeting of 2023—a great opening of the new year when VP Program Venkat Jambunathan introduced Kjetil Westeng, lead petrophysicist (Aker BP ASA). Kjetil presented an extended talk of his SPWLA paper "Context and Distribution Matrixes – One Path to Consistent and Efficient Handling of Uncertainty in Formation Evaluation." Well done, Kjetil, and thank you for a fantastic 2023 kickoff!

NFES Technical Meeting January 2023 in Stavanger. Venkat Jambunathan (left), NFES VP Program, presents to Kjetil Westeng (Aker BP ASA) with the NFES ice bear in gratitude for his well-attended and delivered presentation.

8 February 2023—Monthly Technical Meeting: The technical presentation was given by Adesoji Adedamola, SPWLA Global Distinguished Speaker, working as a senior geoscientist with Halliburton here in Stavanger. Adesoji presented his recognized talk on an "Integrated Approach to Leak Detection Using High-Definition Electromagnetic technology, Production Logging, and Ultrasonic Logs." A great audience enjoyed this technical meeting in the Solastranden Gård.

NFES Technical Meeting February 2023 in Stavanger. Adesoji Adedamola (right), senior geoscientist (Halliburton in Norway), receives a keepsake for his great talk from Venkat Jambunathan (left), NFES VP Program.

PDDA SIG

Recent Events

SPWLA PDDA SIG Board Meetings

We have organized monthly board committee meetings to plan several interesting events for 2023. These events include a webinar, workshop, ML competition, and many more. Stay tuned, as we will announce more details when we are allowed to. We are bringing great activities to our SPWLA community and beyond!

Upcoming Events

8 March 2023—NFES welcomes Mr. Øystein Meling (Baker Hughes), who will be presenting ultrasonic drillpipe-conveyed cement and casing integrity logging technology and applications.

12 April 2023—During the April meeting, a talk from Mr. Lars Øy (Well ID) plans to present new LWD caliper logging technologies.

Please follow us for further information on nfes.org and our LinkedIn sites

SPWLA PDDA Annual ML Competition

The SPWLA PDDA SIG had big success in the last two annual ML competitions. Especially last year, more than 100 teams and 250+ participants joined the competitions, which indicates significant interest in ML in the petrophysics community. We will continue preparing the annual machine-learning competition this year and plan to start in March 2023. The topic and details will be announced soon.

SPWLA PDDA SIG Workshop

Our PDDA SIG will host a workshop during the annual symposium in Conroe, TX. This will be a one-day course, and the list of instructors and their topics as summarized below table.

Session	Presenter	Topics
1	Lei Fu	Summaries and Lessons Learned From the 2022 ML Competition
2	Chicheng Xu	ML Assisted Geological and Petrophysical Characterization Workflow
3	Andy McDonald	Machine-Learning Overview Importance of Data Quality for Petrophysics ML Models Applications of ML to Petrophysics Future of ML within Petrophysics
4	Lalitha Venkataramanan	Supervised ML Unsupervised ML Physics Informed ML Applications

The workshop will introduce machine learning (ML), lay out sample workflows and steps for ML applications, and summarize some of the use cases in the industry. Hands-on tutorials using no-code tools to analyze a publicly available data set will also be provided. Attendees will gain insight into the real-world applications of AI and ML in the industry through the course materials.

SPWLA PDDA SIG Webinar Series

14 March 2023—Please join the SPWLA PDDA SIG for an online technical seminar by SPWLA Distinguished Speaker Vanessa Simoes entitled "Deep Learning for Multiwell Automatic Log Correction." Vanessa Simoes is a senior data scientist (SLB). We will share the registration link when it is ready.

Sponsorship Opportunities

There are multiple interesting sponsorship opportunities. Contact our board in case you have an interesting data set or a presentation you would like to share or become a sponsor for PDDA SIG.

Please stay tuned and check it 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.
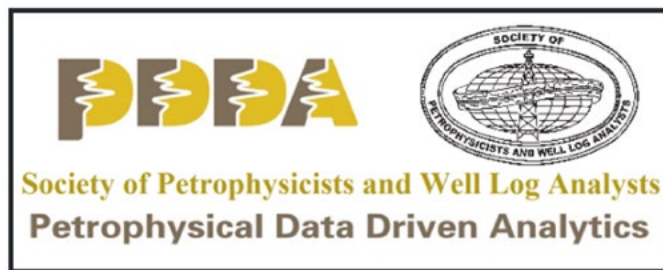
More details available on the PDDA SIG website
 https://www.spwla.org/SPWLA/Chapters_SIGs/SIGs/PDDA/PDDA.aspx
and the PDDA SIG LinkedIn profile
https://www.linkedin.com/groups/13605420
Stay always tuned!
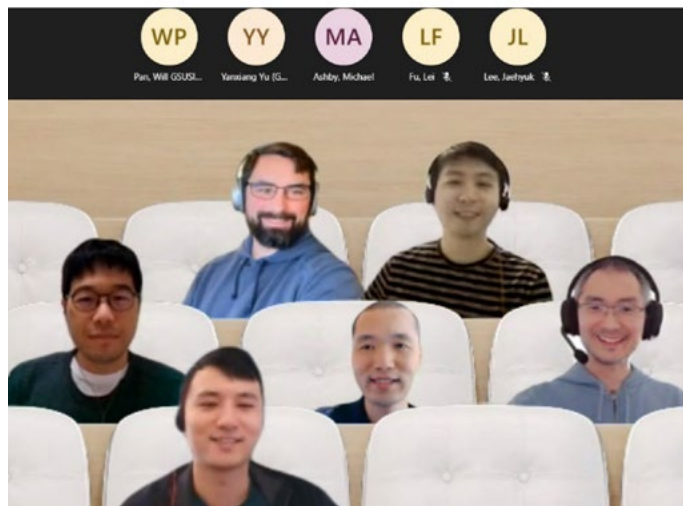
Recent PDDA SIG committee meeting. (Clockwise from top left) Michael Ashby, Wen Pan, Hyungjoo Lee, Lei Fu, Yanxiang Yu, and Jaehyuk Lee.

SAUDI ARABIA CHAPTER

Recent Events

14 December 2022—SPWLA Saudi Arabia Chapter organized a special event focusing on young professionals with the theme of "Gate to Innovate." The event, sponsored by SLB, gathered young professionals from all the partners of the SPWLA SAC Chapter: Saudi Aramco, King Fahd University for Petroleum and Minerals, Kind Saud University, KAUST,

and oil and gas service companies. Mr. Khalid Zainalabedin (Saudi Aramco RDSD manager), Dr. Dhafer Alshehri (Chairman of Petroleum Engineering Department, KFUPM), and Mr. Ibrahim Mousa (SLB Saudi Arabia and Bahrain managing director) opened the workshop. They all stressed the importance of knowledge sharing between the experienced and the young professionals, which was the key to this event. The event was organized with the support of Dr. Faisal Enezi and Ms. Ghadeer AlSulami (Saudi Aramco) and Ms. Marie Van Steene, Ms. Aida Abri, and Mr. Mohammed Al-Hamad (SLB). The morning session covered several technical presentations with topics related to sustainability (Mr. Ayman Ghazzawi, SLB), petrophysics (Ms. Sarah Azman, TAQA company), coring and core analysis (Dr. Taha Okasha, Halliburton), and formation testing (Mr. Mustafa Berkane, Saudi Aramco). In the afternoon session, the YPs were grouped into 10 teams, each headed by a petrophysics expert. The challenge was to resolve a geoscience issue and prepare a presentation to share the technical solutions and findings with the rest of the workshop participants. The team challenges were the highlight of the event, as they allowed the YPs to network with experienced professionals and to learn from them, as well as to network with other YPs. The challenges and the whole event gathered great feedback from all participants.

Speakers at the Gate to Innovate event presented by the SPWLA Saudi Arabia Chapter.

8 February 2023—The SPWLA Saudi Arabia Chapter (SAC) conducted its 12th topical workshop on "Shaly Formation Petrophysics and Thin-Bed Analysis" in Kempinski Hotel al Khobar Saudi Arabia, under the sponsorship of

Halliburton. The main objectives of this topical workshop were to tackle the technical challenges in evaluating shaly formations and thin-bed reservoirs, from data acquisition, data processing and modeling, data interpretation, and integration to arrive at best-in-class solutions. The event started with a valuable keynote speech by Mr. Abdullatif Al-Omair, general supervisor of RDSD (Saudi Aramco). Five technical presentations in the morning session, covered by Mr. Ehab Negm (Halliburton), Dr. Christon Achong (Saudi Aramco), Mr. Pablo Saldungaray (SLB), Mr. Ahmed Abouzaid (Baker Hughes), and Ms. Laila Alshammasi (Saudi Aramco) addressed a variety of challenges and possible solutions for many problems related to thin beds and shaly formations. The afternoon session started with management remarks by Mr. Khalid Zainalabedin, RDSD manager (Saudi Aramco), followed by two technical presentations by Mr. Michael Suhrer (Halliburton) and Mr. Ayman Al-Kamry (Saudi Aramco). The group discussion session was conducted where attendees divided into three groups; the first focused on shaly formation challenges and solutions led by Marie Van Steen (SLB) and Gasser Hasan (Halliburton); the second group focused on thin-bed analysis led by Mr. Ehab Negm and Mr. Ahmed Abouzaid, while the third group led by Dr. Taha Okashah (Halliburton) focused on core analysis challenges in shaly formation and thin-bed analysis. Each group presented the outcome of the group discussion and recommended solutions. This was followed by workshop closing remarks, speakers, and organizers' recognition by Dr. Faisal Enezi, Dr. Mark Ma, and Mr. Ahmed Hafez. The whole event gathered great feedback from participants, and the SPWLA Saudi Chapter Committee thanked all speakers and attendees for their valuable participation and Halliburton for sponsoring this event. The event, organized with the support of Dr. Faisal Enezi and Mr. Mohammad Aljishi (Saudi Aramco), Mr. Ahmed Hafez, and Ms. Ahoud AlKhaldi (Halliburton), was attended with more than 115 attendees from Saudi Aramco, oil and gas services companies, and universities.

A group photo from the Shaly Formation Petrophysics and Thin-Bed Analysis Workshop, Saudi Arabia Chapter.

Upcoming Events

SPWLA Saudi Arabia Chapter (SAC) Student Paper Contest.

SOUTHWEST CHINA CHAPTER

Recent Events

14 January 2023—The Annual Meeting of the SPWLA Southwest China Chapter was held at the Wuhan Campus of Yangtze University, with the conference taking place online. The event was organized by the SPWLA Southwest Chapter (SPWLA-SWCHINA CHAPTER), hosted by the School of Geophysics and Petroleum Resources of Yangtze University, and co-organized by the State Key Laboratory of Oil and Gas Reservoir Geology and Development Engineering, the School of Geoscience and Technology of Southwest Petroleum University, the College of Geophysics of the Chengdu University of Technology, the School of Petroleum and Natural Gas Engineering of Chongqing University of Science and Technology, and the School of Resources and Environment of the University of Electronic Science and Technology. The meeting featured technical presentations from experts and scholars from both home and abroad. The meeting was live broadcasted via three different online conference platforms, including Tencent Meeting, the WeChat platform "Petroleum Circle," as well as Kouxiang Academic. In total, more than 7,000 teachers, students, and experts participated in the annual meeting, with 135 people joining through the Tencent Meeting, 4,615 people through the Petroleum Circle live broadcast, and 2,623 people through the Kouxiang Academic platform.

The meeting began promptly at 9 am and was monitored over by Bin Zhao, vice dean of the School of Geophysics and Petroleum Resources at Yangtze University. Professor Hua Wang, the president of the SPWLA-SWCHINA Chapter, provided an opening introduction and reported on the progress of the chapter in 2022, as well as offering an outlook on the goals for 2023 and wished the conference a success. The technical session then commenced with keynote presentations from Professor Ge Jin at the Colorado Institute of Mining and Technology, Professor Zhejun Pan at the Northeast Petroleum University, and Professor Wei Wang at Sinopec Petroleum Engineering and Technology Research Institute. Professors and experts from the University of Electronic Science and Technology, Southwest Petroleum University, Chengdu University of Technology, Chongqing Institute of Science and Technology, CGG, Olam Energy Technology, Beijing Lime Echo, NIUMAG Technology, and other enterprises also gave excellent presentations, sharing cutting-edge achievements in their fields. Throughout the meeting, there was frequent online interaction, creating a warm atmosphere. At the end of the meeting, Jun Tang, director of the Department of Well Logging Information Engineering (School of Geophysics and Petroleum Resources of Yangtze University), shared the development history and education concept of the well-logging specialty of Yangtze University. In addition, Mr. Chunhao Yu (chief at PetroChina Well Logging), Professor Maojin Tan (China University of Geosciences (Beijing)), Professor Guangzhi Liao (China University of Petroleum), and Professor Wei Guan (Harbin University of Technology) shared their suggestions and comments on the meeting and expressed their gratitude to the SPWLA-SWCHINA Chapter for organizing this conference. They noted that the technical reports of this meeting are of high quality and full of new content, which is of great benefit to relevant domestic academic research, and they hoped that there would be more such activities in the future.

This meeting provided a platform for teachers and students from both domestic and international institutions to exchange ideas and knowledge. It has also facilitated the exchange between academia and industry, fostering greater collaboration and cooperation. Additionally, this conference has played a crucial role in the development of relevant disciplines in domestic universities, offering a new way to advance academic research and education.

UNIVERSITAS PERTAMINA STUDENT CHAPTER

General News

SPWLA Universitas Pertamina Student Chapter 2022/2023 had a fresh start in September. As the fourth cabinet, we named our cabinet, the Propagation Cabinet. Our chapter still is the most active among SPWLA student chapters in Indonesia. The student chapter officers come from across majors, including petroleum, geological, and geophysical engineering, who are still pursuing bachelor's degrees.

In order to keep up with each other, we usually hold the monthly meeting during the second week of the month. Our purpose is to improve and develop hard or soft skills to prepare students to face the new work-life journey. In the year ahead, we will hold many work programs internally and for the public. To keep up to date with our activities, please follow our social media @spwla.upsc on Instagram!

Recent Events

8 January 2023—C-SHALE is the last course series of Sharing and Learning (SHALE) series. The course was well attended by our officers and non-officers and was open to the public. The course is for learning basic knowledge of Python and the use of Python in data science, especially in petrophysics and well logging.
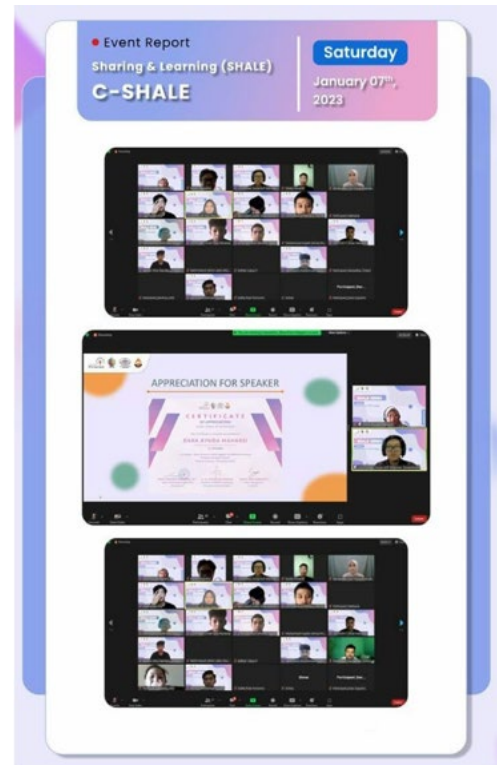
C-SHALE was successfully held and well attended by officers and non-officers.

Trivia is basic knowledge sharing on Instagram. It was created by the Education and Training Division to help all oil and gas enthusiasts enrich their basic knowledge, especially on well-log analysis and petrophysics. Our third trivia is about well logging. A brief sneak peek about well logging is a record of formations made in a drill hole in response to variations in some of the physical properties of the rock through which the drill hole passes. There are several types of well logs, and they will be briefly explained in this post.

The Trivia Series by SPWLA Universitas Pertamina SC on Instagram.

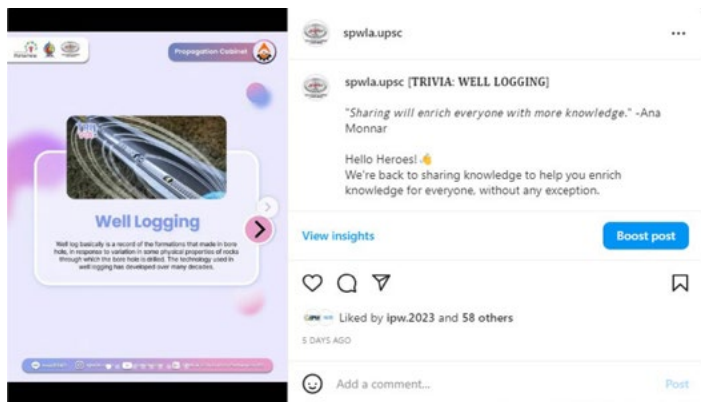**6 February 2023**—Lifting 2.0 was produced by Education and Training Division. This time, the event focused on the Techlog software to enhance the officers' knowledge regarding the software as preparation for working in a professional field, especially in the oil and gas industry. The event was held offline in collaboration with SLB and was well attended by the officers.

The SPWLA Fun Vol. 2 Lifting 2.0 was successfully held and well attended by the officers.

18 February 2023—Petrowell Study Case Competition (PSCC) is one of the events at the International Petrowell Event (IPW) and is the annual international event of the SPWLA Universitas Pertamina SC. The case competition has closed the registration, and the elimination round was held around February 18. The participants of the case competition were from Indonesia and overseas student colleges who are still pursuing their bachelor's degrees. The competition is all about geology, geophysics, and petroleum studies.

The Petrowell Study Case Competition (PSCC) poster.

24 February 2023—SPWLA Fun Vol. 2 was held virtually and was attended by officers of the SPWLA Universitas Pertamina SC. The event was held by Human Resources Department as a bonding event to keep officers well acquainted with each other.

Upcoming Events
19 March 2023—**International Petrowell Forum:** Our upcoming event in January is International Petrowell Forum. This is our annual international forum since 2020.

The Annual Forum will be held virtually and open to the public. Stay tuned for more information regarding the event on our official Instagram account, @spwla.upsc, and the IPW's on @ipw.2023!

Spring 2023—Company Visit With ExxonMobil Cepu Limited: The company visit will be held offline by the officers to gain a better understanding of the work culture and company knowledge of ExxonMobil Cepu Limited. Approximately 60 people from the technology of exploration and production faculties will participate. Also, this is a new era for both parties in collaboration between the Universitas Pertamina and ExxonMobil Cepu Limited.

Attendees listened to Ms. Isa Silveira de Araujo's talk on February 16, 2023.

THE UNIVERSITY OF TEXAS AT AUSTIN STUDENT CHAPTER

General News

The Student Chapter of SPWLA at UT-Austin had a strong start to the new year by planning several coming events, including a series of Distinguished Speaker seminars.

Recent Events

16 February 2023—SPWLA UT hosted a technical seminar by Isa Silveira de Araujo entitled "Quantifying Interfacial Interactions Between Minerals and Reservoir/Fracturing Fluids." Isa is one of the 2022–2023 SPWLA Distinguished Speakers. The technical seminar was presented at The University of Texas and streamed via Zoom and was also available for all interested attendees, whether they were affiliated with UT Austin or not.

Upcoming Events

We have planned the following upcoming events:
- Local Student Paper Contest
- Distinguished Speaker seminars
- Technical and nontechnical sessions by industry experts
- A promotional campaign to increase the visibility of SPWLA to students from petroleum engineering, geological science, and other disciplines
- A series of professional software training for graduate and undergraduate students

Attendees with Ms. Isa Silveira de Araujo.

Publicity flyer for our first Distinguished Speaker seminar for 2023 by Isa Silveira de Araujo.

Carl H. Sondergeld
(1947–2022)

Carl H. Sondergeld passed away in Norman, OK, on November 9, 2022, following a long and courageous struggle with cancer. We were both (CR and ST) truly privileged to know and work with Carl as a colleague and friend while we were all employed at the former Amoco Research Center in Tulsa. Carl was not only an exceptionally gifted rock physicist but also a dedicated and inspiring teacher. He had an exquisite sense of humor and a warm personality, one which endeared him to all of us privileged to know and work with him.

Carl received a BA and an MA from Queens College in New York and, in 1977, obtained his PhD in geophysics at Cornell University. His advisor was Donald L. Turcotte, and his thesis was entitled "An Experimental Study of Two-Phase Hydrothermal Convection in a Porous Medium with Applications to Geological Problems."

After graduation from Cornell, Carl spent time at the Los Alamos National Lab and at CIRES, where he tried to understand rock failure mechanisms and processes. In 1981, he joined the Amoco Research Center in Tulsa, where he remained until 1999. His first contribution after teaming with coworkers Martin Smith and Janice Norris involved the design and development of an array sonic logging tool with real-time data processing. Carl next teamed up with one of us (CR), and we soon became lifelong friends. We jointly made a number of contributions in the broad area of seismic rock physics. We studied what caused anisotropy in shales. We analyzed in-situ stress through anelastic strain relaxation, and shear wave birefringence and circumferential velocity analysis. We applied acoustic tomography to the measurement of elastic anisotropy and developed techniques to measure the properties of unconsolidated materials. We populated and maintained a corporate rock properties database, and developed user-friendly database access and provided modeling software. Finally, we designed, developed, and deployed a portable rock properties laboratory for use at drilling locations and core storage facilities. For this work, we received Amoco's Presidential Special Technical Award.

Following the 1999 Amoco-BP merger, Carl and Chandra moved to the Mewbourne School of Petroleum and Geological Engineering at the University of Oklahoma. Here our research gave greater emphasis to petrophysics and the use of rock physics to solve engineering problems. Funding for this work was provided by many individual E&P companies and by two industrial consortia, namely "Experimental Rock Physics" and "Unconventional Shale Gas." This development led to the formation of a world-class rock characterization laboratory named the "Integrated Core Characterization Center." Novel tools, such as a nano-indenter, an acoustic microscope, a nuclear magnetic resonance spectrometer, and a focused ion beam scanning electron microscope, were introduced to the E&P industry, among several others. The center played a key role in better understanding the complex subsurface behavior of nano-porous rocks and fluids. This led to a better understanding of wettability, pore-size distribution and connectivity, porosity evolution, identification of sweet spots, enhanced oil recovery, and hydraulic fracturing in organic-rich shales. Above all, Carl was a passionate teacher and mentor. He trained many participants of the former Amoco Petrophysics School, and many are now leaders in our industry. He coached the OU undergraduate students to participate in the "SPE International "PetroBowl Competition." OU teams took first place in 2007, 2008, and 2010. Carl's undergraduate course in petrophysics was dreaded by students because of Carl's high expectations. These then resulted in harsh grading. In the words of a former student, "His numerous awards as the best instructor in the department attest to his excellent teaching skills. In a twist, Dr. Sondergeld's demand for more inspired us to achieve excellence through dogged determination, often exceeding our own expectations."

Carl was an author or coauthor of 16 patents and was recognized during his lifetime with numerous professional awards. He was the Fall 2010 SEG Distinguished Lecturer. He received the OU College of Engineering Brandon Griffith Award for Superior Teaching in 2009 and again in 2012. In 2017, he was recognized with the OU Regent's Award

for Superior Teaching, and during the last year of his life, he was honored with the 2022 SPWLA Gold Medal for Technical Achievement.

We will remember Carl for his passion for his chosen profession, his dedication to his students, and his cheerful disposition. He inspired his students and was admired and respected by his colleagues. Even while impaired by deteriorating health during his later years, he insisted on continuing with his teaching commitments as best he could. Carl is mourned by his wife, RoseMarie, his daughters, Amy and Lindsay, and their families. Carl was an inspiration to his students and to his many friends. We all will miss him dearly.

Chandra Rai, Norman, OK
Sven Treitel, Tulsa, OK

James Christopher Barnette
(1961–2023)

James Christopher Barnette, 61, a resident of Broussard, Louisiana, passed away on Saturday, January 21, 2023, after battling cancer. Chris was born August 30, 1961, in Montgomery, Alabama, and was raised in Troy, Alabama. He was a 1979 graduate of Pike Liberal Arts High School and graduated from the University of Alabama in 1984 with a degree in petroleum engineering.

Chris worked around the world in the oil industry for 38 years until his retirement in 2019. During this time, he was employed with Dresser, Baker Hughes, Halliburton, Ecoserv, and Petromac. He was a member of numerous professional petroleum organizations and was a longtime active member of the SPWLA. He was well respected in his field, especially in the Gulf of Mexico region, where he worked and lived for many years. His weekends were set aside for playing golf and cheering on the Alabama Crimson Tide and the New Orleans Saints. Survivors include his wife of 38 years, Mary Catherine Crawford Barnette, and their daughter, Mary Melissa Barnette Nations, and her husband, Sheldon.

Chris began his career as a summer hire with Wilson Brothers Drilling in Lafayette (1981), then later as a co-op intern with Dresser Atlas while attending the University of Alabama. After graduation, he joined Dresser Atlas and moved to Houston to provide technical support for Houston-based clients, particularly with Conoco in South Texas. His career spanned Dresser Atlas, Western Atlas, and then Baker Atlas before moving on to Halliburton and Petromac.

Throughout his time in the oil industry, he worked with numerous locations globally, addressing different technical challenges while presenting a wide range of petrophysical and production solutions. In North America, his career spanned Arctic challenges on the North Slope of Alaska in tremendous reservoirs to South Texas tight gas reservoirs. In the Gulf of Mexico, as the sales manager, he came up with innovative solutions to address deepwater formation evaluation for ultradeep wells. In Asia, there were different geological, commercial, and political challenges in each country, from India to Indonesia to China. After returning to the United States, he was engaged with the emerging unconventional resource challenges and their unique production issues while working as the sales manager in Denver.

Joining Halliburton, Chris managed their Northern US Region sales effort. Later, he transferred to Houston to manage their Wireline and Perforating Product Line for the Southern US region. In 2013, he became the Gulf of Mexico region manager, focusing on deepwater formation evaluation challenges and solutions for wells that exceeded 34,000 ft, with water depths approaching two miles. Chris had a significant impact on solutions to address that challenging environment. He later joined Petromac supporting their Wireline Express Tool Taxi, an innovative method to convey wireline tools in challenging boreholes. Chris helped to adapt this new conveyance technology to deepwater Gulf of Mexico, along with the challenging horizontal well market on land as well.

Throughout his career, Chris was an active member of SPE, SPWLA, and AADE. He served in numerous leadership positions in SPWLA and SPE over the years. In 1989, Chris was the Houston SPWLA Chapter Treasurer and a contributing author to the society. He was transferred to Anchorage, Alaska, to support Conoco, ARCO, and other active operators on the North Slope, along with Kenia offshore operations. While in Alaska, he served as the Chairman, SPE Alaskan Section, and later as the Advisory Board Chairman for Mineral (Petroleum) Engineering at the University of Alaska-Fairbanks.

When Chris returned to Houston, where he specialized in tight gas reservoirs in South Texas, he served on the Advisory Board of the Log Characterization Consortium (SPWLA) in 1997–98 before transferring to New Orleans to resolve deepwater technical challenges. Once there, he served as the Geoscience Committee Co-Chair, Deepwater Symposium, New Orleans SPE, 2000–2003, as well as the New Orleans SPWLA Chapter President from 2003–2004. Later, he was an active SPWLA member in the Singapore, Denver, Houston, and Evangeline Chapters as well.

In closing, Chris will be deeply missed by his family, friends, and colleagues. He made his mark in the oil and gas industry through his hard work, passion, and innovative ideas. As a respected member of the SPWLA, he will always be remembered for his contributions to the advancement of petrophysics, his leadership, and his commitment to sharing his expertise with others.

Welcome New Members – December 5, 2022–February 16, 2023

Abdulkarim, Anar, Halliburton, Sabah Al Salim, Mubarak AlKabir, Kuwait

ALI, Mir Saif, University of Houston, Houston, TX, United States

Aljishi, Mohammad, Aramco, Alqatif, Eastern, Saudi Arabia

Almeida, Gisela, Universidade Federal Do Rio De Janeiro (UFRJ), Rio De Janeiro, Brazil

Arenas Arias, Pablo, Universidad Privada De Bolivia, Santa Cruz, Bolivia

Bing, Wang, China University of Petroleum, Beijing, China

Bo, Yong, Anhui University, Hefei, Hefei, China

Borchardt, Erik, SLB, Littleton, CO, United States

Cotter, Zachary, Advanced Resources International, Columbus, OH, United States

Du, Zhi, China University of Petroleum, Beijing, Yibin, China

ElGhonimy, Rana, BP America, Pearland, TX, United States

Ergashev, Golibjon, SANEG, Tashkent, Uzbekistan

Ermila, Mansur, Colorado School of Mines, Golden, CO, United States

Fang, Zhilong, University of Electronic Science and Technology of China, Chengdu, Sichuan, China

Fornue Vargas, Alejandro, Instituto Mexicano Del Petróleo, Poza Rica De Hidalgo, Mexico

Franquet, Javier, Baker Hughes, Houston, TX, United States

Gilbertson, Shawna, CSM, Evergreen, CO, United States

Hao, Di, China University of Petroleum,Beijing, Changping, China

Henry, Bobbie, Baker Hughes, Spring, TX, United States

Hu, Hengshan, Harbin Institute of Technology, Harbin, Heilongjiang, China

Jacob, Mathilde, Perenco, London, United Kingdom

Ji, Yunjia, University of Electronic Science and Technology of China, Chengdu, Sichuan, China

Jiang, Kai, China University of Petroleum, Beijing, Beijing, Changping, China

Jin, Zhiqiang, China University of Petroleum, Beijing, China

Krueger, Martin, ConocoPhillips, Stavanger, Norway

Lauderdale-Smith, Gabe, ERCE, London, United Kingdom

Li, Jia, Harbin Institute of Technology, Harbin, Heilongjiang, China

Liang, Wang, Chengdu University of Technology, Chengdu City, China

Ling, Kegang, University of North Dakota, Grand Forks, ND, United States

Linzman, Chad, Gaia Earth Group, Thornton, CO, United States

Luo, Yang, Chengdu University of Techlonogy, Chengdu, China

Marin, William, Independent, Oklahoma City, OK, United States

McMillan, Julia, ROGII Inc, Calgary, AB, Canada

Meireles, Leonardo, DTU, Kgs. Lyngby, Denmark

Mizyed, Abdelhamid, University of Louisiana at Lafayette, Lafayette, LA, United States

Nan, De, China University of Petroleum, Changping, Beijing, China

Nile, Kane, Endeavor Energy Resources, Midland, TX, United States

Odewale, Paul, Federal University of Technology, Akure, Owo, Nigeria

Okoroafor, Esuru, Texas A&M University, College Station, TX, United States

Oliver, Guy, Geolog Americas Inc., Houston, TX, United States

Pestana, Sara, Galp, Lisbon, Portugal

Prandi, Pedro Lifter, PRAENGEO, Ribeirão Preto, São Paulo, Brazil

Qi, Yin, Chengdu University of Technology, Chengdu, China

Ramlal, Saul, Shell, Piarco, Trinidad & Tobago

Ricardez Medina, Saul, National Polytechnic Institute, Mexico City, Mexico

Ruterbories, Daniel, Baker Hughes, Magnolia, TX, United States

Sajedian, Ali, University of Louisiana at Lafayette, Lafayette, LA, United States

Scherer, Drew, SM Energy, Denver, CO, United States

Song, Yongjia, Harbin Institute of Technology, Harbin, China

Thompson, Charles, University of Leeds, Ambleside, Cumbria, United Kingdom

Tian, Jie, Chengdu University of Technology, Chengdu, China

Traore, Seydou, University of Houston, Houston, TX, United States

Vasquez, Vladimir, Independent Consultant, Bogota, Colombia

Velez, Alyssa, University of Houston, Houston, TX, United States

Wang, DaHai, LeadingWheel-Beijing LOGIC Evaluation Center, Xi 'an, China

Williams, Steve, University of Houston, Katy, TX, United States

Wongpornchai, Pisanu, Chiang Mai University, Chiang Mai, Thailand

Wright, Marissa, Endeavor Energy Resources, Midland, TX, United States

Wu, Wenhe, University of Electronic Science and Technology of China, Chengdu, China

Xu, Mingyang, Chengdu University of Technology, Chengdu, Chenghua, China

Xu, Jiaqi, Harbin Institute of Technology, Harbin, Nangang, China

Yao, Linfang, Chengdu University of Technology, Chengdu, Chenghua, China

Zeng, Leo, Surge Energy America, Houston, TX, United States

Zhang, Chao, Harbin Institute of Technology, Harbin, Heilongjiang, China

Zhao, Xianzheng, PetroChina Dagang Oilfield Company, TianJin, China

SPWLA 64th Annual Logging Symposium
Lake Conroe, Texas, USA, June 10–14, 2023
Technical Program

NOTE: Tentative Program: Selected papers listed below may not be in the order in which they will be presented. The final technical program may differ from that shown due to paper withdrawals. All technical sessions will be held at the **Margaritaville Lake Resort**. *Photography and video/audio recording of any kind are strictly prohibited in all areas, including technical sessions, workshops, and exhibition hall.*

To read the abstracts in full, please click here:
AUTOMATED METHODS OF FORMATION EVALUATION

A Method for Determining Formation Porosity From Gamma Ray Energy and Time Spectrum Induced by Pulsed Neutron in Cased Well
Hui Zhang, Feng Zhang, Fei Qiu, Xiaoyang Zhang, Yiming Yu, and Han Wang, School of Geoscience, China University of Petroleum (East China)

Accurate Mineralogy When Logs Are Scarce or of Limited Fidelity: Innovative Data Analytics Solution Leveraging Core-Logs Integration
Laurent Mosse and Chiara Cavalleri, SLB; Massimiliano Borghi and Marco Pirrone, Eni S.P.A Natural Resources

Automatic Injection of NanoTags for Improved Cutting Depth Correlation
Gawain Thomas, Marta Antoniv, S. Sherry Zhu, and Martin Poitzsch, Aramco Americas; Hyung T. Kwak, Saudi Aramco

Far-Field Lateral Tectonic Strain Prediction From Straddle Packer Formation Stress Measurements
Javier Alejandro Franquet, Baker Hughes

Generative Adversarial Networks-Based Forward-Inverse Method for Geophysical Logging
Rongbo Shao, LiZhi Xiao, GuangZhi Liao, Sihui Luo, and Gang Luo, China University of Petroleum

High-Performance Stochastic Inversion for Real-Time Processing of LWD Ultradeep Azimuthal Resistivity Data
Mikhail Sviridov, Anton Mosin, and Dmitry Kushnir, ROGII Inc.

Machine Learning and Artificial Intelligence Within Petrophysics: Past, Present, and Future
Andrew McDonald, Geoactive Limited

Permeability Modeling on Highly Porous Brazilian Presalt Carbonates, Assisted by Automated Reservoir Rock Typing Derived From Ultrasonic Borehole Images
Adna Grazielly Paz de Vasconcelos, Marcos Antonio Nunes Junior, Patrick Pereira Machado, Laura Lima Angelos dos Santos, Nadege Bize-Forest, Giovanna da Fraga Carneiro, and Danilo Jotta Ariza Ferreira, SLB

Propagating Image-Based Rock Classes From Cored Wells to Non-Cored Wells Using Supervised Machine Learning for Enhanced Formation Evaluation
Pallavi Sahu, Andres Gonzalez, and Zoya Heidari, The University of Texas at Austin

Robust and Automatic Shale Volume Interpretation Using Adaptive Lithological Thresholds Built on Depth Trends, Statistics, and Geological Units
Kjetil Westeng, Aker BP ASA; Yann Van Crombrugge, Inmeta; Peder Aursand and Egil Fjeldberg, Aker BP ASA

Strata-Constrained GWLSTM Network for Logging Lithology Prediction
Jianjun Li, China National Logging Company; Haotian Lv, Xi'an Jiaotong University; Haining Zhang, China National Logging Company; Hui Li and Baohai Wu, Xi'an Jiaotong University

Using Artificial Intelligence to Predict Contamination During Formation Fluid Sampling
Anup Hunnur, Sefer Coskun, Emiliano Hall, and Jujie Yang, Baker Hughes

CASE STUDIES

A Novel Workflow for Well Placement Optimization Within Highly Fractured Carbonate Reservoirs Through the Integration of Rock and Reservoir Fluid Geochemistry Measurements and Petrophysical Log Data: A Multiwell Field Case Study, Adiyaman, Turkey
Melike Ozkaya Turkmen, Turkish Petroleum Corporation (TPAO); Kemal Hekimoglu, Geolog International; Onur Yuruker, Elif Cihan Yildirim, and Mustafa Biterge, Turkish Petroleum Corporation (TPAO)

Bed Boundary Mapping Technology Improves Coal Mining by Revealing Its Complex Geological Structures
Hatem Abeida, Qiming Li, and James Mather, Oliden Technology; Valentin Woehling, Lucas Drilling Pty Ltd; Jason Patterson, AngloAmerican; Andy Hall, Pentagram Petrophysics Pty Ltd; Greg Runge, Lucas Drilling Pty Ltd

Changing the Game: Well Integrity Measurements Acquired on Drillpipe
Tonje Winter and Laurent Delabroy, Aker BP; Abe Vereide, bp; Lynda Memiche, Roger Steinsiek, and Ian Leslie, Baker Hughes

First Multiphysics Integration of 3D Resistivity Mapping With 3D Sonic Imaging to Characterize Reservoir Fluid and Structural Elements
Redha Al-Lawati, Mauro Viandante, Adam Donald, Maren Eide, Ibrahim Abdullah, Eman Samir, Pascal Millot, Amani Al Shaqsi, and Othman Al Badi, SLB; Fahad Al Qassabi, Marwa Al Shaqsi, Adil Al Hamadani, Khalil Al Arafati, Clive Johnson, Khalil Hassan, and Jalal Al Shukaili, Oxy Oman

Integrated Petrophysics and Rock Physics Results and Log QC and Editing in Deep HPHT Chlorite-Rich Wilcox Sands, Fandango Field, South Texas – A Case Study
Jeffrey Baldwin, Global Rock Scope, and Fred Jenson, GeoSoftware

Integrated Physical and Digital Chalk Relative Permeability Evaluation: A Case Study
Abraham Grader, Bob Engelman, and Caroline Mignot, Halliburton; Knut Arne Birkedal, Nils Andre Aarseth, and Kristoffer Birkeland, Aker BP

Multiwell Production Allocation via Petroleum Fingerprinting: A Case Study in the Norwegian Sea
Placido Franco and Roberto Galimberti, Geolog Technologies Srl; Thorsten Uwe Garlichs, Wintershall Dea Norge ASA

Temperature Sensitivity of NMR Responses of Porous Media
Zhen Xie, Lizhi Xiao, Lu Zhang, Sihui Luo, and Guangzhi Liao, China University of Petroleum, Beijing

FORMATION EVALUATION OF CONVENTIONAL RESERVOIRS

3D Electromagnetic Modeling and Quality Control of Ultradeep Borehole Azimuthal Resistivity Measurements
Sofia Davydycheva, 3DEM Modeling&Inversion JIP; Vladimir Druskin, 3DEM Modeling&Inversion JIP and Worcester Polytechnic Institute; Carlos Torres-Verdín, Junsheng Hou, and Wardana Saputra, The University of Texas at Austin; Michael Rabinovich, bp; Frank Antonsen, Equinor

3D Ultradeep Azimuthal Resistivity (UDAR), a Tool for Identification of Bypassed Pay in Mature Fields
Rosamary Ameneiro Paredes, Nigel Clegg, and Arthur Walmsley, Halliburton; Ingvild Andersen and Svein-Tore Brundtland, ConocoPhillips

A New Petrophysical Workflow to Characterize Magnesium-Rich Clay Minerals in Presalt Lacustrine Carbonate Reservoirs
Pingjun Guo, Anindya Nandi, Allison Scribner, Elton Ferreira, and Karrie Miller, ExxonMobil

Characterizing Petrophysical Uncertainties of Thin-Bedded Gas Sands With Cores and Production Data
Ting Li and Adil Manzoor, Chevron

Development of a Staged Effective Medium Model With a Thomas-Stieber Model to Estimate Permeability
Michael Myers, Lori Hathon, and William Horvath, University of Houston

Dielectric Characterization of NMR Surface Relaxivity
James Funk, University of Houston

Dielectric Dispersion Model for Qualitative Interpretation of Wettability
Chang-Yu Hou, Jiang Qian, and Lalitha Venkataramanan, Schlumberger-Doll Research Center; Laurent Mosse, and Wael Abdallah, SLB; Shouxiang Mark Ma, Saudi Aramco

Enhanced Reservoir Characterization and Horizontal Well Placement With the Use of High-Definition and Three-Dimensional Reservoir Mapping-While-Drilling Systems in Campos Basin, Offshore Brazil
Guillermo Cuadros and Antonio Mainieri Vieira da Cunha, SLB

Experimental Workflow for Quantifying the Performance of Geophysics-Based and Conventional Core-Based Wettability Assessment Methods
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Influence of Grain Shape and Size on the Performance of Dielectric Permittivity-Based Water Saturation Assessment Models
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Xinglin Wang, Rice University; Eva G. Vinegar, The University of Texas at Austin and Vinegar Technologies, LLC; Yunke Liu and Philip M. Singer, Rice University; Harold J. Vinegar, Vinegar Technologies, LLC; George J. Hirasaki, Rice University

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Xinxu Dong, Department of Geology, Northwest University, China

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A New Method to Improve the Calculation Accuracy of Element Content in Natural Gamma Spectrometry Logging While Drilling
Zhiyuan Liu, Feng Zhang, Xiaoyang Zhang, and Jilin Fan, China University of Petroleum, East China

A Novel Data Processing Method for Array Induction Logging in Tight Carbonate Reservoirs Drilled With Oil-Based Mud
ChaoLiu Li, Han Tian, and Zhou Feng, PetroChina Research Institute of Petroleum Exploration & Development; Lei Wang, China University; Hongliang Wu and Falong Hu, PetroChina Research Institute of Petroleum Exploration & Development

A Novel Oil Saturation Evaluation Method by Using Double Particle Detector Cs_2LiYCl_6:Ce(CLYC)
Qixuan Liang, Feng Zhang, Hui Zhang, Fei Qiu, and Yiming Yu, School of Geosciences, China University of Petroleum, East China

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Ahmad Shoeibi, Geolog International B.V.; Saad Al-Ajmi and Meshari Al-Hashash, Kuwait Oil Company; Milton Sanclemente and Antonio Bonetti, Geolog International B.V.

Integrated Petrophysical Evaluation of Reservoir Fluids Affected by Production Using Combination of NMR and Elemental Spectroscopy Log Data Combined With Core Experiment Analysis
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Integrated Reservoir Characterization and Effective Reservoir Identification by Advanced Logging Series for Complex Volcanic Gas Field – A Case Study From Songliao Basin, China
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NMR Fluid Substitution – Pursuing the Fundamental Controlling Parameters of a Low-Mobility Reservoir
Soren Christensen, Aker BP; Holger Thern, Jon Torkel Petersen, and Tor Eiane, Baker Hughes

Pore System Characterization of Carbonate Formations: A Multiphysics Approach Through Acoustic and NMR Measurements
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Salinity Effect on CO_2 Solubility in Live Formation Water Under Reservoir Conditions
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Through-Tubing Casing Inspection for Well Integrity Evaluation Using Physics-Driven Machine-Learning Nonlinear Correction
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Through-Tubing Lightweight Cement (TT-LWC) Evaluation in Production Wells
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Use k_o-b Plot to Determine Fracture Impacts on Gas Permeability Measurements
Wenxiu Song, Michael T. Myers, and Lori Hathon, University of Houston

Using Formation-Tester Measurements to Estimate Depth of Invasion and Water Saturation in Deeply Invaded Tight-Gas Sandstones
Tarek Mohamed, Mohamed Bennis, and Carlos Torres-Verdín, The University of Texas at Austin; German Merletti and Camilo Gelvez, bp

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A Machine-Learning Approach Performed on New Technology for Images in Oil-Based Mud for Advanced Electrofacies Analysis – A Case Study From the Norwegian Sea
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Guoqiang Zhang, CNOOC Ltd.-Tianjin; Bo Liu, Xianlei Zeng, and Yehong Cao, Baker Hughes; Bin Tao, CNOOC Ltd.-Shenzhen; Zhongqing Zhang, Baker Hughes

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Using Image Logs to Characterize and Correlate Mass Transport Deposits in the Bone Spring and Wolfcamp Formations, Delaware Basin
Jarret Borell, Joshua J. O'Brien, and Sloan Anderson, Devon Energy

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Darya Andornaya, Yuriy Antonov, Kjeld Ghysels, Elena Konobriy, and Sergey Martakov, Baker Hughes; Kåre Røsvik Jensen, Equinor

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Nazanin Jahani, NORCE Norwegian Research Centre; Carlos Torres-Verdín and Junsheng Hou, The University of Texas at Austin; Jan Tveranger, NORCE Norwegian Research Centre

Reservoir Connectivity Characterization and Controlling Factor Analysis by Advanced Logging-While-Drilling Electrical Image Data and MDT Data for Offshore Sandy Conglomerate Reservoirs
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Ibrahim Gomaa, Zoya Heidari, and D. Nicolas Espinoza, The University of Texas at Austin

On the Nature of CO₂/Brine Mixing in Assessing the Feasibility of CCS Monitoring
Kristoffer Walker, Alexei Bolshakov, Hermes Malcotti, Lei Wei, and Artur Posenato Garcia, Chevron

The Effective Diagnostic Capability of Pulsed-Neutron Logging for CCS Monitoring Purposes
Saida Machicote, Marco Pirrone, and Simone De Lisio, Eni SPA

Time-Lapse Pulsed-Neutron Logs for CCS: What Have We Learned From All These Monitoring Runs?
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A New Workflow for Assessment of Fluid Components and Pore Volumes From 2D NMR Measurements in Formations With Complex Mineralogy and Pore Structure
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A Review of the Latest Developments in Laboratory NMR Techniques for Unconventional Shale Characterization
Z. Harry Xie and Omar Reffell, Core Laboratories LP

A Study on NMR Logging Data Processing With Deep Learning
Gang Luo, Lizhi Xiao, Sihui Luo, Guangzhi Liao, and Rongbo Shao, China University of Petroleum, Beijing

Determine Oil and Water Saturations in Preserved Source Rocks From 2D T_1-T_2 NMR
Stacey Althaus, Jin-Hong Chen, Qiushi Sun, and J. David Broyles, Aramco Americas

Field Implementation of LWD NMR ROP Correction Enables Faster Drilling
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Improvement of T_2-P_C 2D NMR Inversion Method for Characterizing Pore-Throat Connectivity
Gong Zhang and Yingyao Qin, Yangtze University

Learnings From Impact and Implications of Signal-to-Noise in NMR T_1-T_2 Logging of Unconventional Reservoirs
Olabode Ijasan, ExxonMobil

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Michael Dick, Taylor Kenney, and Dragan Veselinovic, Green Imaging Technologies; Bruce J. Balcom and Florin Marica, University of New Brunswick MRI Research Centre; Derrick Green, Green Imaging Technologies

NMR Fluid Substitution for Multimodal Carbonate Pore Systems
Wei Shao and Gabriela Singer, Halliburton; Gabor Hursan and Shouxiang Mark Ma, Saudi Aramco

Partitioning Fluids in NMR T_1-T_2 Measurements Using Gaussian Mixture Models and Surface Fitting
Jonathan Markell and James Davidson, Netherland, Sewell & Associates, Inc.

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A Method for Automatic Depth Matching of Multiwell Logging Curves Based on Deep Reinforcement Learning
Xiong Wenjun and Lizhi Xiao, China University of Petroleum, Beijing; Dakuang Han, Research Institute of Petroleum Exploration and Development, PetroChina, Beijing; Wenzheng Yue and Guangzhi Liao, China University of Petroleum, Beijing

AI-Driven Image-Based Digital Twin Rock Properties – Fast, Consistent, and Cost Effective
Ghadeer Alsulami and Shouxiang Mark Ma, Saudi Aramco; Katrina Cox and Allen Britton, Core Lab

AI-Guided Interpretation: Automated Quality Assessment for Depth-Matched Images
Kristina Prokopetc, Alexis He, Salma Benslimane, Josselin Kherroubi, and Nadege Bize-Forest, SLB

Automation of LWD-Resistivity Workflows With Hybrid Physics + AI-ML
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Best Practices in Automatic Permeability Estimation: Machine-Learning Methods vs. Conventional Petrophysical Models
Oriyomi Raheem, Wen Pan, and Carlos Torres-Verdín, The University of Texas at Austin

Evaluation of the Efficiency of Machine-Learning Techniques to Estimate Petrophysical Properties of the Albian Carbonate Reservoir in the Campos Basin Using Well-Log Data
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Nuclear Logging in Geological Probing for a Low-Carbon Energy Future – A New Frontier
Ahmed Badruzzaman, Pacific Consultants and Engineers

Petrophysical Analyses for Supporting the Search for a Shale-Hosted Nuclear Repository
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State of Integrated Formation Evaluation for Site-Specific Evaluation, Optimization, and Permitting of Carbon Capture and Storage Projects
Erik Borchardt, SLB

Underground Hydrogen Storage in Porous Media: The Role of Petrophysics
Esuru Rita Okoroafor, Texas A&M University

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Iterative Cement Bond Logging Without Calibration
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Multiple String Cement Bond Logging With Acoustic Wireline Tools for Plug and Abandonment: Possible and Impossible
Alexei Bolshakov, Kristoffer Walker, Yegor Se, and Scott Cole, Chevron

The Road to Achieving Business Value With Reflection Sonic Imaging
Brian Hornby, Hornby Geophysical Services, LLC