



spwla today



NEWSLETTER

Petrophysics Journal

CALL FOR PAPERS

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



MORE
INFORMATION
ON SPWLA.ORG



ISSUE SPONSORSHIP AVAILABLE

INSIDE THIS EDITION

From the President.....	5
From the Past President	10
From the Editor	13
Board of Directors Reports	
Tech Today	14
Financial Times.....	17
Learning Opportunities	20
Informative Technology	22
The Feed	23
Regional Understandings.....	25
The Bridge	30
Call for Papers: Mud Logging Special Issue.....	32
Call for Papers: Latin America Special Issue.....	33
Workshop: From Measurements to Theory: Adventures in Rock Physics, Petrophysics, and Engineering.....	34
Call for Abstracts: SPWLA Asia Pacific Regional Conference 2024	35
Board Minutes.....	36
Chapter News.....	38
New Members.....	72





President
Jennifer Market
Consultant
Perth, Australia
President@spwla.org



VP Finance, Secretary, and Administration
Jing Li
Occidental Petroleum Corporation
Houston, TX USA
VP-Finance@spwla.org



President-Elect
Iulian Hulea
Shell Global Solutions
The Hague, Netherlands
President-Elect@spwla.org



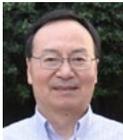
VP Publications
Stephanie Perry
Continental Resources
Oklahoma City, OK, USA
VP-Publications@spwla.org



VP Technology
Robert "Bob" Gales
Halliburton
Houston, TX USA
VP-Technology@spwla.org



VP Information Technology
Tom Bradley
Baker Hughes
Den Helder, Netherlands
VP-InfoTech@spwla.org



VP Technology-Elect
Harry Xie
CoreLab
Houston, TX USA
VP-Technology-Elect@spwla.org



VP Social Media
Chelsea Newgord
ExxonMobil
Houston, TX USA
VP-SocialMedia@spwla.org



VP Education
Kelly Skuce
Core Petrophysical Consulting
Calgary, Canada
VP-Education@spwla.org

REGIONAL DIRECTORS



N. America 1
Javier Miranda
DeGolyer and MacNaughton
Houston, TX, USA
Director-NA1@spwla.org



Middle East/Africa
Jennifer Duarte
Geoactive Ltd
Abu Dhabi, UAE
Director-ME@spwla.org



N. America 2
Clara Palencia
Intertek Westport Technology Center
Houston, TX USA
Director-NA2@spwla.org



Asia Pacific
Yuki Maehara
SLB
Tokyo, Japan
Director-Asiapacific@spwla.org



Latin America
Nelson Suarez
Halliburton
Mexico City, Mexico
Director-LA@spwla.org



Executive Director
Sharon Johnson
SPWLA
Houston, TX 77017
(+1) 713-947-8727
sharon@spwla.org



Europe
Mathias Horstmann
SLB
Stavanger, Norway
Director-Europe@spwla.org



Managing Editor
Elizabeth Naggar
(+1) 713-444-3495
editor@spwla.org

Publication Manager
Anna Tarlton
InkSpot Printing
2301 S. Shaver
Pasadena, TX 77502, USA
(+1) 713-472-1100
orders@inkspotprinting.com

May 18–22, 2024

SPWLA 65th Annual Symposium
Sheraton Grand Rio Hotel & Resort
Rio de Janeiro, Brazil
www.spwla.org

About the Cover

It may be a little chilly outside now, but the SPWLA 65th Annual Symposium in May will be turning up the heat in Rio de Janeiro. Make your plans now to attend!

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.



Jennifer Market
SPWLA President
2023–2024

Hello again from the president's desk. It is hard to believe that we are closing in fast upon the holiday season and the end of the year. By the time of publication, the abstract acceptance letters will be sent, thanks to the hard work of the technical committee, and the excitement for the annual symposium in Rio de Janeiro in May is really beginning to build.

We've had an active couple of months, with many SIG and local chapter meetings, along with the joint Imaging & Acoustics SIG topical conference (see the article later in this newsletter) and the International Geomechanics Symposium (see below).

Before diving into the event summaries, I'd like to take a moment to touch on a couple of topics that frequently come up. We receive dozens (sometimes hundreds) of emails a week from members who are passionate about petrophysics, often with great suggestions and enthusiasm but often with frustration on why I (or the board) haven't addressed every issue with alacrity.

First, we'd like to gently remind everyone that the international board is made up of volunteers generously giving of their time for the benefit of the society, but we all have full-time jobs as well, so we do our best to organize and address the needs of the society alongside our excellent full-time staff (Sharon and Stephanie) and part-time editor (Elizabeth). For many of the board members, we spend upwards of 40 to 60 hours a month on society business, often paying from our own pockets to travel to and organize events. However, we can't always tackle every topic, though we do try! We don't neglect topics because we are not passionate, but sometimes, there just isn't enough time for the board to address every issue, which is where you (the members) come in! There are always ways to participate in the society and help further the field of petrophysics. Below are a few of the inquiries/complaints we frequently receive and how we can work together to progress them.

- A particular topic didn't receive enough attention at the annual symposium:
 - While the technical committee solicits input and puts careful consideration into the special sessions and topics in the call for abstracts, the symposium program is, in the end, made up of the abstracts/papers that were submitted/selected by the committee. If few or no abstracts were submitted on a topic, there may not be a special session for that topic.
 - The symposium isn't the only venue for discussion and advances on a particular topic. We also have special interest groups, and we can have webinars or training sessions on any topic. This requires volunteers. If you are passionate about a topic and think it needs the attention of the petrophysics community, the board can help organize a webinar, a special event, or an event to start a new SIG. So, if you are passionate about a topic, let us know, but be prepared to help organize!

A great way to gather interest in a topic is to write an article for the newsletter, which welcomes submissions from any member. Contact editor@spwla.org for details on formatting and deadlines.

- "The annual symposia, topical conferences, SIG meetings, etc., are always held in the United States and exclude my region, and it isn't fair."

We hear this a lot, and I would like to correct the impression that the annual meetings are always in the USA by directing everyone to the historical locations of the conference at https://www.spwla.org/SPWLA/About/Symposium_Locations_and_Conferences/SPWLA/About/Symposia_Locations_And_Conferences.aspx?hkey=f97307fd-01fa-4417-a2e5-c7fd916a6589

The way in which we select our annual symposia locations is not arbitrarily selected by the board but is a transparent process. Any chapter may bid to host the annual symposia anywhere in the world. One of the President-Elect's duties is to work with the chapters to solicit bids for the next symposia. The bid process is well-defined. It starts with the local chapter forming a committee, identifying a location, and preparing a bid package that includes quotes from suitable venues, a budget, a document detailing why the location would be attractive for our membership, and what field trips/events are available in the locations. This year, we have three chapters interested in hosting the 2026 symposia. Any chapter can contact President-Elect@SPWLA.org to discuss the bid process. The deadline for 2026 bids is late February, and the President-Elect will work with any interested chapters to help organize a bid. The board will then meet in March to review all the bids, weighing the advantages of each before deciding upon the next location and announcing to the membership shortly after.

- "The board is always the same old guys in Houston."
 - While we do have our business office in Houston, only 6 of our 15 board members are located in Houston (only 7 of 15 in the USA). The remaining board members are distributed globally, including in Canada, Europe, the Middle East, Latin America, and Asia Pacific. This distribution mirrors very closely our actual membership, and we thus feel that it is quite appropriate.

From the President

- Our board is a diverse mixture of gender, age, and nationality, as well as location. https://www.spwla.org/SPWLA/About/BoardDirectors/SPWLA/About/Board_of_Directors.aspx?hkey=34532545-e179-4b9a-9309-e2fa9248ba23

Anyone can run for office. While we have a nomination committee that looks for well-qualified members and approaches candidates to determine if they are interested in running for office (and the dedication and time commitments required), if we have inadvertently overlooked anyone who would like to make a difference by leading, nominations can be made by anyone. If you have a candidate in mind, start by sending an email to Sharon@SPWLA.org, and you will be put in touch with the nominating committee. Our society is run by volunteers, and we'd love for any member who is passionate about dedicating their time to the betterment of petrophysics to volunteer.

The international board is not the only way to volunteer. There are many opportunities at local, national, and international levels. Please see the website for volunteer opportunities: https://www.spwla.org/SPWLA/Volunteer_Opportunities/SPWLA/Volunteer/VolunteerOpportunities.aspx?hkey=46366206-7941-4f00-8aa7-eb2a4d26ba7e

Please remember that the leadership of the society are members just like you—passionate about furthering petrophysics. We'd love your help in making it better either as contributing members or joining the leadership yourselves!

IGS Summary

From October 29 to November 2, I was privileged to represent the SPWLA at the International Geomechanics Symposium (IGS) in Al Khobar, in the Kingdom of Saudi Arabia.

This event was hosted by Aramco, with the organization led by the SEG, SPWLA, and seven other partnering societies.

Partner Societies



It was generously sponsored not only by Aramco but also by the following companies:



Host & Diamond



Diamond



Gold



Silver



Delegate Gift



Luncheon



Student and Academia



From the President

The organizing committee was vast but led by the team of Drs. Gang Han (ARMA), Musab Modrra (DGS), Mohammed Badri (SEG), and Osman Hamid (Aramco). The soul of the conference, whose passion really brought everyone together, was the indomitable Dr Gang Han.

The symposium spanned the hydrocarbon, mining, geothermal, and CCUS industries with the theme of **“Geomechanics for Efficient and Sustainable Energy Supply.”** There were preconference field trips and an educator forum, with the main event starting with an outstanding day of expert presentations/training from the world’s leading geomechanics experts. The sessions, known as “Rock with Fellows,” were given by Priscilla Nelson on Mining (Colorado School of Mines), Maurice Dusseault on Energy Storage (University of Waterloo), and John McLennan on Geothermal (University of Utah), as well as a keynote by Mark Zoback on Unconventional Resources (Stanford University). These were the absolute highlights of the show.

There were also exhibitors from more than 15 companies with booths and demonstrations, which were widely attended.

In the following 3 days, there were many outstanding presentations – over 150 live presentations in three streams featuring experts from the industry and academia. Participants came from 35 countries, representing 140 companies, and included ~400 scientists. There were two gala dinners, a visit to the national museum/oil museum of Ithra, and a sunrise “fun run.”

I represented the SPWLA by presenting two papers, “Multi-Discipline Geomechanics Techniques: Sharing Best Practices Amongst Hydrocarbon, Mineral Mining, Geothermal, and CCUS Geoscientists” and “The Role of Geomechanics in the Modern Exploration and Production Life Cycle: Hydrocarbons, Mining, and the Energy Transition,” as well as participating in the President’s forum on how societies are managing the energy transition.

Next year’s event will be held in October 2024 in Kuala Lumpur. I highly recommend that we participate both in the organizing and more fully in the event (we can have a free booth at the show).

I also had the opportunity to meet the SPWLA Saudi Arabia Chapter board and the KFUPM Student Chapter representative to discuss how we can help them.



Meeting with the Saudi board of directors at Aramco on October 29.



Meeting with KFUPM representative Mohammed Ali.



Nearly 400 people attended the symposium.

From the President



The Presidents and Fellows.



As always, when I am visiting Saudi, it rained heavily.



The host committee for the 2024 symposium to be held in Kula Lumpur.



Evening cultural event at Ithra Museum.



Girl power! The leading ladies exchanged ideas at lunchtime (note: it is no longer required for ladies to sit separately—this was our choice).



Rock Mechanics in Mining Session (note our logo!).

From the President



Presenting on geomechanics crossing over industries.



Q&A from the presentations (note our logo!).



Dr. Priscilla Nelson (Colorado School of Mines) gave an excellent seminar on Mining geomechanics. Google her. She has some really great teaching videos and interviews on YouTube.



The hard-working symposium chairs.



Hosting the session on Mining Rock Mechanics.



Dr. Gang Han—the inspiration for the IGS.



President's Panel on how our societies are handling the energy transition.



Tegwyn JP Perkins
SPWLA 64th President

It's been 6 months since I handed the gavel to **Jennifer Market**, and she became SPWLA President. I wish her all the best as she continues to command the ship from Down Under (Australia). However, presidential duties do not cease the moment you stop being President! In the year immediately following your term, you assume the mantle of Past President and have responsibility for two very important activities: Chair of the Nominations committee and Chair of the Awards committee.

These two committees are essentially diametrically opposed. The Nominations committee is dedicated to finding the future leaders of the society. That group of people who are willing – and able – to perform the duties associated with the various board positions that they are elected to.

Recently, Sharon Johnson emailed the membership and wrote on social media inviting any individuals who wish to self-nominate. Thank you for your responses, as we have received the names of several capable potential candidates. There are still a couple of positions on the electoral slate, and the committee will be looking to fill them shortly. Please feel free to contact me at the email address shown below if you are interested in running.

Conversely, the Awards committee aims to recognize anyone who has made a significant contribution to the society either through their furthering of the science or by volunteering their time.

We are currently soliciting nominations for these awards. Awards can be presented for **Technical Achievement** and for **Service** to the Society and industry. To add some perspective, it's highly unlikely that we would present a **Gold Medal** or a **Medal of Honor** to someone who is early in their career. We have very limited numbers of these awards to give each year, and a lot of thought and discussion goes into the selection process. On the other hand, we wish to encourage new members with **Meritorious** and **Young Professional Awards**, and I would highly recommend nominating a friend or colleague for one of these awards.

The process for nominating a potential candidate for an award has been streamlined in recent years. All the information required can be submitted via this link: **[FORM TO SUBMIT POTENTIAL CANDIDATE](#)**. If you require assistance in completing the form, we have a committee who can assist you. Please email me at the address below, and we work together to recognize all deserving recipients of an SPWLA award.

I look forward to seeing you at the symposium in May.

Kind regards,
 Tegwyn JP Perkins
 SPWLA 64th President
past-president@spwla.org

SPWLA Annual Awards

Awards for Technical Achievement

Awards for technical achievement may be granted by the Board of Directors to members or former members of the Corporation as follows:

Gold Medal for Technical Achievement: The Gold Medal for Technical Achievement is the highest honor bestowed on any individual by the Corporation. It is awarded for outstanding achievements in the science of formation evaluation that result in significant and enduring contributions to the technology. The Gold Medal award shall be accompanied by an award of Honorary Membership. Award of the Gold Medal shall be confirmed at a meeting of the Board of Directors by an affirmative vote of at least two-thirds of the Board of Directors. No more than one Gold Medal shall be awarded in a calendar year. A Gold Medal need not be awarded every year.

Distinguished Technical Achievement Award: The Distinguished Technical Achievement Award is presented in recognition of exceptional contributions in one or more specific areas of formation evaluation technology. No more than three Distinguished Technical Achievement Awards shall be awarded in a calendar year. Distinguished Technical Achievement Awards need not be awarded every year.

Meritorious Technical Achievement Awards: Meritorious Technical Achievement Awards are presented for specific technical contributions in a given year and may be awarded to as many individuals as appropriate.

Young Professional Technical Award: The Young Professional Technical Award is bestowed by the Board of Directors to a member or a student member of the Corporation who has distinguished him/herself with impactful technical achievements. All nominees for this award shall be a member in good standing, has at least one paper published or peer-approved in *Petrophysics*, and has less than 12 years of experience in petrophysics for the exploitation and development of hydrocarbons and other mineral resources, at the date of the ceremony during the annual Symposium. Post-graduate work may count up to 4 years' experience. This award need not be awarded every year.

Awards for Service

Awards for service to the Corporation may be granted by the Board of Directors to members or former members of the Corporation as follows:

Medal of Honor for Career Service: The Medal of Honor for Career Service is awarded to an individual in recognition of extraordinary and long-term service to the Corporation. The service shall further the purposes of the Corporation as set forth in Article IV of the Amended Articles of Incorporation. The Medal of Honor Award shall be accompanied by an award of Honorary Membership. Award of the Medal of Honor shall be confirmed at a meeting of the Board of Directors by an affirmative vote of at least two-thirds of the Board of Directors. No more than one Medal of Honor shall be awarded in a calendar year. A Medal of Honor for Career Service need not be awarded every year.

Distinguished Service Award: The Distinguished Service Award is presented in recognition of outstanding service to the Corporation in the form of work on a specific project or project during a period of several years. No more than three Distinguished Service Awards shall be awarded in a given year. A Distinguished Service Award need not be awarded every year.

Meritorious Service Award: The Meritorious Service Award is presented in recognition of praiseworthy service to the Corporation during a given year and may be awarded to as many individuals as appropriate.

Other Awards

Other awards of the Corporation shall include:

SPWLA Award of Appreciation: The SPWLA Award of Appreciation is awarded by the Board of Directors to a non-member of the Corporation who has performed some notable service to the Corporation. This award is made as needed and need not be awarded every year.

Outstanding Professional Chapter Award: The Outstanding Professional Chapter Award is awarded by the Board of Directors in recognition of an outstanding accomplishment by a Professional Chapter of the Corporation. The accomplishment shall further the purposes of the Corporation, as set forth in Article IV of the Amended Articles of Incorporation. It may have occurred over 1 or more years and have involved the participation of numerous members of the chapter. No more than one Outstanding Professional Chapter Award shall be awarded in a calendar year. The Outstanding Professional Chapter Award need not be awarded every year. No Professional Chapter is eligible to receive the Outstanding Professional Chapter Award in consecutive years.

Outstanding Student Chapter Award: The Outstanding Student Chapter Award is awarded by the Board of Directors in recognition of an outstanding accomplishment by a Student Chapter of the Corporation. The accomplishment shall further the purposes of the Corporation, as set forth in Article IV of the Amended Articles of Incorporation. It may have occurred over 1 or more years and have involved the participation of numerous members of the chapter. No more than one Outstanding Student Chapter Award shall be awarded in a calendar year. The Outstanding Student Chapter Award need not be awarded every year. No Student Chapter is eligible to receive the Outstanding Student Chapter Award in consecutive years.

FORM TO SUBMIT POTENTIAL CANDIDATE

This information can also be found here: <https://www.spwlaworld.org/description-of-spwla-annual-awards/>

From the Editor



Stephanie Ellen Perry
2022–2024
Vice President Publications

Happy 2024 to everyone! We are thankful for everyone's continued contributions and focus on the organization. We have an exciting year ahead of us, as is highlighted by all of the contributions in this newsletter. We appreciate the continued focus and sharing for the upcoming annual symposium. As we focus on chapter news and highlights, we hope everyone will consider increasing engagement and involvement in the society and our publications if interested, given the new year.

Sincere regards,
Stephanie Perry
2022–2024 VP Publications



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

Dear Colleagues,

We would like to commend the SPWLA Membership on their support. As noted, we received **417** abstracts, a good increase over the previous 3 years. We ended up with **413** unique abstracts, with two non-English, one without an abstract, and one withdrawal. The acceptance notices were emailed on December 1. There was a broad range of excellent abstracts. Normally, we would accept about 150 abstracts; however, the ranking was extremely close, and increasing the count to 170 with an expanded poster session provided a “bigger break” and improved both the geographic and presenter distribution.

It has been a busy time since our last letter. Our thanks to the Technical Committee, who did an outstanding job of reviewing 78 to 80 abstracts each, and to the members who stepped in to review a few extras when needed to make sure all abstracts had a minimum of 9 (28%) or 10 (72%) reviews. (The last issue has more on the process.)

The abstract submittal ended up with expanded global coverage. The accepted abstracts, although a good distribution, indicate we still have work to do (Fig. 1). It was encouraging to see a broader affiliation mix, though service companies still dominate. We encourage more operator and academic submissions, including graduate work (Fig. 2).

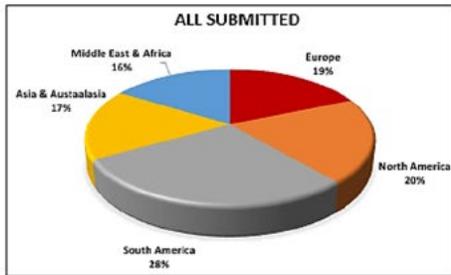


Fig. 1—All Submitted and Accepted Abstract Geographic Distribution.

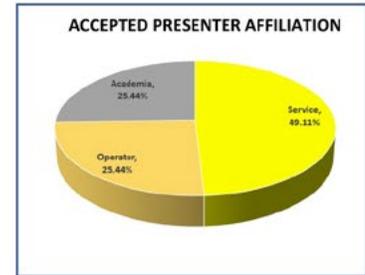
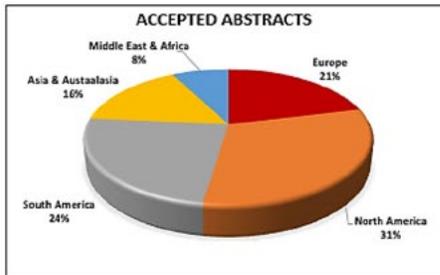


Fig. 2—Accepted Distribution.

Several people have asked how the 170 are selected. (The last issue has more on the process.) The key items are:

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

The guidelines are clear that structure, along with a clear captioned figure to support the abstract account, are important. Commercialism is a Yes or No switch. For example, **22%** of the submissions did not add an illustration. A few added multiple figures, presentations, or posters. (Too long is also bad.) Commercialism remains low (a tribute to the society members); however, the guidelines specifically exclude company names on illustrations or in the abstracts. Many were likely accidents, but using company tool names on illustrations or obviously pushing a tool or software was downgraded by the reviewers.

We were surprised that over 70% of the first and second choices were for General Sessions. There were only three distinct requests for Special Organized Sessions (SOS). Three additional SOS were created combining similar General Session and SOS abstracts. This will create a good mix of General and Special Organized Sessions. We were surprised that some historical topics like NMR, Imaging, Spectroscopy, and Testing did not make the SOS list, but they are well covered in other General Sessions – Integrated Evaluation and New Technology/Applications sections. The extremes had lots of requests – Ultradeep Resistivity Applications and Casedhole Evaluation, resulting in multiple sessions for both.

The Top General Sessions are: (The full list will be published with the abstracts early in the new year.)

- Integrated Openhole Formation Evaluation
- New Technologies / Applications
- Geosteering / UDAR Well Placement for Optimal Completions
- Casedhole Formation Evaluation / Well Integrity Diagnostics and Remediation

The Special Organized Sessions are:

- Latest Innovations in Ultradeep Azimuthal Resistivity for 3D Applications
- Digital Rock Physics for Formation Evaluation – Are We There Yet?
- Multi-Physics/Multi-Disciplinary Core to Reservoir Models: Geologic Facies Linked to Petrophysical Rock Types, Heterogeneity Quantification, and Large Pore Petrophysical Modeling

SOS rounded out with General Session abstracts:

- Casedhole FE: General – Casedhole Formation Evaluation / Well Integrity Diagnostics and Remediation and SOS – Petrophysics and Reservoir Surveillance
- Data Analytics: General – Data Analytics: Gains and Limitations and SOS-Automation in Well-Centric Geologic Evaluation
- Energy Transition: General – Energy Transition – What We Have, What We Need for Evaluation and Monitoring and SOS – Preparing for the Energy Transition – Reducing Subsurface Risk in Modeling and Monitoring.

In addition to a full Symposium of great talks, there are eight workshops scheduled for Saturday and Sunday (May 18–19) pending the finalization of instructors. Thanks to the SPWLA SIGs, Technical Committee, and Brazil Symposium Team for their workshop input. Keep a watch on the Symposium website.

- Energy Transition Petrophysics
- Formation Evaluation in Mature Fields – Where Are the Hydrocarbons?
- Data Analytics – Understanding the Tools – Limitations and Opportunities
- UDAR – Well Placement for Optimized Reservoir Performance and Petrophysics in Horizontal Wells (Beyond UDAR)
- Digital Rock Applied to Formation Evaluation
- Introduction to Borehole Images From Acquisition to Interpretation
- NMR Applications (Log and Core)
- Advanced Acoustic Applications

Once again, thank you for your enthusiastic support. Harry and I look forward to seeing you in Rio. We wish you, your family, and friends “Best Wishes for the Holidays.”

Regards,
Robert H. (Bob) Gales
2023–2024 VP Technology
VP-Technology@spwla.org





Harry Xie
2023–2024 Vice President
Technology-Elect

To add, I would like to mention that we are very delighted to see high portions of submissions from regions of South America and Asia Pacific/Australia and glad to see more participation globally. Of course, we are very sorry to see so many abstracts being rejected. As Bob stated above, every abstract received 9 or 10 reviews and grades. We had to walk a fine line to choose the cutoff between accepting and rejecting by using the second decimal point of the scores for differentiation. This year, we have increased the number of accepted abstracts by more than 20 to reflect the high number of submissions. We also agree that there is room for improvement in the abstract review process for future symposiums, although we have had a set of rigorous rules and metrics for every member of the Technical Committee to follow. We have collected many good recommendations and suggestions, but more are welcome. Our goal is to make the SPWLA symposiums the best technical conferences in the industry. We are confident that the Rio Symposium will be both technically merit and enjoyable.

We look forward to seeing you in Rio.
Happy New Year!

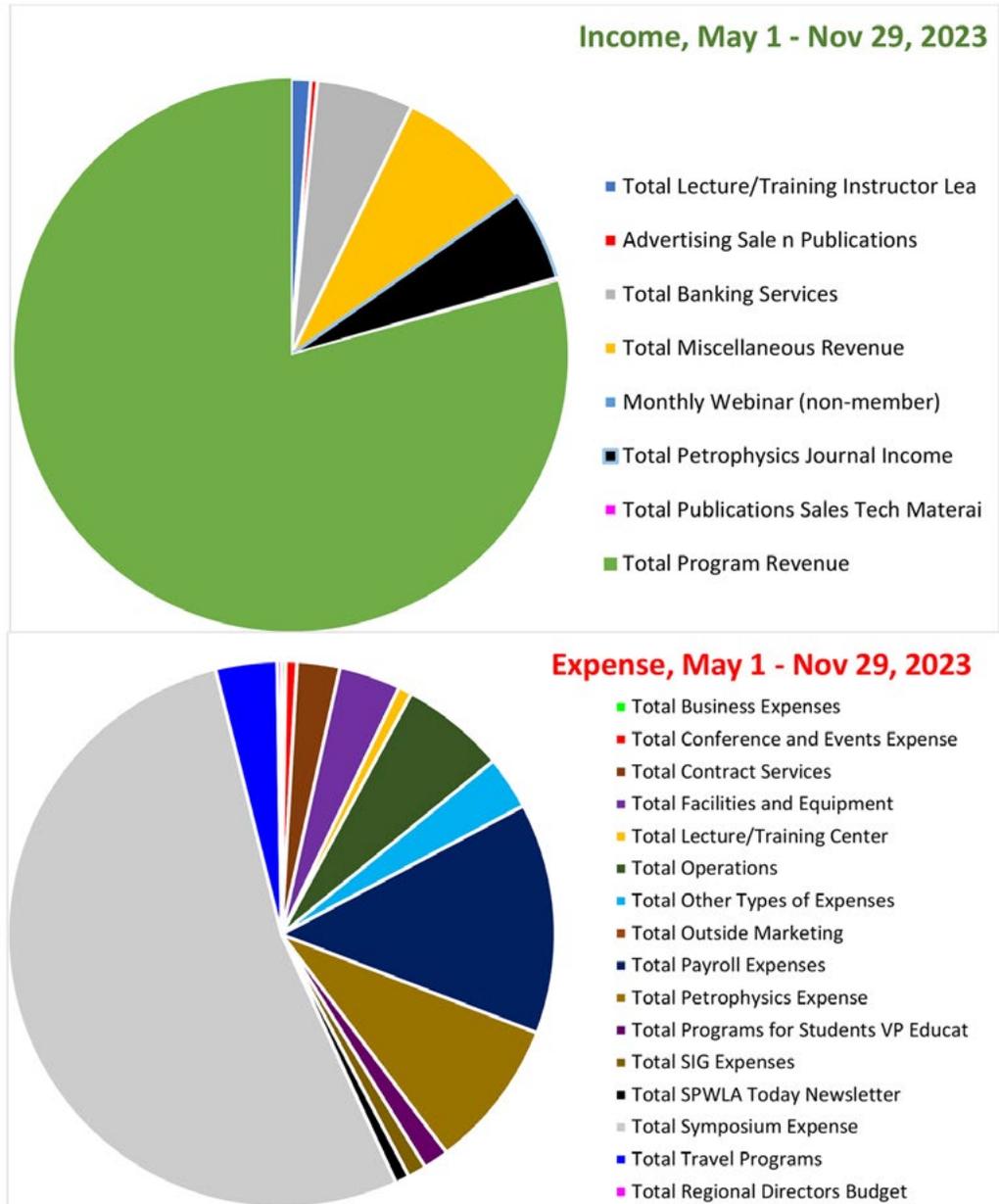
Harry Xie
2023–2024 VP Technology-Elect
VP-Technology-Elect@spwla.org



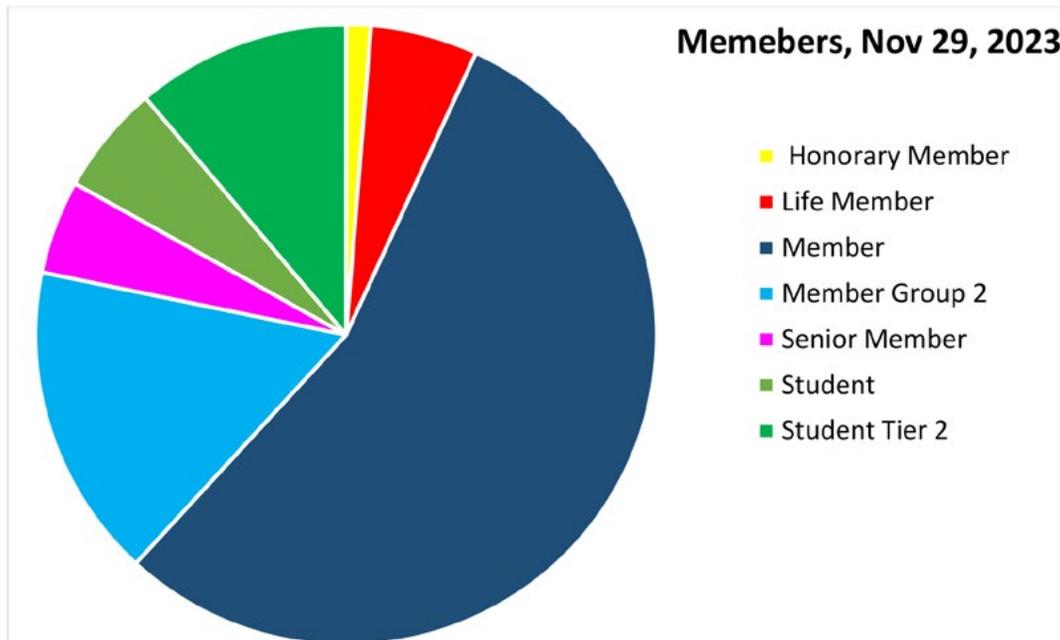
Jing Li
2023–2025 VP Finance,
Secretary, and
Administration

Dear SPWLA colleagues,

First, I want to share the finance overview. The financial status of the SPWLA remains steady and healthy. The total assets in November 2023 increased by 0.73% compared to November 2022. Pie charts in percentages for the income and expenses for May through November 2023 are shown below.



The total number of members of the society is 2,256. The percentages of different categories are shown below.



The board is working to reduce costs and looking for new sources of revenue to continue providing existing services and expanding innovative programs—some strategies to ensure the long-term financial health of the SPWLA and explore new revenue sources.

Increase the Printed Subscription for the *Petrophysics* Journal to \$190 Member/ \$325 Library Subscriber 2024

All full members will continue to receive a complimentary digital version of the journal. The table below displays the *Petrophysics* journal’s income and expenses from 2020 to 2023. While the journal’s price remained unchanged, the number of units sold kept decreasing, resulting in reduced revenue and increased loss. The board was aware of this trend and kept the price flat for 3 years to maximize the membership benefits. However, it was time to revisit the pricing strategy, and the board decided to increase the cost to offset the inflationary print and mailing costs and ensure the society’s financial stability in the long run. The board will review this decision again in 2024–2025 to determine how many members opt for the printed copy this year.

	Unit Price	Units Sold	Income	Expense	Loss
2020 (6 issues)	\$65 Member / \$250 Library Subscriber	154 / 56	\$24,101.00	\$27,657.15	\$3,647.15
2021 (6 issues)	\$65 Member / \$250 Library Subscriber	112 / 41	\$17,530.00	\$25,347.96	\$7,817.96
2022 (6 issues)	\$65 Member / \$250 Library Subscriber	78 / 34	\$13,570.00	\$24,456.43	\$10,886.42
2023 (5 issues)	\$65 Member / \$275 Library Subscriber	72 / 31	\$13,205.00	\$24,053.25	\$10,848.25

Financial Times

Increase in Annual Membership Dues 2024

Starting in 2024, we will increase the annual membership dues by approximately 10%. This is a necessary measure to account for inflationary costs and ensure the long-term financial stability of our society. Please refer to the table below for each membership category's current active members and corresponding dues.

Member Category	Member Number	Current Annual Fee	New Annual Fee
Honorary Member	29	Gifted \$0 fee for life	Gifted \$0 fee for life
LM Lifetime Member	126	One-time fee \$300	One-time fee \$330
M Member	1,240	\$100	\$110
MT2 Member Tier 2	370	\$40	\$45
S Student Member	110	\$15	\$15
SM Senior Member	129	\$50	\$55
ST2 Student Tier 2	252	\$6	\$6
Total Members	2,256	\$148,412 + LM \$37,800	\$163,055 + LM \$41,580

Please continue supporting SPWLA's workshops, conferences, annual symposiums, and other initiatives. If you have ideas for new sources of revenue for the society, please share them with us so that we can work together towards a brighter future for all. I appreciate your continued support.

Sincerely,
Jing Li
2023–2025 VP of Finance, Secretary, and Administration
VP-Finance@spwla.org

Learning Opportunities



Kelly Skuce
2022–2024 Vice President
Education

Hello SPWLA Colleagues,

It is that time of year for students in the SPWLA Student Chapters to start competing to be able to submit their papers to the International Student Paper Competition. The competition will be held in Rio de Janeiro on **May 19, 2024**. This date is the Sunday prior to the start of the SPWLA Annual Symposium.

You will have seen the emails from the SPWLA office and the social media posts about the competition. The 2024 ISPC Chair, Gisela Miranda de Souza Almeida, has helped me put together a little FAQ about the competition.

Start Date of Promotion: When is the promotion of the Student Paper Contest scheduled to begin?

The start date is **NOW**. Details are on the website at <https://www.spwlaworld.org/international-student-paper-contest-2/>.

Key Deadlines: What are the key deadlines we should keep in mind when planning the promotion? This includes registration dates and presentation dates.

- Critical dates are:
 - Internal Student Chapter Paper Competition (ISPC) proposals are due **January 10**.
 - Abstract submittal is due **March 1**; students will be notified of acceptance on **March 15**.
 - Presentation submittal due **May 4**

Communication Channels: What will be the main communication channels used to promote the contest? Will this include emails, social media (such as LinkedIn), or other means?

The main communication channels between the ISPC organizers and students will be through me, vp-education@spwla.org, and at papercompetition@spwla.org. Discussion between the judges and the organizers will be with the two of us and the VP Technology-Elect, who will help us organize the judging of the abstracts and the judges on the day of the event. The VP Social Media will handle all the social media (LinkedIn, Facebook, Instagram, etc.) posting for the SPWLA. We can work with them to ensure the announcements are going out and that students are informed.

Participation Rules: Will detailed information about the participation rules in the contest be disclosed? It is important that potential participants have access to all relevant guidelines.

- Participation guidelines are in the document on the website. All students affiliated with a local SPWLA Student Chapter must first submit and present their paper (abstract and presentation) to their Student Chapter as part of the **ISPC**. The local Student Chapter will rank and nominate up to three students for each degree category from their chapter to submit to the **ISPC**. **ISPCs** are run independently by the local Student Chapter and must be completed by **Friday, March 1, 2024**.
- Independent students at accredited universities/schools without an SPWLA Student Chapter are also eligible to submit their abstracts directly to the ISPC in the relevant degree category by **March 1, 2024**.

Evaluation Criteria: What criteria will be used to assess the students' papers and presentations? This will help us guide future participants.

The judging rubric is very similar to the one the Technical Committee uses for the symposium abstracts. Details can be found on the website at <https://www.spwlaworld.org/call-for-abstracts-verbose/>.

Travel Cost Assistance: Will there be any form of travel cost assistance or subsidies for participants who need to travel to the event? If so, what are the criteria for receiving this assistance, and how can interested parties apply for it? Can we publish this information?

- Limited travel assistance is available based on the student's point of origin. Funds are available, but the students will receive the monies after they present and attend the symposium.
- There are also funds available for Student Chapters to hold their individual **ISPC**.

Learning Opportunities

Prizes: What prizes are offered to the winners of the contest? Can we disclose information about the prizes to encourage more participation? How will the prizes be distributed, such as in cash, certificates, or other forms of recognition?

- Prizes are for 1st, 2nd, and 3rd place for each of the three categories (Undergrad, Masters, and Doctorate). The prize amounts last year were 1st - \$1,200, 2nd - \$1,000, and 3rd - \$800. All are in US dollars. We budgeted the same amount this year.

All questions can be sent to me at vp-education@spwla.org or to papercompetition@spwla.org, where Gisela and I will be able to help answer them.

Kelly Skuce // SPWLA VP Education, 2022–2024

Gisela Miranda de Souza Almeida // Chair of 2024 SPWLA International Student Paper Contest

Keep on learning,

Kelly Skuce

2022–2024 VP Education



Tom Bradley
2023–2025 Vice President
Information Technology

Tom Bradley
2023–2025 VP IT
vp-infotech@spwla.org

Hello everyone,

Now that the call for abstracts is closed, I can start to work on migrating the webpages from the legacy spwla.org website to the spwlaworld.org site and also investigate moving the site to a dedicated server, which should improve the speed of the site overall. The migration will be a big task; therefore, we're looking to engage specialist help with this task.

The calendar at <https://www.spwlaworld.org/calendar-2/> is up and running. Keep sending the events in, and we'll keep it populated. Over the next few weeks, I'll contact the individual chapters and designate contacts so local chapters can update it.

As mentioned previously, I'm also working on migrating content from the legacy spwla.org site to spwlaworld.org. Several pages are ready to go live already when the time is right. However, migrating the site will be a big undertaking and will take some time, so I'm looking for volunteers to help. If you'd like to help, please get in contact at vp-infotech@spwla.org.



Chelsea Newgord
2023–2025 VP Social Media

Hello SPWLA colleagues,
I hope everyone had a nice holiday season! In the past few months, we’ve created and shared content on LinkedIn, Instagram, Facebook, and X. Be sure to follow SPWLA on your favorite channel. If you enjoy graphic design and would like to volunteer with social media posts, please reach out to me.

Some recent highlights were communicating Topical Conferences, SIG events, the International Geomechanics Symposium, and sharing Calls for Special Issues for the *Petrophysics* journal.

One of my favorites to publish highlighted the Distinguished Speakers! We’ve already had Harry Xie provide a webinar, and we’ll share on social media when the next webinars are scheduled.

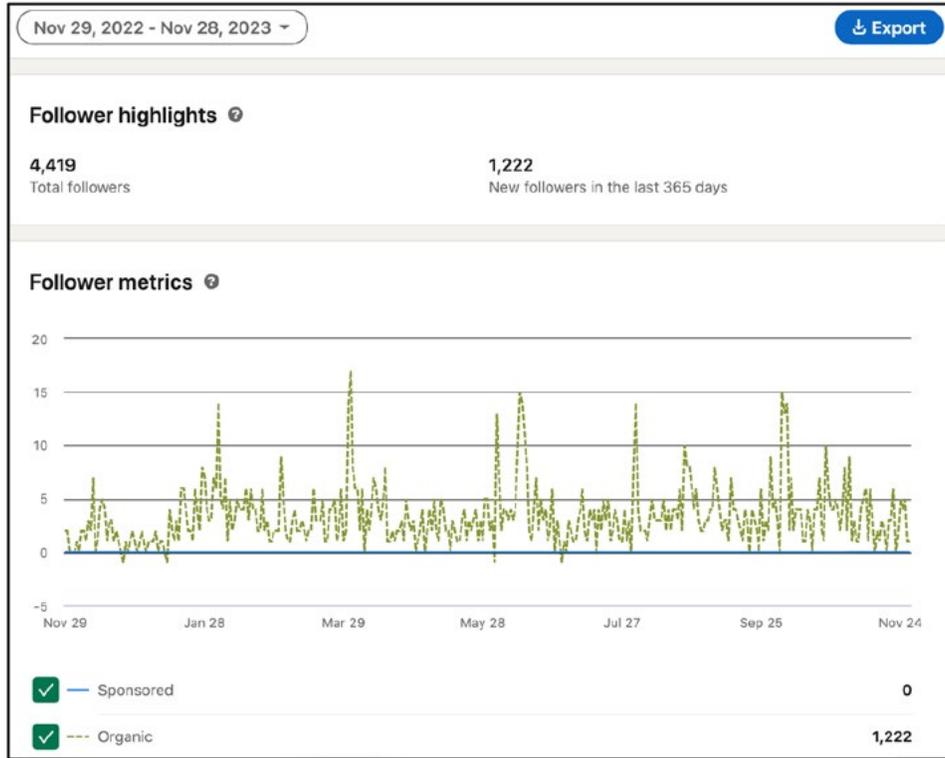


The LinkedIn SPWLA page analytics help us to understand the impact of different posts. The Distinguished Speakers post was a more popular one, and you can see the statistics below.

Post title	Post type	Audience	Impressions	Views	Clicks	CTR	Reactions	Comments	Reposts	Follows	Engagement rate
Congratulations to our 2023-2024 SPWLA Distinguished Speakers! The... Posted by SPWLA SocialMedia 10/23/2023	Image	All followers	1,389	-	81	5.83%	42	2	5	-	9.36%

Impressions = Views when the post is at least 50% on screen or when it is clicked, whichever comes first.
CTR = Clicks/Impressions
Engagement Rate = (Clicks + Likes + Comments + Reposts + Follows) / Impressions.

In the past year, we’ve had a 38% increase in SPWLA LinkedIn page followers! SPWLA has a lot of exciting and useful events, content, and technical work to share for our discipline.



With these statistics in mind, we do appreciate your engagement on social media!



~ Chelsea Newgord
2023–2025 VP Social Media
VP-SocialMedia@spwla.org



Javier Miranda
2022–2024 North America 1
Regional Director

We have had a couple of intense months at SPWLA since my last column in November. By the time you read the January issue, abstracts accepted to the 2024 Annual Symposium will have been already selected and authors notified. Most of us on the Technology Committee reviewed at least 79 to 80 abstracts, providing a good number of reviews for each abstract. Read more about the process and results in Bob and Harry's column. They are doing an amazing job leading our team to prepare a strong technical program for the conference in Rio de Janeiro. I was pleased to see that none of my reviewed abstracts had commercialism and, in general, there was very high-quality content, making it more difficult to select the top ones. Considering the sample of reviewed abstracts, I am already looking forward to a very successful symposium with excellent technical content.

Speaking of the work towards preparing the 2024 Annual Symposium at the Sheraton Grand Rio Hotel & Resort, hotel registration will be open in January. I recommend you take advantage of the special rates at the conference hotel and secure your room as soon as possible. I delayed doing this last year and had to go through a painful process, although I was lucky to get a room when some rooms were released later. I learned from that experience and will follow my colleague Matt

Blyth's recommendation. Check out updates for SPWLA Rio 2024 and stay tuned for more announcements related to next year's symposium at the following link:

Welcome to the 65th Annual Symposium – SPWLA World

Let's Keep the Energy, Planning, and Hard Work to Make Rio 2024 the Best SPWLA International Annual Symposium We Have Ever Seen!

The Houston Chapter has been very active, not only with technical and networking seminars happening every month but also with the well-known Technology Show that happened on December 8. Several service companies participated in the exhibition, with four technical talks included in the agenda and one keynote presentation by James Brady, Chief Digital Officer, Oilfield Services & Equipment for Baker Hughes. There was plenty of networking happening, too, which was valued by the exhibiting companies as they could showcase their products, tools, software, and services. This used to be the "software show," which we changed to a "Technology Show" 3 years ago when we restarted it after the pandemic. The change has been well received by members and companies who are now showcasing tools, technologies, etc. I included some pictures at the end with the technical and networking highlights.

The leadership of Bernd, Neal, Amer, and Artur has been key in achieving so much in the last year at this chapter, making them one of the most active chapters in our society. The now well-known monthly networking event happening every last Thursday of the month at the same location and time (5 pm–8 pm at Cedar Creek Bar & Grill, 1034 West 20th Street, 77008) has also been a success. The most recent one was on Tuesday, December 19; the next one will be on **January 25**. Feel free to attend if you are in town. You will regret not attending before! The entire SPWLA community is invited; there is no need to RSVP, so join us even if you are in town for a visit. Come at your leisure; no payment is required. Come and mingle with fellow petrophysics enthusiasts. These social events have become a tradition in Houston and are well-attended by petrophysicists, geologists, geophysicists, engineers, and managers. You can also expect to see current and past SPWLA international board members and recognized names in our industry, including SPWLA Distinguished Speakers! I invite you to register or check their website to stay tuned for what is going on in each section during January, with some lunch seminars happening:

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

A couple of student chapters in the region have started their plans to host their internal student paper competition to select their representatives for the ISPC. Others remain silent, which can be frustrating after so many emails and notifications I have sent them. I hope they come back at some point, especially when they need financial support to continue their activities. As I have insisted to them, I am here to help, but I cannot do that if I do not receive any answer or communication from you. Thanks to those two student chapters that keep the communication channels open.

Regional Understandings–North America 1

Best wishes to all my fellow SPWLA members in the new year, especially those in my North America region. Let's stay strong during 2024 by continuing to be involved in your local and international activities, professional and student chapters, and **volunteering and joining SPWLA initiatives if you have not done so. Let's bring our society to the next level!**

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

Javier Miranda
2023–2024 North America Region 1 Regional Director
Director-NA1@spwla.org



SPWLA Houston Chapter hosted their Annual Technology Show in December.



Part of the SPWLA International Board 2023–2024 attending the Houston show. (From left to right) Robert “Bob” Gales (VP Technology), Chelsea Newgord (VP Social Media), Harry Xie (VP Technology-Elect), and Javier Miranda (North America I Regional Director).



Keynote presentation by James Brady, Chief Digital Officer, Oilfield Services & Equipment of Baker Hughes.



SPWLA local and international officers in attendance with keynote speaker James Brady, Chief Digital Officer, Oilfield Services & Equipment of Baker Hughes (third from the right).

Regional Understandings—North America 1



A well-attended Technology Show that broke previous years' attendance records with several companies in the exhibition.



Part of the exhibition during this year's Technology Show.



An operator's presentation integrating some technologies.



Having a great technical conversation with Alfonzo Quaglia, my friend and former mentor in the PDVSA Petrophysics School back in 2000, a program established with Amoco to prepare petrophysicists within the national oil company with hands-on projects using their region's data to provide actual solutions to ongoing challenges.



Having some fun after the show during the networking event with some members, including Tegwyn Perkins, SPWLA President 2022-2023 (third from left to right).



A networking event followed the show, with several members in attendance.

Regional Understandings—Europe



Mathias Horstmann
2023–2025 Europe
Regional Director

Dear SPWLA Community,

Winter has taken over in Europe. Days are short, but all local chapters mingle in technical and social gatherings, concluding a successful year! Many of you enjoyed one of the happenings around Europe, celebrating in a mix of technical, fun, and charity events.

Some of the highlights below already reflect the actions we discussed and planned during the past European Chapter President Meeting: To connect with relevant academia and research institutes in Europe, reversing a trend of less academic teaching related to formation evaluation and subsurface geoscience. Some chapters engage with students and young professionals to encourage participation in their events or expand the reach toward special institutes. By that, petrophysics and formation evaluation will stay important, not only to classic O&G but also to increase visibility in the evolving framework. The grants of NFES to a PhD student presenting his CCUS research results at the One-Day Seminar, the LPS 101 Seminar targeting young professionals and geoscience students, or the session in France along with the Alternative Energies and Atomic Energy Commission are a fantastic start on which we can build upon. Well done!

European Chapter Spotlights

To highlight a few events in Europe, the Aberdeen Formation Evaluation Society (AFES) traditionally closes the year with their Annual Quiz Night, which took place for the 20th time on St Nicholas' Day in December at the Castlegate Brew Dog. It was a great evening on Union Street with a generous buffet and a fun quiz, but most remarkable were the funds raised and donated to the Aberdeen Children's Hospital A.R.C.H.I.E. Fund. For posting the pictures, especially of the "Best Fancy Dress Team" winner, I will let AFES decide – maybe they will apply "what happens in Aberdeen, stays in Aberdeen." Anyway, thumbs up to AFES for such a fantastic charity event!



Peter von Schultendorff (left), PhD student at CSSR, receives a travel grant from Sergey Alyaev, NFES VP Public and Academia Relations (right).

NFES, the Norwegian Formation Evaluation Society, continued the technical program with their annual One-Day Seminar in November, where a quality technical lineup was prepared for a large crowd in the Solastranden Gard. I had the opportunity to speak for a few minutes, reminding the delegates of all the benefits SPWLA offers, hoping many of them renew their membership or join our global community.

The NFES fund supported a PhD student from the Centre for Sustainable Subsurface Resources (CSSR) in Bergen. Peter von Schultendorff received a travel grant to the annual seminar, presenting his recent work on using machine learning to model the near-well pressure environment in CO₂ storage reservoirs. Thank you, NFES, for engaging young professionals and giving them a platform to share their exciting research results.

In December, the long-awaited "Jule-Lunsj" took place along with a technical presentation, and NFES members enjoyed the traditional Ribbe, Pinnekjøtt & Co.

In early December, the London Petrophysical Society (LPS) closed the year with another of their high-quality, full-day seminars on Petrophysics 101 – this time on fluid characterization. It's great to see what LPS puts together regularly at the Geological Society in the Burlington House. This session of the very popular series was an introduction to fundamental petrophysical concepts in fluid characterization for early career professionals, geoscience students considering a career in the energy industry, and an opportunity for the more experienced to refresh and share their knowledge. How could we better set up a session to engage with the next generation of formation evaluation experts! And as the LPS also knows how to celebrate a great year, the day ended with the LPS President's Evening at the Kings Head!

The French Chapter of SPWLA closed its year with a seminar on nuclear measurements and their applications at the Société Géologique de France. This very interesting program, with the participation of the Commissariat à l'Énergie Atomique et aux

Regional Understandings–Europe

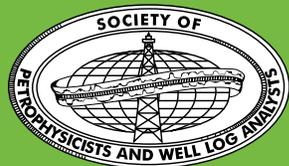
Energies Alternatives (CEA) – the French Alternative Energies and Atomic Energy Commission, TotalEnergies, SLB, and Orano clearly widened the reach of our local chapter. Going into the festive season, the presentation session in Paris closed with a cocktail party celebrating the end of a successful year!

I'm very pleased to see great participation all around Europe, attesting to the importance of our community with engaging and social functions, clearly showing the value of nonprofit organizations to the society.

With that, I thank all the European chapter committees and members for their commitment this year. I wish all of you much cheer this holiday season and a great new year 2024 ahead!

Keep well and stay tuned – all the best,
Mathias

Mathias Horstmann
2023–2025 Europe Regional Director
Director-Europe@spwla.org



January 2024

2024 Steering
Committee

Editors

Ishank Gupta
Kanay Jerath
Javier Miranda
Clara Palencia

Senior Editor

Nelson Suarez Arcano

SPWLAYP@SPWLA.ORG

In this edition:

*SPWLA Paper of
the Quarter Series*

SPWLA Paper of the Quarter Series

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

Title: Flow-Dependent Relative Permeability Scaling for Steady-State Two-Phase Flow in Porous Media: Laboratory Validation on a Microfluidic Network

Authors: Nikolaos Karadimitriou, Marios S. Valavanides, Konstantinos Mouravas, and Holger Steeb

Summary: Traditionally, the permeability of two immiscible fluid phases in porous media is expressed as a function of saturation. However, recent theoretical, numerical, and laboratory studies challenge this conventional approach. They reveal a substantial dependence of relative permeabilities on flow rates, especially in capillary-viscous-dominated regimes where a portion of the nonwetting phase remains mobile. These studies propose that relative permeability models need to consider the functional dependence on flow intensities. The systematic dependence of relative permeabilities on local flow rate intensities can be analytically described by a universal scaling functional form involving the capillary number (Ca) and flow rate ratio (r). The proposed scaling introduces a kernel function known as the intrinsic dynamic capillary pressure (IDCP) function, which describes the transition between capillarity- and viscosity-dominated flow phenomena. In a parallel laboratory study, researchers conducted extensive measurements of relative permeabilities for steady-state co-injections of two immiscible fluids within an artificial microfluidic pore network. The results demonstrate the degree of consistency between flow rate ratio and mobility ratio values, IDCP curve, critical flow conditions, and equal relative permeabilities. These findings serve as a basis for assessing end effects and characterizing flow as capillary- or viscous-dominated. The proposed scaling model opens up opportunities for enhancing special core analysis (SCAL) protocols and their applications. These applications include system and flow condition characterization, dynamic rock typing, evaluation of capillary end effects, and the improvement of field-scale simulators. Moreover, the scaling model holds promise for designing more energy-efficient enhanced oil recovery (EOR) interventions. The snapshot below shows results from the paper, which highlights the relative permeability curves determined by the authors for a variety of capillary numbers, Ca , and as a function of flow rate ratio, r . These results suggest that it is possible to derive and implement universal, true-to-mechanism functions describing correctly the flow dependency of relative permeabilities. The authors recommend that based on the initial findings, it's advisable to conduct a systematic laboratory study to explore how factors like wettability, pore network structure, and core size affect the IDCP curve ($A(\log Ca)$). The goal is to assess if this approach can enhance SCAL and dynamic rock-typing protocols and contribute to the development of more robust macroscopic scale models.

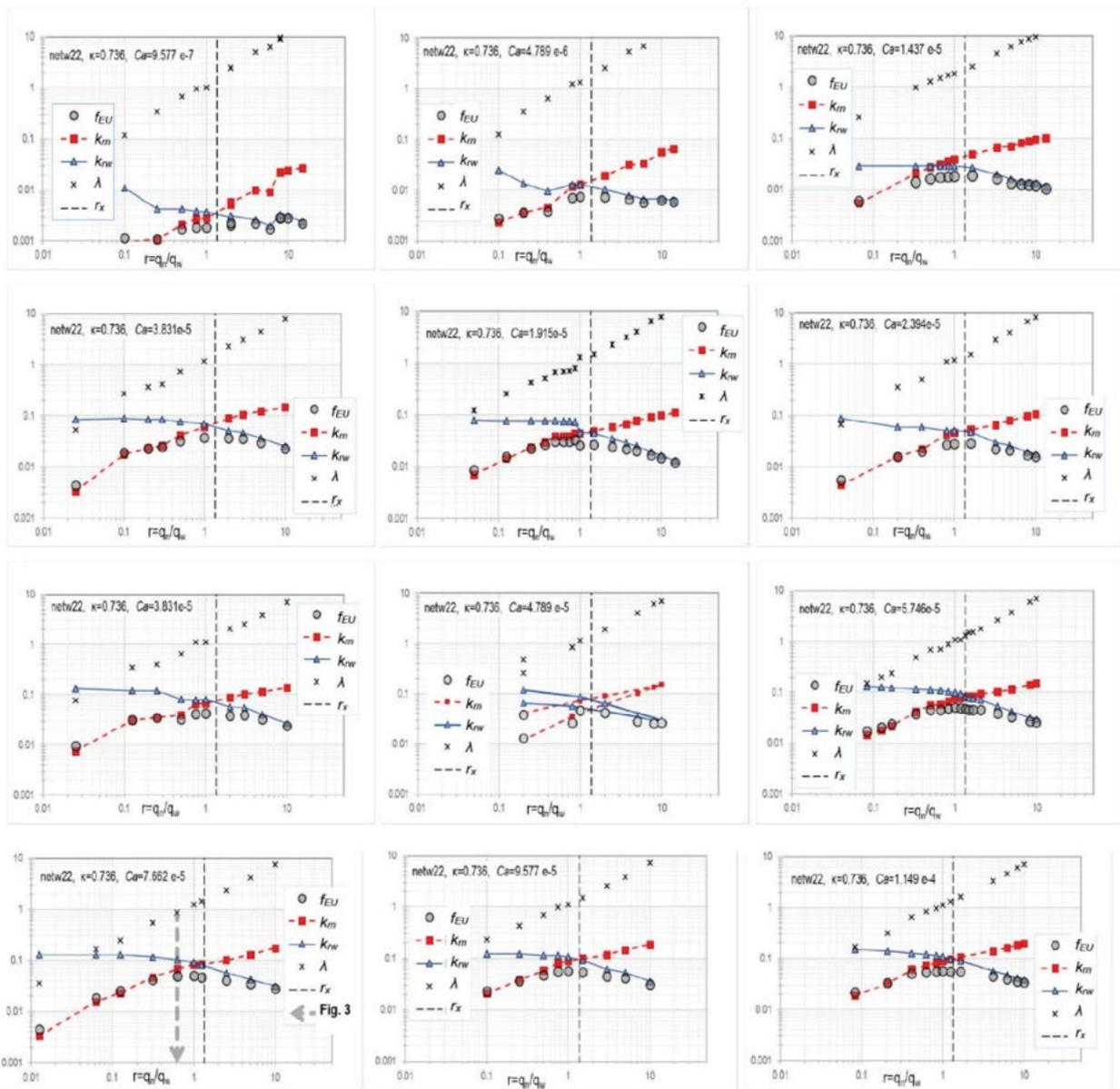


Fig. 4—Relative permeability (■,▲), energy efficiency (●), and mobility ratio (×) diagrams in the flow dependency format. Each diagram is associated with successive runs under a constant-Ca value. The straight, dashed, vertical lines indicate the theoretical value of the relative permeability crossover flux ratio value, as predicted by Eq. 11. The dashed thick line (gray) in the diagram at the bottom left corner identifies calculated values pertaining to the time evolution of the inlet pressures in the diagram of Fig. 3 (also referred to in Table A1.1).

Karadimitriou, N., Valavanides, M.S., Mouravas, K., and Steeb, H., 2023, Flow-Dependent Relative Permeability Scaling for Steady-State Two-Phase Flow in Porous Media: Laboratory Validation on a Microfluidic Network, *Petrophysics*, 64(5), 656–679. DOI: 10.30632/PJV64N5-2023a4. URL: <https://doi.org/10.30632/PJV64N5-2023a4>.

CALL FOR PAPERS

DEAR MUD LOGGING PETROPHYSICS ENTHUSIASTS

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

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

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

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

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

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

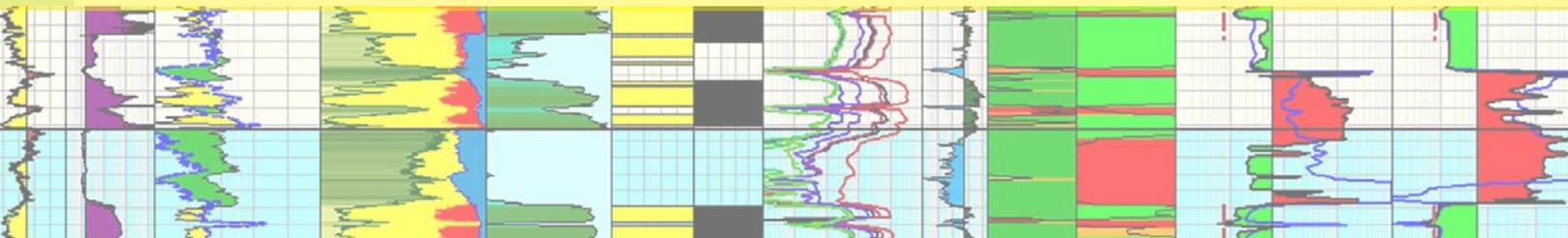
Please join the Mud Logging special issue of the *Petrophysics* journal and share your experience and how this data is transforming the way you work. It's a new landscape for mud logging in which geoscience meets engineering in the oil and gas industry.

PLEASE SEE BELOW THE GUIDELINES FOR APPLYING:

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

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

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





Petrophysics in Latin America Special Issue Call for Papers

Dear Latin American petrophysics enthusiasts,

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

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

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

The following guidelines should help:

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

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

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

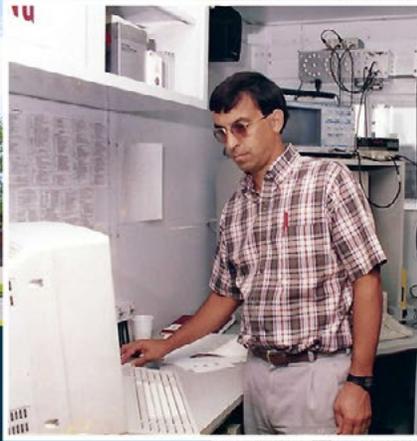
Best regards,

Javier Miranda

Clara Palencia

Nelson Suarez

Guest Editors, *Petrophysics*



WORKSHOP

FROM MEASUREMENTS TO THEORY:

*Adventures in Rock Physics,
Petrophysics, and Engineering*

Honoring the Contributions of Professor Carl H. Sondergeld

27–29 Mar '24 • Norman, OK, USA



<https://doi.org/10.1190/tle420704871>

2024

SPWLA BANGKOK

6th to 9th October



Call for Abstracts

SPWLA – Asia Pacific Regional Conference 2024

“Traditional and Transitional Petrophysics”

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

Theme of the conference:

Ideas, technology or case studies that are directly applicable to the Asia Pacific region.

Submit your abstract to:

ap2024@spwla.org

Deadline for submission:

29th March 2024.

Presentation Options:

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

Details:

Maximum of 500 words.

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

Conference Schedule (*Notional*)

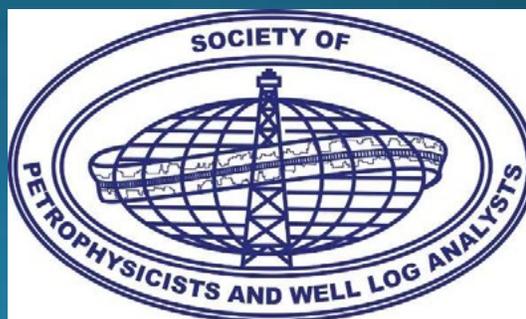
Sunday 6th – Field Trip (optional)

Monday 7th - Technology Day

Tuesday 8th – Technical Session 1

Wednesday 9th – Technical Session

Thursday 10th – Golf Day (optional)



SPWLA THIRD BOARD OF DIRECTORS MEETING
REMOTE
November 3, 2023

President Jennifer Market called the meeting to order at 6:03 am. In attendance, President-Elect, Iulian Hulea, Vice President Education, Kelly Skuce, Vice President Finance, Secretary and Admin, Jing Li, Vice President Technology-Elect, Harry Xie, Vice President Social Media, Chelsea Newgord, Vice President Information Technology, Tom Bradley, Regional Director Europe, Mathias Horstmann, Regional Director Middle East/Africa, Jennifer Duarte, Regional Director N. America 1, Javier Miranda, Regional Director Latin America, Nelson Suarez Arcano, and Executive Director, Sharon Johnson.

Absent, Vice President Technology, Robert “Bob” Gales, Vice President Publications, Stephanie Perry, Regional Director N. America 2, Clara Palencia, and Regional Director Asia Pacific/Australia, Yuki Maehara.

A motion made by Vice President Education, Kelly Skuce, to waive the reading of the minutes from the September BOD meeting was seconded by President-Elect Iulian Hulea. This motion passed by majority vote.

ACTION ITEM: Vice President Information Technology, Tom Bradley, to investigate the website link to the chapter map (Chelsea inquiry).

ACTION ITEM: Vice President Information Technology, Tom Bradley, to contact at least two IMS-WordPress companies and schedule a virtual meeting with Sharon Johnson, Stephanie Turner, and Tegwyn Perkins by 16 November – target decision point by 15 December.

ACTION ITEM: Vice President Information Technology, Tom Bradley, Sharon Johnson, and Tegwyn Perkins to research a one calendar system for easy access on the main SPWLA website.

ACTION ITEM: All Regional Directors and Vice President Information Technology, Tom Bradley, ensure that each chapter representative has access to post their current events on the website calendar.

ACTION ITEM: Vice President Education, Kelly Skuce, and Sharon Johnson will accept Student Chapter support requests. All requests must include a budget proposal on how the money will be spent. General support funds are a quarterly maximum of \$500.

ACTION ITEM: Vice President Education, Kelly Skuce, and Sharon Johnson to keep an accounting of funds distributed to each chapter.

ACTION ITEM: Vice President Education, Kelly Skuce, to publish a list of donations to the Student Chapters in the January 2024 Newsletter.

ACTION ITEM: President, Jennifer Market, and President-Elect, Iulian Hulea, to put together a guideline package on how to organize a Chapters/SIG/Regional meeting and what SPWLA could offer + timelines (based on Sharon Johnson doc and spreadsheets).

ACTION ITEM: Regional Directors: communicate to your Chapters that Stephanie Turner can assist in setting up Chapter/SIG web pages within the SPWLA site with easy chapter maintenance.

A motion made by Vice President Technology-Elect, Harry Xie, to build a partnership with *WLT Journal* in China per the proposal outlined in his report was seconded by Vice President Information Technology, Tom Bradley.

BOD Report Summary on the subject: Discussion on Granting *WLT* to Translate Selected SPWLA Papers for Publication in *Well-Logging Technology* Journal, China (*WLT*)

- Discussed the possibility of collaboration with the *Well-Logging Technology* journal to allow them to translate and publish selected articles from *Petrophysics* for some fees. They have agreed a proposal as follows:
- SPWLA recommends the best papers of *Petrophysics* every year to the *Well-Logging Technology (WLT)* journal. The authors or *WLT* will translate the articles into Chinese, publish them, and upload them to the mainstream Chinese database platforms.
- *WLT* will pay SPWLA RMB8000, about US\$1090 at the current exchange rate, per published article.
- SPWLA will form a technical committee to recommend articles and review the translation for quality control. There should be no less than 10 papers per year.
- *WLT* will promote SPWLA through their platforms in China, publish SPWLA information, activities, conference announcements, technological achievements, etc., to broaden the influence of SPWLA and recruit new members.
- SPWLA will introduce the *WLT* journal on its website with hyperlinks to promote *WLT* to some degree.
- SPWLA will be responsible for signing the copyright agreement with authors for *WLT* to have the rights to translate, publish, and transmit articles to Chinese database platforms (similar to OnePetro), while *WLT* will not hold the corresponding legal responsibility for the authors' copyright claims.
- SPWLA will invite *WLT* editorial members to attend SPWLA annual symposiums.

This motion failed to pass per the following vote results.

YES -4, NO -6, ABSTAIN -2, ABANDON THIS MOTION -1

ACTION ITEM: Vice President Technology-Elect, Harry Xie, to notify *WLT* of the results of his motion.

A motion made by President-Elect, Iulian Hulea, to adjourn the meeting was seconded by Vice President Information Technology, Tom Bradley. 10:21 am.

Respectively Submitted by
Sharon Johnson
Executive Director

NEXT MEETING: Friday, January 5, 2024, 6 am CST.

Chapter News

ABU DHABI CHAPTER

The Abu Dhabi Chapter hosted the first event of the 2023–2024 season. The gathering had an intellectual audience of various companies and backgrounds where “The Role of the Advanced Mud-Logging Solutions in the Modern Petrophysical Workflows” was discussed with representative carbonate reservoir examples to clearly demonstrate the added values for the audience by Maged Shaker and Hossam Elfaramawy. The local chapter President Amr Serry and Vice President Nager Gerges, in addition to the board members, shared an interesting discussion session with the presenters and the attending audience.



ALGERIA CHAPTER

We started earlier this month by inaugurating our chapter, which included an official announcement on LinkedIn. Also, we created an SPWLA LinkedIn page and a YouTube channel in order to communicate and publish our collaboration efforts and recorded webinars.

Recent Events

9 December 2023—We had our first webinar, and after that, a series of webinars are planned that I will communicate with you later.

New Membership Officers

We have two members who want to join our chapter starting in January 2024, and we believe there will be more in the upcoming months.

ARGENTINA CHAPTER

In the latter half of the year, the chapter has dedicated its efforts to hosting insightful talks on specific topics related to unconventional reservoirs. This strategic focus aligns with the ongoing development of such reservoirs in the Vaca Muerta Formation within the country. Additionally, the chapter has embraced a dynamic approach through Instagram Live sessions, aiming to bring these critical themes closer to participants in a more relaxed and interactive manner.

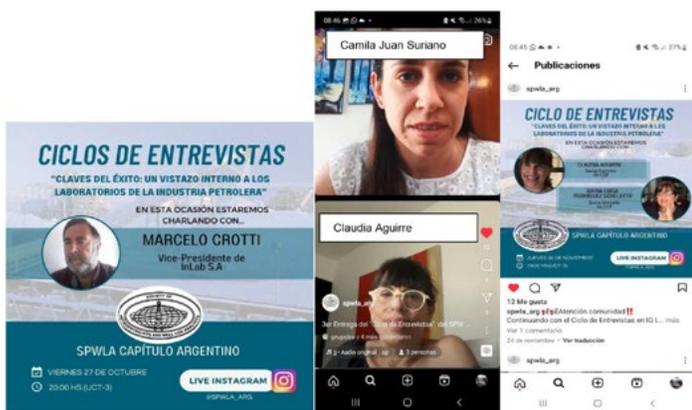
Furthermore, a noteworthy highlight includes a comprehensive course on essential tools vital for any petrophysicist aspiring to advance their learning. This holistic approach underscores the chapter’s commitment to fostering knowledge and engagement within the community.

Recent Events

11, 18, 25 October 2023—The Argentina Chapter recently organized an online introductory programming course in Python, led by petroleum engineer Jorge Barbosa. The course spanned three sessions, each lasting 1 hour and 50 minutes. Participants had the opportunity to learn, ask questions, and enhance their understanding of this valuable topic, particularly beneficial for those involved in formation evaluation. The interactive nature of the sessions allowed for active engagement and progression in programming skills. Certificates were awarded to those who completed all proposed exercises in addition to attending the sessions. Kudos to the Argentina Chapter for facilitating this insightful and practical learning experience.



27 October and 30 November 2023—Instagram Live sessions were conducted and coordinated by Camila Juan Suriano, a member of the media team of the SPWLA Argentina Chapter. During the first session, Marcelo Crotti, the vice president of INLAB.S.A, a prominent laboratory in Argentina with years of impactful work, was interviewed. In the second session, Claudia Aguirre and Maria Luisa Rodriguez Schelotto, the managing partners of another significant laboratory in the country named LCV, were interviewed. Both events unfolded in a highly agile and dynamic manner, facilitating easy, pleasant, and relaxed interaction. The interviewees shared insights into their career journeys, detailing the challenges, problems, and triumphs they encountered, along with entertaining anecdotes. Instagram Lives provided a platform for a rich and engaging conversation about their experiences and accomplishments.



14 November 2023—A presentation featured a talk by Rafael Panesso, director and petrophysical advisor (Inter Rock). He discussed the topic “Integrated Petrophysical Characterization of Hydrocarbon Shale Unconventional Reservoirs Using a Rock Typing Approach: A Case Study of Vaca Muerta Play.”

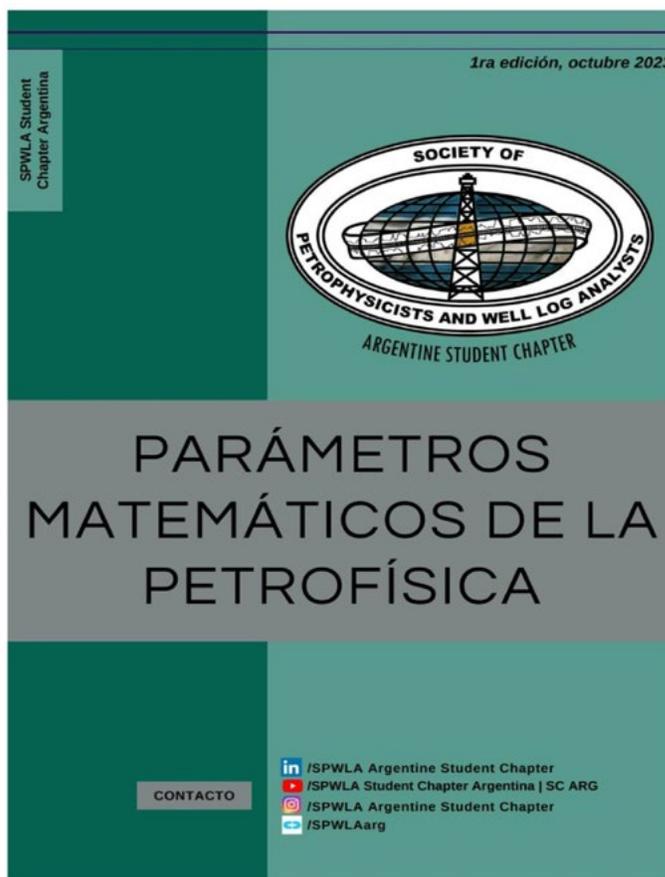


ARGENTINE STUDENT CHAPTER

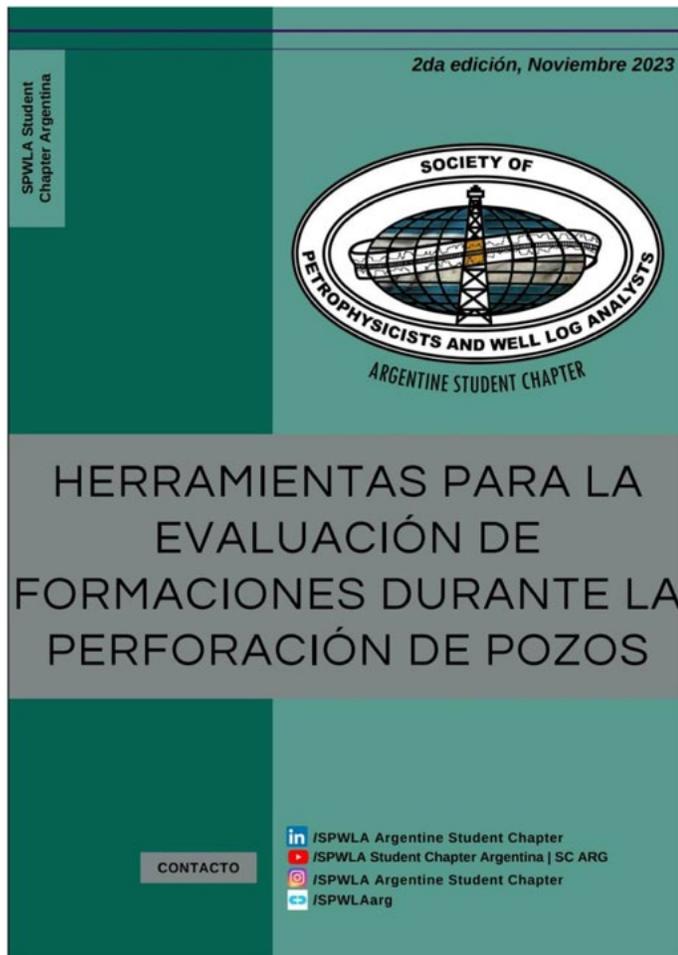
General News

We produced our own virtual magazine entitled *Informative Sundays & The Student Log Analyst*. The objective of the journal is to provide students with academic concepts related to petrophysics and geoscience. With this, we hope they can build their own virtual library and encourage reading. We have published three editions. We invite you to read them.

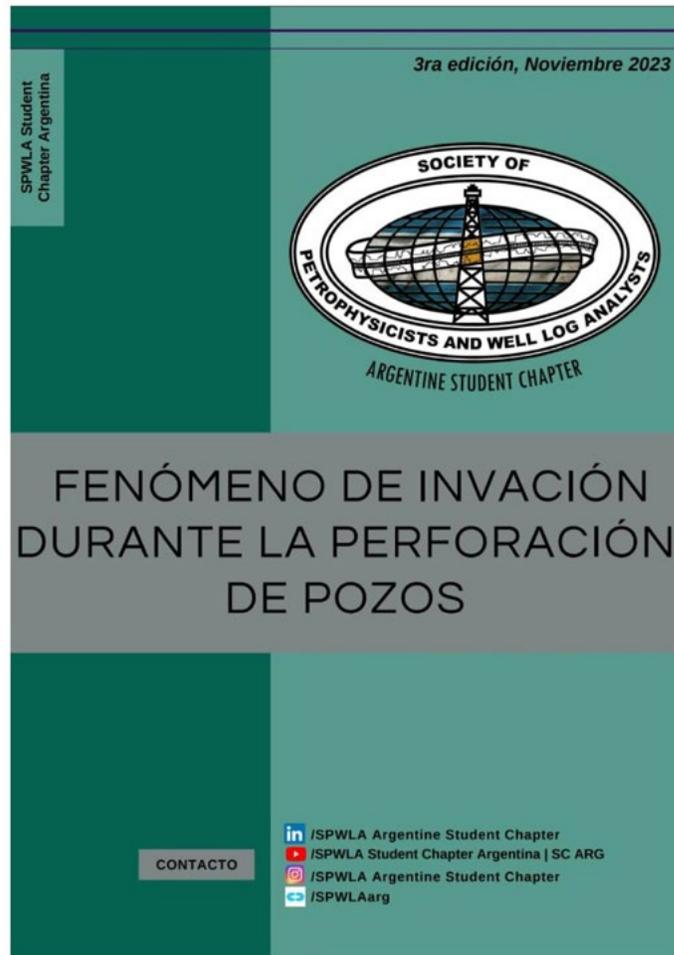
- **October 22, 1st Edition: “Mathematical Parameters of Petrophysics”** (Porosity, Shale Volume, Permeability, Saturation).
- **November 12, 2nd Edition: “Tools for Formation Evaluation During Well Drilling”** (Measuring While Drilling, Logging While Drilling).
- **November 26, 3rd Edition: “Invasion Phenomenon During Well Drilling”** (Parameters and Processes).



Magazine cover for “Mathematical Parameters of Petrophysics.”



Magazine cover for "Tools for Formation Evaluation While Drilling Wells."



Magazine cover for "Drilling Fluid Invasion During Well Drilling."

Recent Events

15–16 November 2023—Marta D’Angiola (faculty advisor from SPWLA Argentina) presented **“The Dilemma of Publishing a Technical Paper: Where Do I Start?”** Participants received important information and valuable advice on the process of writing the technical work, respecting its rules, including how to present it both in-person and virtually. The course was completed in 2 days:

- Day 1: November 15, from 5:00 to 6:30 pm (Buenos Aires, GMT-3)
- Day 2: November 16, from 5:00 to 6:30 pm (Buenos Aires, GMT-3)

The first day covered the following topics:

- Introduction to technical work (comprehensive reading)
- General and specific objectives
- The topic, the title: What? Why? What for?

- Technical vocabulary: use of glossaries
- Bibliographic search
- Structure of the technical thesis (TT): abstract or summary, extended summary
- Structure of TT: introduction, development, conclusions
- Writing standards

The second day covered the following topics:

- Presentation skills: use of PowerPoint and PDF
- Structure of the Technical Thesis (TT): introduction, development, conclusions
- Balanced use of resources: animations, videos, etc.
- Online presentations
- In-person presentations: body language and voice management



EL DILEMA DE PUBLICAR UN TRABAJO TÉCNICO: ¿POR DÓNDE COMIENZO?



MARTA D'ANGIOLA

Marta es Geóloga advisor Interpretations and Evaluation Services en Weatherford Argentina. Fue Presidente del SPWLA Capitulo Argentina 2020-2022. Coordinó el Simposio Magmatismo y Sistemas petroleros en el Congreso de Exploración y Desarrollo, Mendoza 2022. Además es Profesora libre de Geología de Subsuelo en la Facultad Ciencias Naturales y Museo, Universidad Nacional de La Plata

PLATAFORMA TEAMS

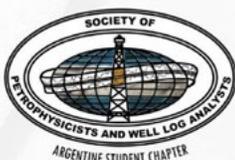
ID DE REUNIÓN: 281 648 597 895
CÓDIGO DE ACCESO: ASKTXM

- MIÉRCOLES 15 DE NOVIEMBRE.
17:00 A 18:30 HS.

-JUEVES 16 DE NOVIEMBRE.
17:00 A 18:30HS.

(BUENOS AIRES, GMT-3).

ORGANIZA:



REDES SOCIALES:

- /SPWLA Argentine Student Chapter
- /SPWLA Argentine Student Chapter
- /SPWLA Student Chapter Argentina | SC ARG

Event flyer for "The Dilemma of Publishing a Technical Work: Where Do I Start?"

HIDROCARBUROS Y TRANSICIÓN ENERGÉTICA



EMILIO JOSÉ APUD

Emilio es Ingeniero Industrial egresado de la Universidad de Buenos Aires, ha ampliado su formación con una serie de postgrados especializados en Argentina y Estados Unidos. Su experiencia profesional incluye: Director de apud & asociados, Consejero Académico en la Fundación Libertad y Progreso, y Miembro del Club Político Argentino.

En el ámbito académico, ha ejercido como Director de la Diplomatura en Oil & Gas de la Universidad Champagnat de Mendoza; profesor especializado en Negocios Energéticos en la UCA, y contribuido como profesor invitado en la UCEMA.

Se desempeñó como Director de YPF SA. (2015-2019) y previamente como Secretario de Energía y Minería de la Nación (2001). Ha sido invitado como panelista en eventos internacionales de renombre, como el 'Regional Economic Blocks and Multilateral Free Trade' en Bruselas y el Economic Forum de la Unión Europea en Polonia. Además, ha compartido su expertise como columnista en reconocidos diarios como La Nación y Clarín.

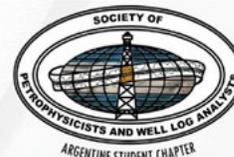
-MARTES 28 DE NOVIEMBRE.
17:00HS
(BUENOS AIRES, GMT-3).

-MODALIDAD VIRTUAL

-INSCRIPCIONES ABIERTAS



ORGANIZA:



REDES SOCIALES:

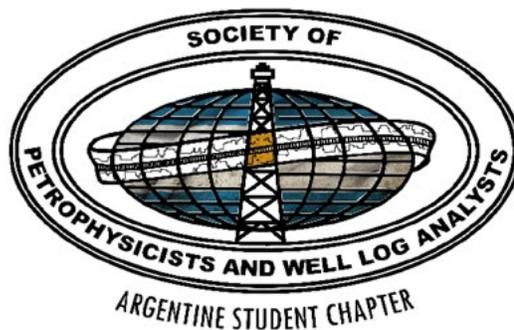
- /SPWLA Argentine Student Chapter
- /SPWLA Argentine Student Chapter
- /SPWLA Student Chapter Argentina | SC ARG

Event flyer for "Hydrocarbons and Energy Transition."

28 November 2023—Emilio Jose Apud (past secretary of energy and mining of Argentina) provided us with information on **"Hydrocarbons and Energy Transition."** Argentina is entering a new stage with the changes in presidential governments, and for participants. It has raised questions about this transition and what is to come in terms of the economic situation related to the energy transition, particularly for fossil fuels.

To know more about us:

- Mail: spwla.arg.sc@gmail.com
- LinkedIn: www.linkedin.com/in/spwla-argentine-student-chapter
- Instagram: <https://www.instagram.com/spwlaarg/>



BANGKOK CHAPTER

General News

2023 Bangkok Chapter Committee Members are:

Chapter President	Andrew Cox
Technical Coordinator	Ryan Lafferty
Sponsorship	Marvin Rourke
Secretary	Ronald Ford
Treasurer	Mesine Pullarp
Web Coordinator	Alex Beviss
Media Coordinator	Ryan Banas
Student Liaison	OPEN

Website: https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx
 Email: bangkok.chapter@spwla.org

Recent Events

30 November 2023—“Application of High-Resolution In-situ Geochemical and Image Analysis” was presented by Dr. Pierre Berger, senior petrophysicist consultant (NEXTTraining). An enlightening presentation from Dr. Berger on integrating geochemical logs with high-resolution borehole image logs to obtain highly detailed log analysis. The direct comparison with actual core photos shows the log interpretation to be accurate down to the recognition of many sedimentary and mineralogical features. Some of his slides can be viewed on our LinkedIn and Facebook pages. Thanks to Dr. Berger for taking the time to attend and present.

December 2023—*End of Year Holidays (no meeting)*

Meetings will resume in January 2024.

Upcoming Meetings

January	Dr. Rick Lemancyk	Water Injectivity / Formation Damage in SE Asia
February	Colin Whittaker	TBC

Special Announcement

6–9 October 2024—SPWLA Bangkok Chapter will be hosting the Asia Pacific Regional Conference. The call for abstracts has been released, with submissions due March 29, 2024. Please forward your submissions to ap2024@spwla.org.



2024 SPWLA BANGKOK
6th to 9th October

Call for Abstracts
SPWLA – Asia Pacific Regional Conference 2024

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

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

Submit your abstract to:
ap2024@spwla.org

Deadline for submission:
29th March 2024.

Presentation Options:

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

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

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




Dr. Pierre Berger (left) received a token of appreciation from Andrew Cox (right).



Dr. Pierre Berger, senior petrophysicist consultant (NEXTTraining).



Alternate Activities for December.



Special thanks to our Corporate Sponsors.

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

https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx or visit us on LinkedIn (SPWLA Bangkok Chapter)

BATANGAS STATE UNIVERSITY STUDENT CHAPTER

General News

In the academic year 2023–2024, the SPWLA Batangas State University Student Chapter experienced significant growth, welcoming a total of 123 new members spanning the first through fourth years of the bachelor of science in petroleum engineering and geological engineering programs at the university. This surge in membership reflects the organization’s increasing influence and resonance among students pursuing careers in the field.

Furthermore, the organization achieved a notable milestone by successfully organizing and hosting a face-to-face event, marking a departure from the virtual events that had become the norm. Titled “From Rocks to Riches: Logging Into a World of Gushing Opportunities,” the career orientation event took place on November 14, 2023. Comprising two insightful talks, the event covered unconventional resources and provided essential guidance on mastering job applications, offering invaluable insights to the students in attendance. The focus of the event extended beyond theoretical knowledge as it addressed the practical and timely concerns of today’s industry landscape.

Following the event, a thorough evaluation meeting was conducted by the organization’s officers. This post-event review aimed to analyze the strengths and weaknesses of the career orientation event, fostering a collective understanding of its impact. The insights gained from this meeting will be instrumental in refining the organization’s future endeavors, ensuring continuous improvement and an enhanced experience for its members in subsequent events. This reflective approach underscores the organization’s dedication to excellence and its proactive stance toward refining its initiatives.

On November 29, 2023, the organization concluded a momentous benchmarking initiative with the SPWLA Student Chapter of Universitas Pertamina. This collaborative effort served as a conduit for the exchange of knowledge, insights, and experiences between the two organizations. The benchmarking session provided our officers with

a valuable opportunity to delve into the organizational structure and cultural dynamics of the Universitas Pertamina Chapter, fostering a deeper understanding of their practices and achievements. Furthermore, the event facilitated a meaningful exchange, enabling officers from both chapters to establish connections and build camaraderie, creating a foundation for future collaborations.

Recent Events

28 September 2023—the SPWLA-BatStateU SC convened its third General Assembly, themed “Explore & Succeed: Connecting the Logs of Immeasurable Possibilities.” The event was conducted via Zoom meeting and featured Ms. Jennifer Market, the esteemed president of the mother organization of SPWLA, as the Distinguished Speaker. Her insights and expertise enriched the assembly, providing attendees with valuable perspectives and knowledge crucial to navigating the landscape of petrophysical sciences.



14 November 2023—The career orientation event, which is sponsored by Philodrill Corporation – a Philippine petroleum exploration company, “From Rocks to Riches: Logging Into a World of Gushing Opportunities,” proved to be an invaluable platform for students eager to explore the world of petrophysics and well-log analysis. Attendees acquired comprehensive knowledge about drilling unconventional reservoirs, a topic of paramount importance in the current oil and gas sector. Additionally, the career orientation event went beyond technical aspects by incorporating sessions on career development, imparting crucial skills essential for navigating the

job market. The participants were guided on creating effective resumes, mastering interview techniques, and enhancing soft skills, collectively equipping them with the tools necessary to embark on a successful career path in the oil and gas industry.



Engr. John Kevin M. De Castro, the organization advisor of SPWLA – BatStateU SC, gave his welcoming remarks to the guests and participants of the said event.



A photo during the event.



The speaker in the photo above is Engr. Ferdinand B. Goce, Jr., one of the speakers during the career orientation. His talk focused on unconventional resources.



The speaker in the photo above is Mr. Angel, who shared his expertise on how to ace a job.



This photo shows the SPWLA – BatStateU SC officers who worked hard behind the success of the career orientation event that was held at Batangas State University – The National Engineering University.

Upcoming Events

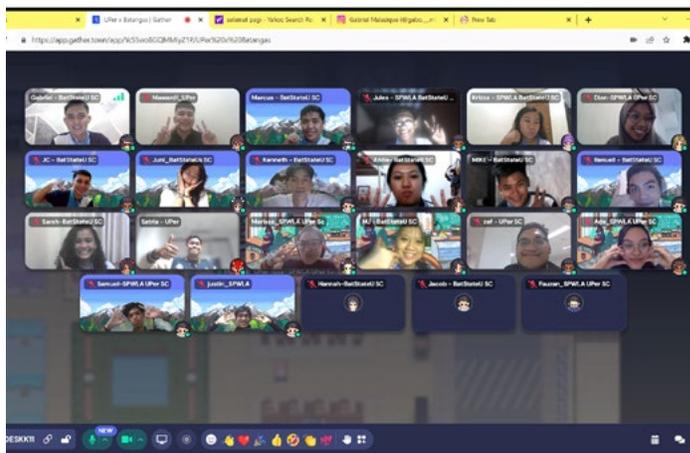
- **ExSPWLAtory Investigations:** The SPWLA BatStateU SC has been showcasing the analytical and technical knowledge of its members through a paper competition. This time around, the Student Chapter decided to step up side by side with the mother organization by conducting an internal paper competition and quiz bee. This competition will help the students to believe in themselves and enhance their respective skills, which will be helpful in the future.
- **SPWLA Slay:** Playing online games is one of the ways to cope with stressful times. Online games are pretty popular nowadays due to the entertainment they bring. These games often require players

to work together, communicate effectively, and coordinate their efforts to achieve common goals or overcome challenges. The objective is to foster social interaction, build relationships, and encourage cooperation. SPWLA Slay serves a purpose by giving members a chance to form bonds with their fellow members through playing.

- **Coastal Cleanup:** Coastal habitats, including beaches, wetlands, and coral reefs, are vital for maintaining biodiversity and providing essential ecological services. Cleanup initiatives help preserve these ecosystems by removing debris that can harm their health and integrity. By protecting coastal habitats, we also ensure the well-being of countless plant and animal species that rely on these environments. Through education and outreach, cleanup initiatives aim to inspire individuals and communities to adopt sustainable practices and reduce waste generation.
- **Blood Donation:** Voluntary blood donation is one of the ways to ensure that there is a sufficient supply of blood used in surgeries, therapies, and transplants, as well as to provide further understanding of the benefits of blood donation. The project would be during the fourth week of January 2024 in celebration of National Blood Donor Month.
- **SPWLA MentorConnect:** This event title emphasizes the mentorship aspect (“MentorConnect”) and the focus on developing the next generation of petrophysics and well-log analysts (“Empowering the Petrophysics and Well Log Analysts of Tomorrow”). The event would serve as a platform for fostering meaningful connections between experienced professionals and aspiring individuals, creating a supportive network for knowledge sharing and career growth within the SPWLA community. The e-mentorship program is designed to provide the student members with in-depth knowledge of their chosen petrophysical course through a three (3) session program with professionals or volunteer mentors who have actual experience in the field. The program would run from March up to the fourth week of April 2024 via Google Meet or through a face-to-face session.
- **Group Study:** The study is designed to encourage the student members to think more creatively while building strong communication with other members. It will allow the students to refine their understanding

of their chosen field of interest. The SPWLA BatStateU SC is dedicated to ensuring its members have an environment that would give them an opportunity to learn, grow, and prosper as a professional. The program will be during the second week of February and will last until the second week of March 2024.

- **BOSH Training:** To prevent any harm and accidents are among the basic principles of BOSH Training. Through this event, the student members would be exposed to the proper ways to prevent harm and keep the workers from accidents in the workplace. The training will be conducted face-to-face/via Google Meet in April 2024 and will be facilitated by the organization’s officers.
- **Benchmarking:** Benchmarking is a process of comparing an organization’s performance, practices, or processes against those of industry leaders or best-in-class companies in order to identify areas for improvement and set performance targets. It involves measuring performance metrics, analyzing data, and learning from the successes and strategies of top-performing entities. Benchmarking can be applied to various aspects of an organization. Benchmarking is done in order to form connections or partnerships with another organization. This will take place in the second week of April.
- **Empowering Digital Transformation:** The workshop can focus on familiarizing participants with a particular software tool, framework, or library. The objective could be to enable participants to understand the tool’s features, best practices, and how to leverage it effectively in their projects or school tasks. This aims to improve participants’ software development skills by focusing on specific areas or software, such as Petrel and Eclipse. The objective could be to provide participants with practical knowledge and techniques they can apply to their projects. The training will be conducted face-to-face or online in the first week of March.
- **Election of Officers & Turnover:** The event is organized to serve as a transition to prepare for an orderly and efficient turnover for the incoming officers of the organization. The SPWLA BatStateU SC is committed to ensuring strong bonds between its incoming and outgoing student officials. The ceremony will be on the fourth week of April 2024 using Google Meet and Google Forms.



The photo shows the benchmarking event with the SPWLA student chapter of Universitas Pertamina last November 29, 2023. The program facilitated knowledge exchange and provided a unique opportunity for officers to foster personal connections and build professional relationships. The meeting was well-attended by the officers of both organizations.

BOREHOLE IMAGING – BHI SIG

General News

The SIG is constantly gaining new members. Currently, we have 169 members.

Recent Events

8–9 November 2023—The SPWLA Fall Topical Conference “See and Hear—the Formation: Exploring the Synergies Between Borehole Imaging and Borehole Acoustic” was held at Halliburton’s Houston Training Center. The conference was co-hosted by the Acoustics and Imaging Special Interest Groups (SIGs). It was an “off-the-record” collaborative event providing an opportunity for enthusiasts to exchange ideas freely, a format that led to great brainstorming for the future. There were approximately 60 attendees (live + online). We calculated that there were over 500 years of expertise in borehole acoustics and imaging at the conference! The lineup was a stellar one with several themes wound throughout – particularly integration of acoustics and image interpretation, fractures characterization from the wellbore to the far field, as well as the limitations of current technology and the needs of the industry for new developments. There were two lively panel discussions: Visualizing Fractures Away from the Borehole—and What Ties to Flow? and Limits of LWD and Slimline Tools with Respect to Imaging, Anisotropy, and Heterogeneity. We also had a special session on “A Standardized Format for Dip Data Exchange” led by Dr. Tegwyn Perkins and Peter Barrett, where the importance of a standardized data

format for borehole dip data was pointed out, and a first standard was introduced. We would like to thank our sponsors, Halliburton and Aspentech, for their generous support. We are also grateful to the technical committee (below) and to the SPWLA staff (Sharon and Stephanie), who put in many hours to make the event a success.

Committee

- Rob Vines (Shell)
- Tegwyn Perkins (GeoActive)
- Peter Barrett (Halliburton)
- Margaret Crowson (Halliburton)
- Matt Blyth (SLB)
- Philip Tracadas (Halliburton)
- Bob Gales (Halliburton)
- Brian Hornby (Hornby Geophysical)
- Christian Rambousek (Nimbuc)
- Jennifer Market (SPWLA)
- Kelly Skuce (SPWLA)
- Doug Patterson (Baker Hughes)
- Alexei Bolshakov (Chevron)

Upcoming Events

The BHI SIG is planning a meeting in Q1 2024 to be held online. Invitations will be sent out soon.

For the SPWLA Annual Conference 2024, the BHI SIG submitted a proposal for a special session and a workshop about borehole image log analysis. At this stage, the special session will not be included in the final program due to the low number of suitable submissions.



BOSTON CHAPTER

General News

SPWLA general members and Boston-affiliate members are invited to browse our chapter website <http://boston.spwla.org> for up-to-date information on our mission and events, including event details and registration. Follow us on LinkedIn at <https://www.linkedin.com/in/spwla-boston/>.

Recent Events

5 December 2023—The Boston Chapter hosted **Jie Wang** (Intertek Westport Technology Center and University of Houston) in the auditorium of Schlumberger-Doll Research in Cambridge, Massachusetts, for an in-person presentation of her Distinguished Speaker lecture “Salinity Effect on CO₂ Solubility in Live Formation Water Under Reservoir Condition.” The in-person talk was well-attended, and it provoked many questions from the audience. The meeting was followed by a networking lunch in the SDR Winter Garden.



Jie Wang (Intertek, U. of Houston) with members of the Boston Chapter after her presentation in the auditorium of Schlumberger-Doll Research on Dec 5, 2023.

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 in Rio de Janeiro in May 2024. We are still starting the organization, so stay tuned to our LinkedIn page for new information. SPWLA Brazil would like to thank the SPWLA board and the entire petrophysics and formation evaluation community for their trust. Brazil will certainly have the best event ever!

Webinar Format and YouTube Page

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

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

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

Recent Events

31 October 2023—We had Luciana Brelaz, senior geologist (Petrec), give the talk entitled “Machine-Learning Techniques Applied to the Presalt Facies Classification.” You can watch this webinar using the following link: <https://www.youtube.com/watch?v=OnTNNI99tf8>



31/10 | 16h |  YouTube SPWLA Brazil

“Machine Learning Techniques Applied to the Pre-Salt Facies Classification”



LUCIANA BRELAZ
Geóloga Sênior



Invitation to the October webinar of the SPWLA Brazil Chapter.

21 November 2023— We had Ana Carla Pinheiro, petrophysicist (UFF), give the talk entitled “APPy: A Log Evaluation Software.” You can watch this webinar using the following link: <https://www.youtube.com/watch?v=8V9YFhqSiaA>



21/11 | 16:30h |  YouTube SPWLA Brazil

“APPy: um software para a avaliação de perfis”



ANA CARLA PINHEIRO
Petrofísica



Invitation to the November webinar of the SPWLA Brazil Chapter.

Upcoming Events

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

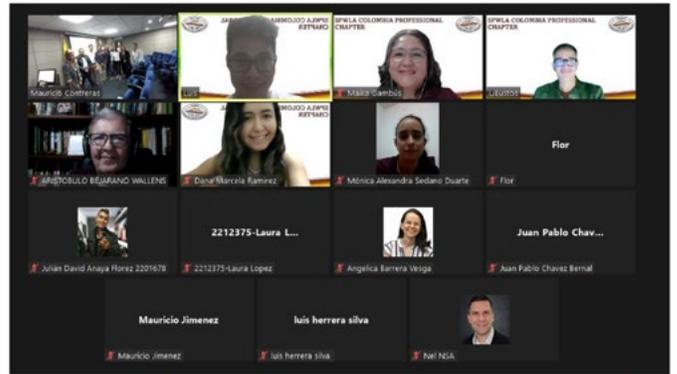
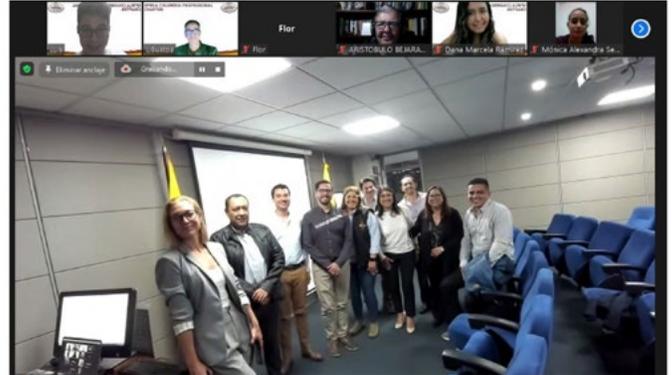
COLOMBIA PROFESSIONAL CHAPTER



Board of Directors

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

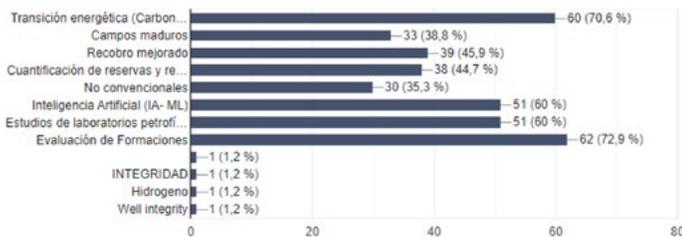
Contreras Garzon Contreras Garzon (Halliburton). We appreciate all those who were able to be part of our event. We will see you next year with new activities. You can find the video memories on our YouTube channel (SPWLA COLOMBIA): <https://www.youtube.com/@spwla colombia5994>



Recent Events

The team successfully completed the agreement with the Universidad de América in Bogotá, Colombia, for the development of presential activities.

Considering the opinions of our public, we analyzed the topics of greatest interest for the development of activities.



We culminated our final hybrid event of the year entitled “Digital Rock Technology: Its Role in Reservoir Characterization and the Energy Transition” by our special speaker, Mauricio

Upcoming Events

The team will conduct upcoming collaborative events with academia, including the University of America in Bogota-Colombia and oil and gas companies.

Follow us on our social media:



FEDERAL UNIVERSITY OF RIO DE JANEIRO STUDENT CHAPTER

General News

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

Board Members

- President: Gabriel Ferraz
- Vice president: Guilherme Lontra
- Treasurer: Sofi D'Orsisi
- Secretary: Diana Tabach
- Professor Advisor: Jorge Picanço

Executive Members

- Rodrigo Azambuja
- Iago da Costa
- Sarah Aleixo

Marketing Members

- Renan Camilo
- Luís Henrique Trianon
- Marina Alfradique

Logistic Members

- Alexandre Nobre
- Vittor Cambria
- Enzo Borges

Recent Events

10 and 17 November 2023—The webinar organized by the chapter and presented by Jorge Picanço was a success. The event took place over 2 days and was 1.5 hours in duration for each. On the first day (November 10), the presentation approached the concepts and applications of oil generator rocks and migration of fluids, while on the second day (November 17), we discussed reservoir rocks, seals, and oil traps. The event attracted an average of 50 simultaneous viewers, and we sent certificates to the participants.

The technical visit to the Development and Research Center of Petrobras (CENPES) was a success as well. We visited the laboratory of testimony, PB, the rock physics lab, the laboratory of geomechanics, and the tomography lab. In all of them, we had the pleasure of being well-received and acquiring a lot of knowledge.



Part of our team at the testimony laboratory at CENPES.

5 November 2023—We worked on organizing the chapter management changes for next year. Several board members had a meeting with Lucas Abreu, President of SPWLA Brasil, to discuss how we could make those changes in the best way possible and talked about future events of the chapter. Therefore, we can have a good start in terms of activities at the beginning of 2024.

MALAYSIA CHAPTER (FESM)

FESM, a local chapter of the Formation Evaluation Society of Malaysia, is based in Kuala Lumpur. Technical meetings are held monthly. For meeting information, please visit our chapter website at www.fesmkl.com.

General News

FESM held multiple discussions online to discuss the recent update of the society, including bank accounts, sponsorship, upcoming events, and moving forward in the next year.

Recent Events

15 November 2023—FESM held a talk by David Allen to discuss “Challenges and Solutions of Low-Resistivity Pay: A Brief History.” The talk covered the topic of the methodology used to compute the potential of thin beds

and the necessity to unravel more thin-bed reservoirs to optimize the production of reservoirs. The integration of thin-bed analysis with recent technology from high-resolution logging, 3D induction tools, and NMR increases the confidence in finding additional reserves.

Upcoming Events

More events will be held next year to encourage more discussion and participation from FESM members.

FRANCE CHAPTER

General News

The SPWLA France board has enlarged and welcomed Rubi Rodriguez (SLB) in October 2023 as IT committee lead. Rubi is also the SPWLA France Community Manager. She has already revived our LinkedIn and web page (<https://www.linkedin.com/company/spwla-france-chapter/> and <https://spwla-france.fr/>).

Recent Events

Our activities from September to December 2023 alternated Lunch and Learn and in-person half-day events. Lunch and Learn virtual sessions occurred in the September and November slots, while October and December were in-person events.

22 September and 5 October 2023—We had the chance to welcome a Distinguished Speaker of the 2023–2024 series. Artur Posenato Garcia talked about “A New Workflow for Assessment of Fluid Components and Pore Volumes From 2D NMR Measurements in Formations With Complex Mineralogy and Pore Structure” (SPWLA-2023-0110). This talk served as a keynote speech to introduce the October afternoon event about dynamic petrophysics from core to log organized at IFP-EN (French Institute of Petroleum and New Energies) in Rueil-Malmaison (France). This event was split in two, with a visit to four laboratories and a series of talks. The attendees could see the cutting-edge labs of IFP-EN dealing with coreflood experiments used for CO₂ flow characterization, micromodels to probe textural and wettability effects, X-Ray microtomography to visualize fluids in complex rocks, and the NMR lab working on rock characterization for CO₂ or geothermal applications. The rest of the afternoon was dedicated to three presentations, all about dynamic petrophysics and NMR. Marc Fleury (IFP-EN) introduced the NMR

permeability prediction in a limestone geothermal reservoir with core and log data. Then, Emmanuel Caroli (TotalEnergies) showed new insights from NMR and digital rock physics for the characterization of capillary trapping in carbonates with complex textures. Finally, George Bordakov (SLB) presented the new NMR porosity correction algorithm for the steady-state buildup effect in unconventional reservoirs.



Some attendees of the IFP-EN visit during the Dynamic Petrophysics event on October 5 in Rueil-Malmaison (spwla-france-chapter_nmr-petrophysics).

November 2023—Then, the November Lunch and Learn session opened a new chapter about nuclear measurements with a presentation from SPWLA 2023 by Saida Machicote (ENI), who talked about the effective diagnostic capability of pulsed-neutron logging for CCS monitoring purposes. This event was a keynote introduction to the December event.

15 December 2023—A special session was held on Nuclear Measurements and Applications [spwla-france-chapter_nuclear-measurement-seminar]. This event covered a wide spectrum of applications from the mining and oil and gas industries. It started with an introductory speech by Hervé Toubon (R&D director of Orano – Orano is a French company mining uranium) and Youcef Bensedik (Orano project leader) about nuclear logging tools used for uranium mines exploration and exploitation. This talk was followed by CEA (French Atomic Committee) about gamma and neutron logging probes for uranium mining exploration. Then, Rubi Rodriguez presented the high-resolution LWD spectroscopy tool of SLB and its new mineralogy deliverable derived from a neural network approach. The two last talks were centered on casedhole

applications with Geoffrey Varignier (TotalEnergies and CEA), who presented the experimental validation of a sensitivity function Sigma simulator in a casedhole environment with a calibration facility and production well data. His presentation was followed by Samira Ahmad (SLB), who presented an overview of pulsed-neutron logging applications. As this December session was the last 2023 event, it closed with an end-of-year cocktail.

Upcoming Events

The SPWLA France 2024 program is being prepared. The year will start with a session about new business around CO₂ storage and geothermal energy. Let's keep up the pace!

HOUSTON CHAPTER

General News

The SPWLA Houston Chapter has been actively enhancing the local petrophysical community through various engaging initiatives. In recent months, we organized three technology seminars across Houston, offering a platform for experts and professionals to share insights and advancements. These seminars have been complemented by monthly networking events, drawing participants from various sectors, including academia and industry, to establish a robust exchange of ideas and experiences.

In the digital realm, the chapter's social media presence, particularly on Instagram, has seen remarkable growth, doubling its followers in the past year. This surge in online engagement reflects the increasing interest and involvement of the community in the chapter's activities.

A highlight of their efforts was the successful SPWLA 2023 Technology Show on December 8, attracting over 120 participants. This event was a vibrant showcase of innovation, with keynote speeches and technology presentations that fostered a strong sense of community among oil and gas professionals. The positive feedback received stands as a testament to the event's impact and its role as a key gathering point in the industry. The Houston Chapter looks forward to continuing these successful initiatives and events, fostering growth and collaboration in the petrophysical community.

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

A seminar was held on SPWLA Houston Chapter Northside on October 31. Dale Fitz made a presentation. The seminar was titled "Evolution of Casedhole Nuclear Surveillance Logging Through Time." We extend our gratitude to Baker

Hughes for allowing the Houston Chapter to use their office for the event.

Another seminar was held by the SPWLA Houston Chapter Downtown on November 8. Eliana Russo (GEOLOG) made a presentation. The seminar was titled "Predict Geomechanical Parameters With Machine Learning Combining Drilling and Gamma Ray."

To provide more networking opportunities, the SPWLA Houston Chapter continuously hosts networking events on the last Thursday of each month, from 5:07 pm to 8:08 pm, at the same location for easy recall. In the last 3 months, we gathered on October 26, November 30, and December 19. These events brought together a diverse group of professionals from the SPWLA community, including petrophysicists, geologists, geophysicists, engineers, managers, and even current and former SPWLA international board members.

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

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

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

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

Recent Events

31 October 2023—A seminar was held on SPWLA Houston Chapter Northside. Dale Fitz made a presentation. The seminar is titled "Evolution of Casedhole Nuclear Surveillance Logging Through Time." We extend our gratitude to Baker Hughes for allowing the Houston Chapter to use their office for the event.

8 November 2023—Another seminar was held on SPWLA Houston Chapter Downtown. Eliana Russo (GEOLOG)

made a presentation. The seminar was titled “Predict Geomechanical Parameters With Machine Learning Combining Drilling and Gamma Ray.”

26 October, 30 November, and 19 December 2023—We hosted three in-person social networking events. The whole SPWLA community was invited. That was an outdoor party attended by petrophysicists, geologists, geophysicists, engineers, managers, etc. We have current and past SPWLA international board members joining our events. We plan to have such a networking event monthly on the last Thursday from 5:07 pm to 8:08 pm at the same location to make it easier to remember. Hope to see you there!

8 December 2023—The 2023 SPWLA Houston Chapter Technology Show held at the Hyatt Regency Houston Westside in the Texas Ballroom was a resounding success. The primary aim of this showcase was to bring together professionals from various sectors to learn about the latest innovations in technology for formation evaluation and data interpretation. The event provided an invaluable platform for networking, sharing industry insights, and exploring new technologies. Special thanks were extended to sponsors like **Aspen Technology, Baker Hughes, Diversified Well Logging, LLC, Eriksfiord, Gaia Earth Group, Geoactive Limited, GEOLOG International, Green Imaging Technologies Inc., INT, ROGII, and SLB** for their invaluable contributions. The Technology Show was incredibly well-received, drawing over 120 participants, including industry experts, academics, operators, and technology providers. The diverse audience contributed to a dynamic environment filled with innovation and insightful discussions. The event featured a keynote address by James P. Brady, chief digital officer (Baker Hughes). Thank you, Mr. Brady, for the inspiring keynote. Insightful presentations were delivered by professionals from INT, Baker Hughes, GEOLOG, XCL, and others. The event facilitated exciting networking sessions, allowing attendees to connect with potential clients, partners, and collaborators. Meanwhile, exhibitors had the opportunity to showcase their products and services to a targeted audience. Exhibiting at the SPWLA Technology Show provided numerous benefits, including increased visibility, networking opportunities, a chance to showcase innovation, and staying up to date with industry trends. The SPWLA Technology Show proved to be an indispensable event for professionals in the oil and gas industry, filled with opportunities for learning, networking, and innovation. The organizers and attendees

are eagerly looking forward to future events that promise to be as impactful as this year’s show. Acknowledgments: A heartfelt thank you is extended to all the attendees, sponsors, and organizers for making the 2023 SPWLA Houston Chapter Technology Show a memorable and successful event.



Upcoming Events

31 January 2024—Lunch Seminar Northside: 11:30 am–1:00 pm: “Learnings From Impact and Implications of Signal-to-Noise in NMR T1-T2 Logging of Unconventional Reservoirs” by speaker Olabode (Bode) Ijasan. Please register by January 30, 2024 to reserve lunch for those attending in person. **Registration Link:** <https://www.spwla-houston.org/seminar-detail.php?id=68>.

More details are available on the Houston Chapter’s website: <https://www.spwla-houston.org>

Houston Chapter LinkedIn profile: <https://www.linkedin.com/company/houston-chapter-of-spwla/>



Dale Fitz made a presentation about “The Evolution of Casedhole Nuclear Surveillance Logging Through Time.” SPWLA Houston Chapter VP Northside Amer Hanif greeted the speaker. Dale’s presentation was informative and followed by a great Q&A section.



Warm and insightful SPWLA social events full of holiday spirit on November 30.



Eliana Russo (GEOLOG) made a presentation titled "Predict Geomechanical Parameters With Machine Learning Combining Drilling and Gamma Ray." SPWLA Houston Chapter VP Downtown Artur Garcia greeted the speaker.



The Houston Chapter successfully hosted the SPWLA Houston Technology Show 2023 on December 8. It was incredibly well-received, drawing over 120 participants, including industry experts, academics, operators, and technology providers.



The success of a fantastic networking event hosted by the SPWLA Houston Chapter on October 26.



Bernd Ruehlicke, President of the Houston Chapter of SPWLA, and SPWLA Houston Chapter VP Northside, Amer Hanif, warmly greeted the guests during the networking event.



The event featured a keynote address by James P. Brady, chief digital officer (Baker Hughes).



The SPWLA Technology Show is a great platform and dynamic environment filled with innovation and insightful discussions.



Insightful presentations were delivered by professionals from INT, Baker Hughes, GEOLOG, and XCL. Bernd Ruehlicke thanks all the presenters.



The event facilitated exciting networking sessions, allowing attendees to connect with potential clients, partners, and collaborators. We have current and past SPWLA international board members joining our events.

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

SPWLA Houston Chapter Board for 2022–2024

 <p>Bernd Ruehlicke PRESIDENT president@spwla-houston.org</p>	 <p>Amer Hanif VICE-PRESIDENT NORTH SIDE vpnorthside@spwla-houston.org</p>
 <p>Artur Posenato Garcia VICE-PRESIDENT DOWNTOWN vpdowntown@spwla-houston.org</p>	 <p>Neal Cameron VICE-PRESIDENT WESTSIDE vpwestside@spwla-houston.org</p>
 <p>Ronke Olutola TREASURER treasurer@spwla-houston.org</p>	 <p>Hans Wong SECRETARY secretary@spwla-houston.org</p>
 <p>QinShan (Shan) Yang EDITOR editor@spwla-houston.org</p>	 <p>Tianmin Jiang WEBMASTER webmaster@spwla-houston.org</p>

INDIA CHAPTER

Recent Events

20 October 2023—SPWLA India Chapter conducted a Technical Session at Dehradun. The Technical Session was attended by 20+ petrophysicists. **President** of the chapter, **Mr. S K Singhal**, welcomed the gathering, and **Vice President (Education)**, **Mr. Sanjay Vohra**, gave a short brief on the technical presentation. The technical presentation on “**A Modern Day Approach to Electrofacies Using MRGC Technique**” was delivered by **Mr. Sumanta Sarkar**, senior petrophysicist (Aspentech).

A Modern-Day Approach to Electrofacies Using MRGC Technique

Electrofacies are sets of log responses that characterize sediment facies and allow them to be distinguished from other sediments or rock types. Simply put, electrofacies are facies, rock types, or clusters that are generated or distinguished by differences in log responses.

Geolog's Facimage interprets log data based on statistical and neural network methods to characterize and predict classes and petrophysical properties. It focuses on the Facimage MRGC (Multi-Resolution Graph Based Clustering) and KNN (K-nearest neighbor) approach.

This method allows a simple, fast, and effective integration of all types of petrophysical and geological information: conventional logs, array and image logs, core measurements, and core descriptions.

There are four unsupervised clustering methods available in Facimage:

1. AHC – Ascendant Hierarchical Clustering
2. Dyn-Cluster – Dynamic Clustering
3. MRGC – Multi-Resolution Graph-Based Clustering
4. SOM – Self-Organizing Map

Many clustering algorithms require that you specify the number of clusters to find upfront. If that number is not apparent from prior knowledge, it should be chosen in some way. The dynamical clustering and ascending hierarchical classification methods currently in use group log values by their proximity (the grouping being interpreter-dependent).

Unsupervised classification offers the possibility of exploring the structure of the data without guidance in the form of class information and often reveals features that were not expected or previously known. These classification methods can be statistical or neural network methods. Unsupervised methods avoid the user bias that supervised methods build in.

A classic approach to facies analysis, automatic clustering, requires an estimate of the number of clusters, with the results being very sensitive to this parameter.

MRGC proposes the optimal number of clusters yet allows the geologist to control the level of detail actually needed to define electrofacies. MRGC proposes to the user several optimal numbers of clusters corresponding to different resolutions. In addition, the results of MRGC are organized in a hierarchical way so that the clusters of higher resolutions are always subclusters of the low-resolution clusters.

From the decreasing ordered KRI curve, several important breaks can be observed, where KRI changes from one stable plateau to another. These breaks correspond to the optimal clusters at different resolutions.



Bio Data of Mr Sumana Sarkar:

Sumanta Sarkar is a seasoned petrophysicist with more than 18 years of oil and gas industry experience, currently serving as a senior petrophysicist at AspenTech, formerly Paradigm Geophysical/Emerson. With a strong background in processing and interpretation of petrophysical logs, Sumanta has excelled in various technical roles, including team leadership, service delivery management, and client support. Sumanta’s dedication to excellence in execution is evident in his track record of delivering outstanding results. Sumanta holds a wealth of academic qualifications, including an ongoing PhD from IIT Bombay, an Executive MBA from ITM University, and an MSc in applied geology from IIT Roorkee.



JAPAN CHAPTER (JFES)

Recent Events

6 December 2023—The 122nd JFES Chapter Meeting welcomed 27 in-person and 63 online audience participants for two lectures for a series of technical presentations, which were followed by lively discussions. We also celebrated the success of the chapter meeting at the networking ice-breaking party.

Presentation 1

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

Mr. Naoshi. Aoki (JGI)

Presentation 2

“Importance of Stress Evaluation in CCS”

Mr. Koji Kashihara (JAPEX)



Mr. Aoki gave us an example of a DAS application to the geothermal fields.



Mr. Kashihara explained the challenge of geomechanics in the CCS/CCUS.

Upcoming Events

March 2024—We are pleased to announce that the forthcoming 123rd JFES Chapter Meeting will be held in March 2024. Details will be announced soon.

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS (KFUPM) STUDENT CHAPTER

General News

SPWLA 2023–2024 Board of Members

Dr. Ahmed Farid
Facility Advisor

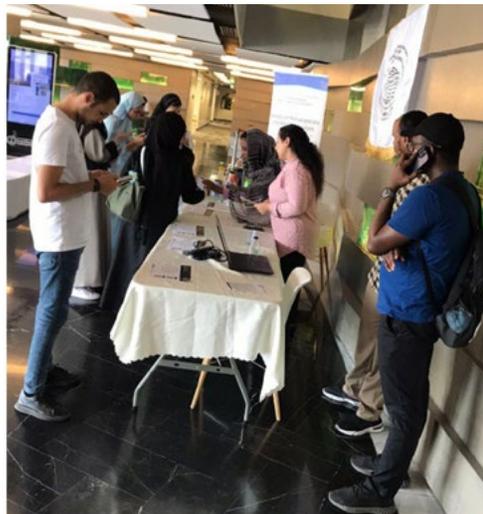
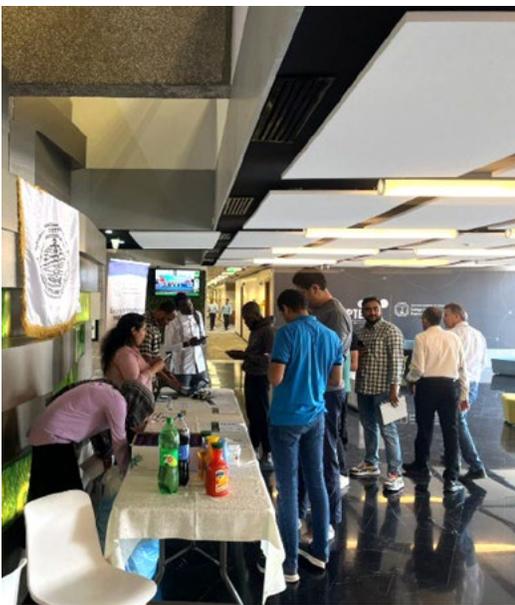
Dr. Amjed Hassan
Chapter Mentor

Society of Petrophysicists and Well Log Analysts
Student Chapter at KFUPM

Recent Events

16 October 2023—A registration campaign was recently orchestrated at KFUPM to unveil and extend invitations to students, beckoning them to join SPWLA. This strategic initiative was meticulously designed not only to introduce students to the manifold benefits of SPWLA membership but also to provide them with the keys to a world brimming with opportunities in petrophysics and well-log analysis. The event witnessed a remarkable turnout, successfully guiding students through the account creation process and ensuring the acquisition of their SPWLA membership numbers.





16 October 2023—"Core Analysis of Unconventional Source Rock Shales With a Focus on NMR Methods" was presented by Dr. Jinhong Chen, research science consultant (Saudi Aramco). Dr. Jinhong Chen elucidated on the intricacies of his subject matter. The presentation promised a comprehensive exploration of core analysis techniques, with a particular emphasis on nuclear magnetic resonance (NMR) methods.



NORWEGIAN FORMATION EVALUATION SOCIETY (NFES)

General News, end 2023

Month	Title	Presenter	Affiliation	Attendance (incl speaker) at the Gård	Attendance (incl speaker) via Teams	Attendance (incl speaker) Total
Jan.23	Context and distribution matrixes - one path to consistent and efficient handling of uncertainty in formation evaluation	Kjetil Westend	Aker BP	14	3	17
Feb.23	Integrated approach to leak detection using high definition electromagnetic technology, production logging and ultrasonic logs - a case study	Adesoji Adedamola	Halliburton	18	7	25
Mar.23	Experience with CICM on NCS: Drill pipe conveyed ultrasonic cased hole logging	Øystein Meling	Baker Hughes	13	3	16
Apr.23	4D Radar Imaging of wellbore Geometry while drilling	Inge Bye	Well ID	25	4	30
May.23	Analytical Models for predicting the formation resistivity factor and resistivity index at Overburden conditions	Meysam Nourani	Stratum Reservoir	25	1	27
Jun.23	Seismic LWD: Real time lookahead VSP while drilling	Neil Kelsall	Schlumberger	21	3	24
Sep.23	A method to identify vertical reservoir pressure communication by combining borehole sonic and high-frequency electrical imaging data	Knut Arne Birkedal Harish B. Datir	Aker BP SLB	18	7	25
Oct.23	NMR Fluid Substitution – Pursuing the Fundamental Controlling Parameters of a Low-Mobility Reservoir	Seren Amdt Christensen	Aker BP	20	11	31
Nov.23	NFES Full day Seminar	10 presentations		60+		60+
Dec.23	Stochastic Inversion of Borehole Ultra-Deep Azimuthal Resistivity Measurements Using Fast Multi-grid Simulated Annealing	Nazanin Jahani	NORCE	32	3	35

Recent Events

1 November 2023—NFES Full-Day Seminar: The NFES One-Day Seminar was held in Stavanger. It was an amazing event with 60+ people! It was a pleasure to see many attendees from different companies gathered in Solastranden Gård to share experiences and learnings and to network with peers from across the industry.

High-quality talks! Many good ideas! Excellent presentations!

Three main topics were covered by the experts, addressing the current O&G industry concerns and feature development.

- New Logging Technology in Complex Formation Evaluation
- Petrophysical and Well-Log Analysis Supporting CCS and Energy Transformation Agenda
- A New Way of Working – Applications of Machine-Learning Digitalization, AI, etc., in Formation Evaluation

Thanks to the main event sponsor, Logtek AS, for supporting the event.



Thanks also to Mathias Horstmann, the SPWLA European Region Director, for his talk and note on the update from the mothership and the upcoming SPWLA seminar in Brazil.



In addition, and in compliance with the NFES board’s strategy of supporting academia and students, the NFES Student Travel Grant was given to Peter von Schultendorff.



Thanks to the NFES board for their contribution to making this event successful.



It was a great effort with great contributions. Thank you to all presenters and coauthors for making the NFES Seminar a success!



Marta Prymak-Moyle (Equinor ASA) et al.:

“The Evolution of UDAR Technologies for Risk Mitigation in Geostopping Applications”

Karol Riofrio (Halliburton) et al.:

“Successful Geostopping Using a Recently Developed LWD Look-Ahead Ultradeep EM Resistivity Tool”

Sven S. Gundersen (Repsol Norge) et al.:

“Multiscale Reservoir Characterization Using LWD Technologies for Informed Operational Decisions, Yme Field, Norway”

Geoffrey Page (Baker Hughes) et al.:

“Monitoring and Appraisal of Carbon Dioxide Saturation From Multidetector Pulsed-Neutron Characterization and Modeling”

Peter von Schultendorff (Universitetet i Bergen) et al.:

“A Machine-Learned Near-Well Model in OPM”

Kjetil Westeng (Aker BP) et al.

“Tomorrow’s Petrophysics: Blending Big Data, Artificial Intelligence and Human Insight”

Alexandra Cely (Equinor ASA) et al.:

“Reservoir Fluid Typing From Standard Mud Gas – A Machine-Learning Approach”

Alvaro Muñoz Beltran (Stratum Reservoir) et al.:

“X-ray CT 3D Virtual Plugging”

Egil Boye Petersen (Aker BP):

“The Importance of Structuring and Digitizing Rock and Fluid Data to Improving Subsurface Analysis and Modeling Workflows”

Frode Ungar (Equinor ASA) et al.:

“Improved Reservoir Fluid Estimation for Prospect Evaluation Using Mud Gas Data”

6 December 2023—Monthly Technical Meeting: NFES hosted a very interesting talk given by Nazanin Jahani (NORCE), titled “Stochastic Inversion of Borehole Ultra-Deep Azimuthal Resistivity Measurements Using Fast Multi-grid Simulated Annealing.”



NFES Technical meeting, December 6, 2023, in Stavanger. (Left) Venkat Jambunathan, NFES VP Program, presents the NFES ice bear in gratitude for a well-attended and delivered presentation by Nazanin Jahani (right) from NORCE.

PDDA SIG

General News

In 2023, the SPWLA PDDA SIG (Petrophysics and Data-Driven Analytics Special Interest Group) engaged in several

impactful activities. The SIG conducted a series of board meetings to facilitate organizational discussions and decision-making. One of the key highlights was a webinar featuring speaker Vanessa Simoes, who presented “Deep Learning for Multiwell Automatic Log Correction.”

The SIG organized a highly successful machine learning workshop during the annual symposium in Lake Conroe, TX. Our instructors, Lei Fu, Chicheng Xu, Lalitha Venkataramanan, Yuchen Jin, Tao Lin, and Farhan Naseer, guided participants through general machine learning concepts, sample workflows, and steps for ML applications. The workshop also delved into industry use cases, providing valuable insights to attendees.

Additionally, the SIG hosted its 3rd annual ML competition, focusing on the “Automatic Well-Log Depth Shift With Data-Driven Methods.” Over 100 participants actively engaged in the competition, showcasing diverse and insightful solutions to the proposed challenge.

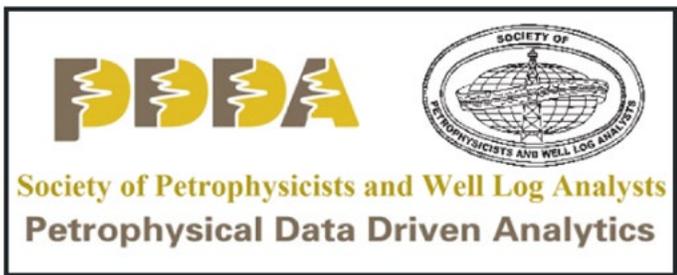
An annual topical ML conference held at Halliburton North Belt Campus in Houston served as a significant gathering for leading petrophysicists, researchers, students, and machine-learning enthusiasts. The conference spanned 1.5 days, featuring technical presentations and discussions that contributed to a deeper understanding of machine-learning applications in the industry. Halliburton’s support was crucial in making the event a success.

Looking ahead, the PDDA SIG expressed its commitment to continue hosting activities in the coming year that will benefit all members of the SPWLA community. The dedication to knowledge-sharing and collaboration underscores the SIG’s role in advancing expertise and innovation in petrophysics and digital data analysis within the industry. Lastly, PDDA SIG thanks all executive committee members, Hyungjoo Lee, Lei Fu, Wen Pan, Jaehyuk Lee, Michael Ashby, and Yanxiang Yu, for their service.

Sponsorship Opportunities

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

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 are 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 tuned always!

PERMIAN BASIN SPWLA

Recent Events

24 October 2023—Our last technical talk was with Zoya Heidari (University of Texas), who presented “Advanced Formation Evaluation of Organic-Rich Mudrocks, Honoring Rock Fabric and Geochemistry.” We were happy also to welcome Clara Palencia (Intertek Westport Technology), North America Regional Director SPWLA.



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



(Left to right) Christopher Smith (Advanced Hydrocarbon Stratigraphy), Vice President Veronica Montoya (Axiom Petrophysics LLC), President Zoya Heidari (University of Texas), and Clara Palencia (Intertek Westport Technology), North America Regional Director SPWLA. Missing: Sebastian Ramiro-Ramirez (Diamondback Energy), Treasurer, and Jennifer Reeves (Applied Petroleum Technology (APT)), Secretary.

Recent Events

Past Monthly Meetings

Date	Speaker	Title
October 24, 2023	Zoya Heidari	Advanced Formation Evaluation of Organic-Rich Mudrocks, Honoring Rock Fabric and Geochemistry
No November or December talk		

Upcoming Events

Upcoming Monthly Meeting of 2024

Date	Speaker	Title
January 2024	David Allen	Customized Thin-Bed Analysis Workflow Applied to Low-Resistivity Pay in Permian Clastics

Upcoming Talks: Our talks are on the fourth Tuesday of the month and are available in person or virtually.

- February: Mitch Pavlovic (Oxy)
- March: Milly Wright (Rhomtek)
- April: Shuvajit Bhattacharya (BEG)
- May: Stonnie Pollick (Fasken)

SAUDI ARABIA CHAPTER

Recent Events

7 and 8 November 2023—The SPWLA Saudi Arabic Chapter successfully hosted its 13th Topical Workshop, centered around the theme of CO₂ capture and storage in saline water aquifers in Al Khobar. The workshop featured a comprehensive program encompassing technical talks by industry and academia experts, panel discussions, poster sessions, and group discussions on case studies. With an impressive turnout of over 150 participants on both days, the event saw active engagement from SPWLA SAC industry partners, including Saudi Aramco, SLB, Baker Hughes, Halliburton, Weatherford, and academia partners such as KFUPM and KAUST. The first day commenced with a keynote speech by Rob Laronga (SLB) on “Integrated Formation Evaluation for Site-Specific Evaluation, Optimization, and Permitting of Carbon Storage Projects.” Technical presentations focused on CCUS site evaluation and CO₂ storage capacity assessment, with topics ranging from CO₂ storage capacity insights to best practices for well abandonment in CCS. The day concluded with a panel discussion and case studies led by the presenters. The second day centered on reservoir characterization and monitoring for CCUS projects. Presentations covered a spectrum of topics, including the integration of characterization, monitoring, and plume movement assessment, monitoring Sleipner carbon storage, optimizing carbon capture and storage, and rapid simulation and optimization of geological CO₂ sequestration. The day concluded with another enlightening panel discussion. Throughout the workshop, participants enjoyed multiple engagement opportunities, including panel discussions, case study group discussions, and poster sessions. An online quiz added a fun element to recognize the most attentive attendees. Heartfelt thanks were extended to SLB management for their support and workshop sponsorship, the dedicated presenters who traveled across the globe to share their expertise, the many volunteers, especially those energetic young professionals, whose efforts contributed to the workshop’s success, and the committee team.



SPWLA SAC 13th Workshop group photo at the Kempinski Al Othman Hotel Al Khobar held November 7–8, 2023.

4 December 2023—The SPWLA SAC recently hosted its end of 2023 Lunch and Learn session, featuring the topic “True Flow: Advanced Noise and Temperature Applications for Behind Pipe Flow and Integrity” by Elena Terentyeva, a distinguished flow domain expert (TGT) based in KSA. The session highlights the increasing significance of through-barrier diagnostics in comprehending well systems. Passive acoustic sensing data are adapted to capture events behind the pipe, including downhole flow and integrity issues. High-precision temperature data provide crucial insights into ongoing well hydrodynamics. Advanced temperature modeling is identified as a key facilitator for accurately reconstructing fluid movement within the well and beyond. The integration of these components holds the promise of delivering insightful behind-barrier diagnostics, a concept that was exemplified through multiple case studies presented during the session. The talk underscored the practical applications and benefits of leveraging advanced noise and temperature applications for a more comprehensive understanding of well dynamics and integrity. The event was well attended, and we conclude the successful 2023 year with this event.



SPWLA SAC Lunch and Learn on December 4, 2023, Saudi Aramco Core Area.

Upcoming Events

We are currently in the process of planning events for the upcoming year, starting a topical workshop on geothermal in 1Q2024. Anticipating another year of success, we extend our warmest wishes for a Happy New Year to the close family of SPWLA SAC, as well as to the bigger SPWLA international family and friends across the industry and beyond! Stay tuned for updates on our website.

SOUTHWEST CHINA CHAPTER

Recent Events

14 January 2023—The “SPWLA Southwest Branch 2022 Annual Academic Conference” sponsored by the International Association of Reservoir Petrophysics and Logging Analysts – Southwest Branch (SPWLA-SWCHINA Chapter) was held on Wuhan Campus of Yangtze University (online). Experts and scholars from home and abroad were invited to make special reports. The conference was conducted by Tencent online conference report and simultaneous live broadcast on the WeChat public account platform Petroleum Circle and Koxiang Academic. More than 7,000 teachers, students, and experts participated in the live broadcast of this annual academic conference. Presided over by Bin Zhao, Vice Dean of the School of Geophysics and Petroleum Resources of Yangtze University, and Professor Hua Wang, Chairman of the Branch, the work of the branch in 2022 was reported. The conference invited Professor Ge Jin (Colorado School of Mining), Professor Zhejun Pan (Northeast Petroleum University), and Professor Wei Wang (Sinopec Petroleum Engineering Technology Research Institute) to give lectures. Professors and experts from the University of Electronic Science and Technology of China, Southwest Petroleum University, Chengdu University of Technology, Chongqing University of Science and Technology, as well as CGG, Olam Energy Technology, Beijing Lemon Eco, Niumai Technology, and other enterprises brought wonderful reports and shared the cutting-edge achievements in their respective fields. The online interactions were frequent during the meeting, and there was a warm atmosphere throughout the whole process.



Professor Hua Wang reports on the work in 2023 online.

27 February 2023—Professor Hua Wang, President of SPWLA – Southwest Branch, invited Xiang Wu, director of research and development (Halliburton) and assistant professor at the National University of Singapore, to give an academic presentation at Innovation Center D518 at the Qingshui River Campus of UESTC. The topic of the presentation was “Sensing and Signal Processing in Oilfield Service Technologies,” and several academy members participated in the presentation. The presentation provides insight into Halliburton’s advanced technologies in oil and gas services, providing attendees with valuable experience and knowledge.



Members listen to the lecture.

25 April 2023—The Seventh National College Students Logging Skills Competition was held at Southwest Petroleum University. Academician Junchong Yu, Academician Pingya Luo, Academician Ning Li of the Chinese Academy of Engineering, and Party Secretary Pengfei Jiang of

Petrochina Southwest Oil and Gas Field Company attended the opening ceremony. The competition is divided into a logging skills competition and a youth education competition. The logging skills competition focuses on participants' grasp of the basic knowledge of logging geology, the basic principles of wireline-logging methods, and the comprehensive interpretation of wireline logging. It also examines the skill level of logging data interpretation and comprehensive evaluation, as well as PowerPoint making and results reporting, contingency ability, and team cooperation. The content of the youth teaching competition includes teaching design, teaching display, and teaching reflection, aiming to improve the basic skills of young teachers in teaching logging. Several executive committee members of SPWLA Southwest Branch led the student members from branch units to participate in the competition and obtained excellent results. This competition enhanced the friendship among the student members and allowed the student members to learn more about rock physics and logging.

concept is proposed, which can directly integrate the underlying physical processes and geological constraints, such as the number of clusters, the number of transitions between clusters, and the minimum layer thickness. This paper also translated "A Comparative Study of Machine-Learning Methods for Logging Prediction." This study aims to compare the performance of three promising machine-learning (ML) methods in predicting the following curves: density, neutron porosity, and compression wave velocity curves. They think it is necessary to evaluate models that can provide answers even in the presence of multiple missing or altered logs, which is a common situation in petrophysics. Therefore, they compared three ML methods that can handle these problems: window-based convolutional neural network autoencoders (WAE), point-by-point connected fully connected autoencoders (PAE), and limit gradient Lift (XGBoost). They developed PAE and WAE methods to handle challenging cases of interest and used the original implementation of XGBoost, which could already handle missing values.



Prof. Xiangjun Liu presides over the opening ceremony.



SPWLA Southwest Branch translated the abstract of the papers from *Petrophysics* 2023.

The SPWLA Southwest Chapter has been promoting papers published in *Petrophysics*. Recently, this chapter translated the abstracts of the papers in *Petrophysics* 2023, which has attracted many scholars and was deeply loved by readers.

6 May 2023—Translation of the abstract of the paper in Issue 2 of *Petrophysics* 2023: "Unsupervised Logging Phase Classification Based on Petrophysical Parameterization: A Dynamic Programming Approach." An unsupervised clustering algorithm based on the dynamic programming

Recent Events

18 September 2023—The 2023 International Congress on Ultrasonics (2023 ICU Beijing) was held in Beijing, hosted by the International Ultrasound Conference Committee, the Chinese Society of Acoustics, and the Institute of Acoustics of China. Professor Wang Hua, Professor Fang Zhilong, and five other teachers and students from the Acoustic Information Intelligent Perception and Imaging Team, the School of Resources and Environment, and the University of Electronic Technology attended the meeting. Among them, Professor Wang Hua has moderated the

Reservoir Acoustic and Borehole Acoustic Logging session. Beijing International Congress on Ultrasonics (2023 ICU Beijing) is the eighth International Ultrasound Conference jointly sponsored by the International Ultrasound Conference, the Chinese Society of Acoustics, and the Institute of Acoustics of the Chinese Academy of Sciences since the establishment of the International Ultrasound Conference (ICU) in 2005. Due to the coronavirus disease 2019 (COVID-19) pandemic, the 2021 ICU BEIJING was postponed, and the ICU Board Member Committee decided that the 2023 ICU BEIJING would be held in a mixed manner, both live and online. The conference aims to bring together professionals and experts from academia, industry, and government in various disciplines to exchange achievements and experiences in the fields of biomedical ultrasound, industrial ultrasound, NDT, physical acoustics, and emerging fields and to provide a valuable opportunity for participants to enhance their international contacts.



The 2023 International Congress on Ultrasonics.

During the conference, the teachers and students of the laboratory made two oral reports, covering the evaluation method of cementing quality of casing well, downhole information processing method, the theoretical calculation of sound field of well hole complex model, logging theory research with drilling acoustic wave, and the study of S-wave characteristics of slow formation under the eccentric of drilling collar. The teachers and students of the laboratory had full exchanges and discussions with experts and scholars in various fields from home and abroad on acoustic-related

academic issues, showing the professional academic literacy and broad academic vision of the teachers and students of the Acoustic Information Intelligent Perception and Imaging Team.

The team postdoc Ji Jiayun reported on the subject of "Shear Wave Measurement in Slow Formations for Eccentric Monopole Acoustic Logging While Drilling" and fully studied the S-wave of slow formation based on a large number of calculation simulation results and analyzed the physical factors affecting the measurement and extraction of S-wave. This work provides physical theoretical support for S-wave signal extraction followed by drilling acoustic wave logging and high-precision acoustic wave logging instrument design.



The team postdoc Ji Jiayun's report.

Associate Professor Li Meng reported on the subject of "Characterizing Annulus-Formation Interface Using Reverse Time Migration Based on Ultrasonic Pitch-Catch Measurements in Cased Wells." A reverse time separation method (RTM) for casing well structure imaging is proposed. It can effectively solve the fuzzy problem of ring-formation interface caused by multiple reflections of casing well and the third interface echo. This method has checked the calibration logging data and the actual Beihai logging data, and the test effect is good.



Characterizing annulus-formation interface using reverse time migration based on ultrasonic pitch-catch measurements in cased wells

Meng Li¹, Hua Wang², Shaopeng Shi², Aihua Tao³

¹School of Earth Sciences and Engineering, Xi'an Shiyou University, Xi'an, 710065, China

²School of Resources and Environment, University of Electronic Science and Technology of China, Chengdu, 611731, China

³China Oilfield Services Limited, Tianjin, 300451, China

Ultrasonic pitch-catch technique has been proven as an effectively non-destructive technology to evaluate the cement bond quality in cased wells^[1]. However, tool and casing eccentricity, high elastic attenuation of ultralight cement medium and strong multiple casing reflections make the third interface echo (TIE) difficult to be precisely separated, leading to ambiguous identification of annulus-formation interface^[2-3]. To deal with this issue, we proposed a reverse time migration (RTM) approach for ultrasonic pitch-catch measurements to image the cased-hole structures especially the annulus-formation interface. To further enhance the feasibility of cased-hole RTM, a phase-shift interpolation technique is applied to reconstruct ultrasonic array waveforms from limited receivers. Zero-lag crosscorrelation imaging condition, source-side illumination and Laplace filtering is applied to provide the image with high accuracy and alleviate the low-frequency imaging noises. Case studies from a synthetic well with tool eccentricity, a full-scale calibration well and a North Sea well demonstrate that the proposed method is able to recover the true position and geometry of annulus-formation interface when it has an irregular shape given with a reasonable migration velocity model.

Associate Prof. Meng's report.

The acoustic information intelligence perception and imaging team of the School of Resources and Environment, University of Electronic Science and Technology, was established by Professor Wang Hua in 2019. The team has undertaken national and provincial level projects, enterprise-commissioned projects in the field of casedhole cementing quality, and intelligent evaluation in the domestic leading position. Members of the team have made contributions to the design and development of instruments in special application scenarios, the application of artificial intelligence techniques in geophysics, the study of wave field propagation law and detection theory in complex environments, and the quantitative characterization of rock micropores.

30–31 August 2023—The second International Symposium on the Development and Application of Digital Rock Physics Technology, hosted by CNPC Logging Co., Ltd., was held in Xi'an. Thirty-three enterprises, universities, and research institutes, including affiliated enterprises of CNPC, Chinese Academy of Sciences, and China Geological Survey Xi'an Jiaotong University, attended the meeting. Mr. Shi Yujiang, deputy general manager (CNLC), attended the meeting and delivered an opening speech. The symposium was sponsored by the Well-Logging Laboratory of CNPC Logging, hosted by CNLC Geology Research Institute, and co-organized by 12 institutions, including the Petrophysics Committee of the Chinese Geophysical Society, SPWLA Southwest China Chapter, and ECC-SPWLA. It is also supported by journals such as *Logging Technology* and *AGER*. With the theme of "Digital Rock Physics and

Intelligent Logging to Help the Development of New Fields and New Businesses in Oil Fields," the symposium set up four topics: digital rock physics theory and modeling, digital rock physics simulation and application, new methods and technologies of rock physics experiments, big data and artificial intelligence in logging. The setup featured a main venue and youth venue and exchanged 78 academic reports. Liu Xiangjun, vice president (Southwest Petroleum University), and other well-known experts at home and abroad made wonderful invited academic reports. There were more than 150 offline participants, and more than 300 online participants attended the symposium. In addition, the conference was strongly supported by Suzhou Guande Energy Technology Co., LTD., Tianjin Sanying Precision Instrument Co., LTD., Kogis Petroleum Technology Consulting (Beijing) Co., LTD., Beijing Qimeng Aike Technology Co., LTD., Fermi Technology (Beijing) Co., LTD., and Huayi Global (Beijing) Environmental Engineering Co., LTD.



The second International Symposium on the Development and Application of Digital Rock Physics Technology.

COLOMBIA – UIS STUDENT CHAPTER



Board of Directors

- **President:** Karen Julieth Rojas O.
Email: presidencia@spwlauiis.com
- **Vice President:** Julian David Anaya F.
Email: vicepresidencia.spwlauiis@gmail.com
- **Fiscal:** Stefany Gabriela Peñaranda G.
Email: fiscal.spwlauiis@gmail.com
- **Secretary:** Anngy Daniela Román O.
Email: secretaria.spwlauiis@gmail.com
- **Treasurer:** Lizeth Vanessa Blanco D.
Email: contador.spwlauiis@gmail.com

Recent Events

9 December 2023—Christmas Event – Energetic Heart, EIP United for Social Work: The SPWLA UIS Student Chapter, together with the three chapters of SPE, ACIPET, ACEIP, and the School of Petroleum Engineering of the Industrial University of Santander (UIS), held a Christmas event called “Energy Heart.” For this event, the student chapters and the oil school raised money by selling bonds, receiving donations, and making contributions. This money was given in its entirety to the FANDIC Foundation, a foundation that supports children and people with disabilities who do not have sufficient resources to receive special treatment.



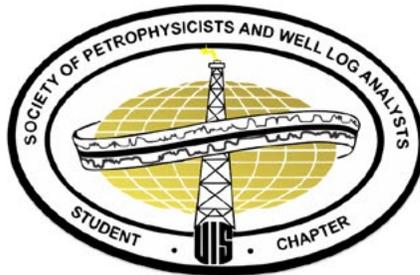
SPWLA UIS members at the Christmas event: Karen Rojas, President, Stefany Peñaranda, Fiscal, Lizeth Blanco, Treasurer, Paula Serrano, Marketing Committee Leader, and Manuel Fontecha, Leader of the Logistics Committee.

15 December 2023—The Importance of Petrophysics in the Oil Industry: The SPWLA UIS Student Chapter, together with the SPWLA Argentina Student Chapter, held three webinars, which aimed to show the public the importance of petrophysics in the oil industry. The webinar speakers were **Alberto Cesar Ortiz**, master’s in geology from the University of Córdoba, Argentina, with the subject of petrophysics of the CCS of Argentina, **Maria Isabel Sandoval**, petroleum engineer, MSc in hydrocarbon engineering, on the application of CO₂ as an improved recovery method and CCUS technology, and **Nelson Suárez Arcano**, petroleum engineer, MSc in petroleum engineering, with the theme of geosteering. Each webinar covered a different topic that reinforced the objective of the event, which was to demonstrate how petrophysics can cover different areas of great importance today for petroleum engineering.

PETROFÍSICA EN LA CCS DE ARGENTINA
 CURSANDO ACTUALMENTE EL MASTER EN ECONOMÍA CIRCULAR Y MEDIO AMBIENTE. ASESOR CONSULTOR PETROFÍSICO Y DIRECTOR TÉCNICO. EXPERTO EN EVALUACIÓN DE FORMACIÓN DE YACIMIENTOS DE PETRÓLEO Y GAS DE YACIMIENTOS NO CONVENCIONALES A ESCALA DE CIENCIA.
 Friday, 15 December 2023
 2:00 p.m. - 3:00 p.m.
WEBINAR
 Alberto César Ortiz
 Master en Geología de la Universidad de Córdoba, Argentina

APLICACIÓN DEL CO2 COMO MÉTODO DE RECOBRO MEJORADO Y TECNOLOGÍA CCUS
 M.Sc. DE GEOLOGÍA, PHD EN INGENIERÍA DE PETRÓLEOS, DELENTE DE DESARROLLO DE NEGOCIOS PETROFÍSICOS, INVESTIGADORA DE YACIMIENTOS NO CONVENCIONALES EN ESTADOS UNIDOS Y PETROFÍSICA SENIOR.
 Friday, 15 December 2023
 3:00 p.m. - 4:00 p.m.
WEBINAR
 María Isabel Sandoval
 M.Sc. Ingeniería de Hidrocarburos

USO Y EVOLUCIÓN DE LA GEONAVEGACIÓN EN EL MUNDO Y SU VALOR PARA EL EQUIPO DE SUBSUELO EN UNA OPERADORA
 INGENIERO DE PETRÓLEO CON EXPERIENCIA INTERNACIONAL ENFATIZADA EN PETROFÍSICA Y EXTENSIVA EN PRODUCCIÓN, GEOLOGÍA E INGENIERÍA DE YACIMIENTOS, CON PRIORIDADES DEL NEGOCIO TANTO EN CAMPOS EN TIERRA COMO EN COSTA AFUERA.
 Friday, 15 December 2023
 4:00 p.m. - 5:00 p.m.
WEBINAR
 NELSON SUAREZ ARCANO
 Msc. Ingeniería de petróleos



SPWLA UIS/ Social Networks

LinkedIn:

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

Instagram:

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

YouTube:

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

Facebook:

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

Welcome New Members – October 15, 2023 – December 12, 2023

Abouzaid, Ahmed, Baker Hughes, Dammam, Saudi Arabia
Affandi, Indi, Baker Hughes, Depok, West Java, Indonesia
Agri, Aarati, University of Houston, Houston, TX, United States
Banzarov, Bair, Baker Hughes, Celle, Lower Saxony, Germany
Bilsland, Mark, Marine Low Carbon Power, Midhurst, West Sussex, United Kingdom
Caserta, Thomas, Baker Hughes, Spring, TX, United States
Eroh, Akpewe, University of Leeds, Leeds, United Kingdom
Gaytán, Ana, Pemex, Centro Tabasco, Mexico, Mexico
Higgins, Michael, Consortium T&A, Houston, TX, United States
Jarvis, Ryan, RockNRG LLC, Conroe, TX, United States
Kafidi, Ndesihafela, Texas A&M University – Kingsville, Kingsville, TX, United States
Lacazette, Alfred, Geothermal Technologies, Inc., Lakewood, CO, United States
Molossi, Attilio, University of Trieste, Copparo, Italy
Nugroho, Aji, AspenTech, South Jakarta, Indonesia
Oliveros, Rosalin, Consultant, Lavon, TX, United States
Pray, McLain, DGI Geoscience, Grosse Pointe Woods, MI, United States
Raza, Dilshad, University of the Punjab, Lahore, Pakistan,
Ruiqi, Fan, China University of Petroleum (Beijing), Beijing, China
Sakshi, Sakshi, HOEC, Haryana, India
Sendra, David, Painted Wolf Resources, London, United Kingdom
Smith, Christopher, Advanced Hydrocarbon Stratigraphy, Midland, TX, United States
Solis, Romeo, PNOG Exploration Corporation, Antipolo, Rizal, Philippines
Zeigler, Loren, BOEM, Anchorage, AK, United States

