



# spwla today

## SPWLA 64th ANNUAL SYMPOSIUM

June 10–14, 2023 | Lake Conroe, Texas USA

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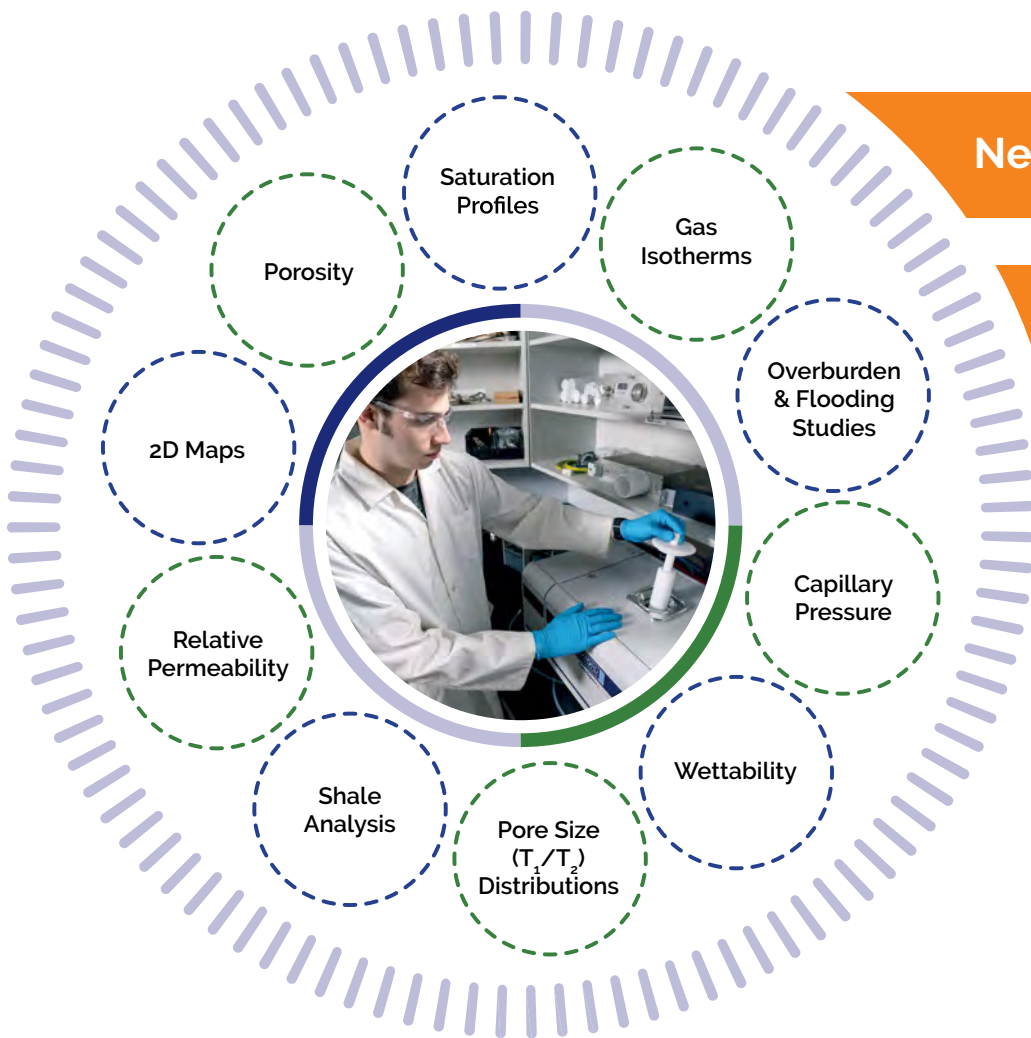
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**Notice:** Articles published in SPWLA Today are not subject to formal peer review but are subject to editorial review and are verified for technical consistency and relevance.

### May 4, 2023

*Formation Testing SIG Meeting*  
Borehole Acoustics: The Road Ahead  
Houston, TX  
[Formation Testing SIG Webpage](#)

### May 10–11, 2023 – English Class May 24–25, 2023 – Spanish Class

*Petrophysical Multiminerals Analysis Training Series 2023*

Instructor – Patricia E. Rodrigues, SeisPetro  
Geoconsulting  
Online Training  
[www.spwla.org](http://www.spwla.org)

### June 10–14, 2023

*SPWLA 64th Annual Symposium*  
Margaritaville Lake Resort  
Lake Conroe, TX, USA  
[www.spwla.org](http://www.spwla.org)

### September 11–12, 2023

*HAHZ with JFES Workshop*  
Thinking Sideways to the Far East  
Blending in the Near-Field and Far-Field Reservoir  
Characterization  
JOGMEC-TRC  
Chiba, Japan  
[www.spwla-jfes.org](http://www.spwla-jfes.org)

### September 13–14, 2023

*The 28th Formation Evaluation Symposium of Japan*  
JOGMEC-TRC  
Chiba, Japan  
[www.spwla-jfes.org](http://www.spwla-jfes.org)

### October 30–November 2, 2023

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

### About the Cover

Preparations continue for the upcoming SPWLA 64th Annual Symposium on June 10–14 at the Margaritaville Resort in Lake Conroe, Texas. We hope to see you there!



## From the President



**Tegwyn JP Perkins**  
2022–2023  
SPWLA President

Hello, and welcome to my sixth and last column as SPWLA President for the *SPWLA Today* newsletter. I really find it hard to believe that a year has almost past since I took the gavel from **Katerina Yared** in Stavanger last year.

As I'm sure you've already seen, the results of the SPWLA elections have been announced. I'd like to thank everyone who ran, and if you were unsuccessful this time, please run again soon. I believe I hold the record for the most failed attempts at SPWLA board positions—but I can attest that it is worth persevering!

Maintaining continuity on the board is always a concern, but we're lucky to have two current board members that have been re-elected to new positions. First up, our new President-Elect will be **Iulian Hulea**. As you know, Iulian is our current VP Technology, and I'm sure he will be an excellent President. He's also maintaining the recent tradition of European Presidents!

The VP Technology II position is new for this year. For the past two years, the VP Technology has had a second assisting them on every step of the journey. Last year, Iulian performed this role for **Carlos Torres-Verdin**, and this year, it has been **Robert (Bob) Gales**. I'm very happy to

announce that Bob has been elected to VP Technology I and that the current VP Information Technology, **Harry Xie**, is the new VP Technology II.

Rounding out the remaining VP positions will be board-newbies **Jing Li** (VP Finance, Secretary, and Administration), **Tom Bradley** (VP IT), and **Chelsea Newgord** (VP Social Media). The three new Regional Directors are **Clara Palencia** (North America 2), **Mathias Horstmann** (Europe), and **Yuki Maehara** (Asia and Australia).

We received 36 abstract submissions for the SPWLA 2023 International Student Paper Contest across the three categories of Undergraduate, Masters, and Doctorate programs. Judges are currently reviewing the abstracts, and by the time this issue is published, the finalists will have been notified. Good luck to everyone who entered, and I look forward to meeting the finalists in June!

Every year, the SPWLA Awards committee solicits nominations from the membership for technical achievements and services to the society. This year, the committee, led by Past President, **Katerina Yared**, delivered an impressive slate of candidates that received a majority vote from the Board of Directors. They are listed below. In addition, the board voted Saudi Arabia Chapter the Outstanding (Professional) Chapter. Honorable mentions go to the Japan Formation Evaluation Society (JFES) and Argentinian Chapter, which were also nominated. At the time of writing, the Outstanding Student Chapter had not been decided. I'd like to extend my congratulations to all the recipients for 2022–2023.

SPWLA 2022-2023 Award Recipients	
Gold Medal for Technical Achievement	Hanming Wang
Distinguished Technical Achievement Award	Ridvan Akurt
	Chengbing (CB) Liu
	Boqin Sun
Meritorious Technical Achievement Award	Not Awarded
Medal of Honor for Career Service	Not Awarded
Distinguished Service Award	Mathias Hortstmann
	Lin Liang
	Abbie Morgan
Meritorious Service Award	Jinhong Chen
	Marie Van Steene
	Ulises Bustos
Young Professional Technical Award	Shaina Kelly
	Ishank Gupta
	Yegor Se
	Olabode "Bode" Ijasan
	Chelsea Newgord
SPWLA Award of Appreciation	Ghadeer M Alsulami
	Dr. Faisal Alenezi

## From the President

I'd like to thank everyone who has submitted a chapter, student chapter, and SIG event to: <https://www.spwlaworld.org/spwla-chapter-event/>. The goal is to capture every SPWLA event from around the world and publish them on a single calendar. The first version should be available now (I'm setting myself a future deadline here).

Just in case you have forgotten, the **2023 SPWLA Symposium** will be held at the **Margaritaville Lake Resort in Lake Conroe, Texas, USA, on June 10–14, 2023**, and will be hosted by the **SPWLA Houston Chapter**. As well as being a North American Regional Director, **Javier Miranda** is also the Chair of the Organizing Committee for SPWLA 2023.

If you are planning to attend the symposium but need a visa to enter the USA, as soon as you have registered for the symposium, please visit <https://www.spwlaworld.org/spwla-invitation-letter-for-visa-request-form/> and complete the form. Once we have verified your registration, we will send a letter of invitation to you for the symposium. Please note that this will not automatically approve a US entry visa for you. That is up to the United States government!

Here is an aerial view of the 2023 symposium headquarters:



Lastly, I want to thank everyone who has contributed to the society during my tenure as the 64th SPWLA President. The board has been amazing; a big thank-you to all of you: **Jennifer M, Julian, Kelly, Adam, Steph, Harry, Mathilde, Javier, Matt, Eva, Jennifer D, Nelson, and Ryan!** **Katerina** and **Fransiska** have been a constant support throughout the year. I'd also like to thank the SPWLA Business Office team of **Sharon and Stephanie**. Without them, the entire society would grind to a halt. Finally, I'd like to thank my wife, **Julie**, who not only puts up with me but has been extensively involved with the SPWLA. Not only does she assist with the website content management, but she has also led the SPWLA DE&I committee this year.

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

Dyfal donc a dyr y garreg.  
Perseverance is the key to success.

Kind regards,  
Tegwyn JP Perkins  
2022–2023 President  
[President@spwla.org](mailto:President@spwla.org)

## From the Editor



**Stephanie Ellen Perry**  
**2022–2023**  
**Vice President Publications**

Dear Colleagues,

Thanks to all for your contributions to this month's newsletter. As we approach the Annual Symposium in June, we hope it informs the community about upcoming events that we can catch up on and discuss together. We also value the new content being shared and discussed informally around fundamental topics in the field, hoping it sparks conversation among colleagues. Excited to reunite in June!

Sincere regards,  
Stephanie Perry  
2022–2024 VP Publications



**Jennifer Market**  
2022–2023 President Elect

I had the privilege to attend the 5th SPWLA India Chapter Conference on April 15–16, held at ONGC's first-class Green Heights center in Mumbai. The theme was "Petrophysics: The E&P Gateway From Discovery to Recovery and Beyond," with an action plan to "Ideate, Innovate, Integrate." It seems that each India Chapter symposium is better than the last, and this one was no exception. With 530 attendees, more than a dozen exhibitors, students (fully sponsored by SPWLA India) and professional training programs (pre-conference), and a splendid cultural evening, the event was truly one to remember. While the India Chapter article detailing the technical program is included in the Chapter News, I wanted to take the opportunity to mention a few points as well.

The topics were well chosen, with themes such as "Integrating Petrophysics to De-risk Exploration," "Maximizing Asset Value in Brown Fields and Mature Basins," "Testing, Completions, and Well Surveillance," "Geomechanics in the E&P Life Cycle," "Hydrocarbon to Low Carbon and No Carbon: Attaining Financial Resilience in a New Energy Paradigm," and "Unlocking Value From AI/ML: Insights and Emerging Technologies." The themes were undeniably pertinent to the Indian energy sector (as well as to the world), as was shown in the many case studies presented that

highlighted the complex heterogeneities of the region. Participation was enthusiastic from the audience as well as the committee, with many exchanges of ideas and solutions from varied disciplines.

Many times throughout the conference, we returned to the theme of the petrophysicist as a spider in the web of exploration and production – connected to all the disciplines – in contact with all the stakeholders and choreographing the connections and integration of data sources to build the most effective earth model and continually refine during the life cycle of the well.

In the geomechanics session, we even stretched everyone a bit beyond the comfort zone by discussing some applications of geomechanics in mineral mining and how the techniques employed to recover mineral resources might add to our arsenal of tools in the energy sector (people love to see things blow up, and petrophysicists are no exception!).

There were many great papers and presentations, which made selecting the best a challenge. We are pleased to announce the winners:

- **Best Paper in Oral Category:** Ms. Srinivasabharathi VK for Paper "Integrated Analysis of Deep Shear-Wave Imaging, High-Resolution Resistivity Imaging and Geomechanics for Identification Sub-Seismic Features – A Case Study From KG Offshore Basin, India"
- **Runner-Up in Oral Category:** Mr. Phoolchand Mahato for Paper "Enhancing the Efficacy of Hydraulic Fracturing Job for Production Improvement of Tight Oil Shaly Sands of Mandhali Formation of Cambay Basin, India Through Reservoir Characterization and Integrated Geo-Mechanical Studies"
- **Best Paper in Digital Poster Category:** Mr. PT Shaji for paper "Critical Factors Affecting the Pulsed Neutron Saturation Monitoring Log Analysis - Lessons Learned From the Case Studies of Brown Fields in Cauvery Basin"
- **Runner-up in Digital Poster Category:** Ms. Komal Chauhan for Paper "3D Pore Pressure Estimation of Prospective Locale of KG Area for Future Well Planning"
- **Best Exhibitor of the Symposium:** Baker Hughes

SPWLA India has kindly shared the full proceedings for everyone via the links below:

[https://spwlaIndia.org/conference/wp-content/uploads/2023/04/Technical-Proceedings-I\\_Oral-Session\\_12.04.2023.pdf](https://spwlaIndia.org/conference/wp-content/uploads/2023/04/Technical-Proceedings-I_Oral-Session_12.04.2023.pdf)

[https://spwlaIndia.org/conference/wp-content/uploads/2023/04/Technical-Proceedings-II\\_Poster-Session.pdf](https://spwlaIndia.org/conference/wp-content/uploads/2023/04/Technical-Proceedings-II_Poster-Session.pdf)

SPWLA International wishes to congratulate the India Chapter on a truly superb conference, and thank everyone involved for their hard work in making it such a grand success.



## Steering Committee - 5th SPWLA India Symposium, 15-16th April 2023



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ONGC, President – SPWLA



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The Steering Committee of the 5th Annual SPWLA India Conference.

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The event sponsors.



The ONGC Green Heights facility where the conference was held.



President SPWLA India addresses the packed auditorium.



We were honored with many fine dignitaries.



Both the oral and poster presentations were engaging.



The audience was engaged throughout – nearly a sold-out crowd!





Here I am with students from universities who attended the conference.



Mr. Dinesh Chandra was honored with a Lifetime Achievement Award; his family was in attendance to accept the award.



SPWLA International was well represented by Dr. Luis Quintero (former President) and Jennifer Market (President-Elect).



A delightful cultural evening was enjoyed by local and overseas guests alike, showcasing the dances and music from all over India.



There were spouse events organized by the committee, which were well received.





**Julian N. Hulea**  
**2022–2023 Vice President**  
**Technology**

Dear Colleagues,

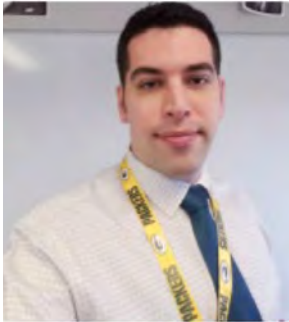
Greetings from your VP Technology!

First, I would like to update you concerning the symposium preparations. We have reached the manuscripts review milestone, which is happening as we speak! Through the discipline of the authors respecting the deadlines and the reviewers making time to proofread the manuscripts, we are working towards finalizing the Technical Program. As part of reviewing the manuscripts, we have relied on and improved on the work of Prof. Carlos Torres-Verdín in having a standardized reviewing metric, something to be considered in the future. This is a good moment to recognize the Technical Committee members again. Without you, this task could not have been completed. On behalf of SPWLA, thank you!

Talking about the future, in the last year, we have been strengthening the VP Technology representation on the board by adding a VP Technology II position—an important step in ensuring continuity in this critical area. This change was initiated and followed through by our current President Tegwyn Perkins and implemented for the first time by Prof. Carlos Torres-Verdín (VP Technology 2021–2022). Those of you who have voted have probably seen this change as well as the elections result. I would like to welcome Harry Xie (2023–2025 VP Technology II) and my right hand this year – Robert Gales (2023–2024 VP Technology) – to their new positions and wish them success!

Let me end this column with a *THANK YOU* to our remarkable SPWLA membership for electing me as President-Elect for the 2023–2024 term. It is an honor and pleasure to serve the SPWLA in this volunteer role, and I remain grateful for your trust in me. I look forward to meeting you in a few weeks in Lake Conroe.

Julian N. Hulea  
2022–2023 VP Technology



Adam Haecker  
2021–2023 VP Finance,  
Secretary, and Administration

Hello Intrepid Petrophysicists,

This will be my last column as VP Finance for SPWLA. We are drawing near to the end of our fiscal year. SPWLA runs its fiscal year from May 1 to April 31 every year. This causes some idiosyncratic accounting since most of our revenue comes in during these months, too. However, it is rather costly to change to a more practical date, so we have kept the status quo. I want to thank all the contributions from our last two Board of Directors and the last two symposium organizing committees. They have been instrumental in getting us to where we are now, which is in the black.

**Thank you to all for your contributions.**

We are having our best year since the pandemic by a huge margin. In the last few years, we have struggled to stay in the black or barely been in the black. For example, last year, we made a profit of \$76,000, which, although meager, was not a loss. In the previous years, we showed a loss. This year, we are showing a profit of – drumroll please – Net Profit = \$305,000 (see Table 2 for details).

To elaborate on how stupendous this is, here are the net profits for the last 7 years.

Adam takes over as VP Finance  
↓

**Table 1—Net Profit by Fiscal Year**

Fiscal Year	2016	2017	2018	2019	2020	2021	2022
Net Profit (\$ Thousands)	-34	-283	-26	83	-154	76 <sup>1</sup>	305

<sup>1</sup>before writedowns on CDs

These numbers still need to be audited, and we expect some changes after the audit. Last year, we showed a profit of \$76,000 before the audit. Then, we had some writedowns on some CDs that caused us to shift to the negative. Tegwyn, Sharon, and I took some corrective action so we would not have further losses due to rising interest rates. We now have 6-month CDs that will yield 5% (rather good, actually). We didn't actually lose money; we just didn't make as much as we could have.

It should also be noted that all our expenses for SPWLA Conroe have not come in yet, but I am still very pleased with this result. Many of these expenses will appear in next year's fiscal year. There is an idiosyncratic way of accounting that is hard to fathom. Basically, revenue for this year's symposium (Conroe) appears on this fiscal year, but the expenses for last year (Stavanger) appear as this year's expenses. It makes your head hurt a little.

Going forward, continuing our prudent fiscal policy will be critical. Luckily, we have an incoming president who did a stint as VP Finance, Jennifer Market. So, I am sure she will continue to keep the reins tight on spending.

I am sure my replacement Jing Li will also continue to watch over our finances with keen interest and keep the budgets tight.

**Table 2**—Profit and Loss for Society in Thousands, 2022 Fiscal Year (current)

	\$(Thousands)
Fundraising Income	24
Lecture/Training Instructor Lea	57
Other Types of Revenue	141
Membership Dues	141
Program Revenue <sup>1</sup>	762
<b>TOTAL INCOME</b>	<b>1125</b>
<hr/>	
Business Expenses	6
Conference and Events Expenses	1
Contract Services	31
Facilities and Equipment	52
Fundraising Expense	19
Lecture/Training Center	37
Operations	48
Other Types of Expenses	38
Payroll Expenses	204
Petrophysics Expense	118
Programs for Students VP Education	14
Regional Directors Budget	0.9
SIG Expenses	3
SPWLA Today Newsletter	8
Symposium Expense	224
Travel Programs	16
<b>Total Expenses</b>	<b>820</b>
<hr/>	
<b>Net Profit</b>	<b>305</b>

<sup>1</sup>Program revenue is multiple programs, including Stavanger, Conroe, and topical conferences.

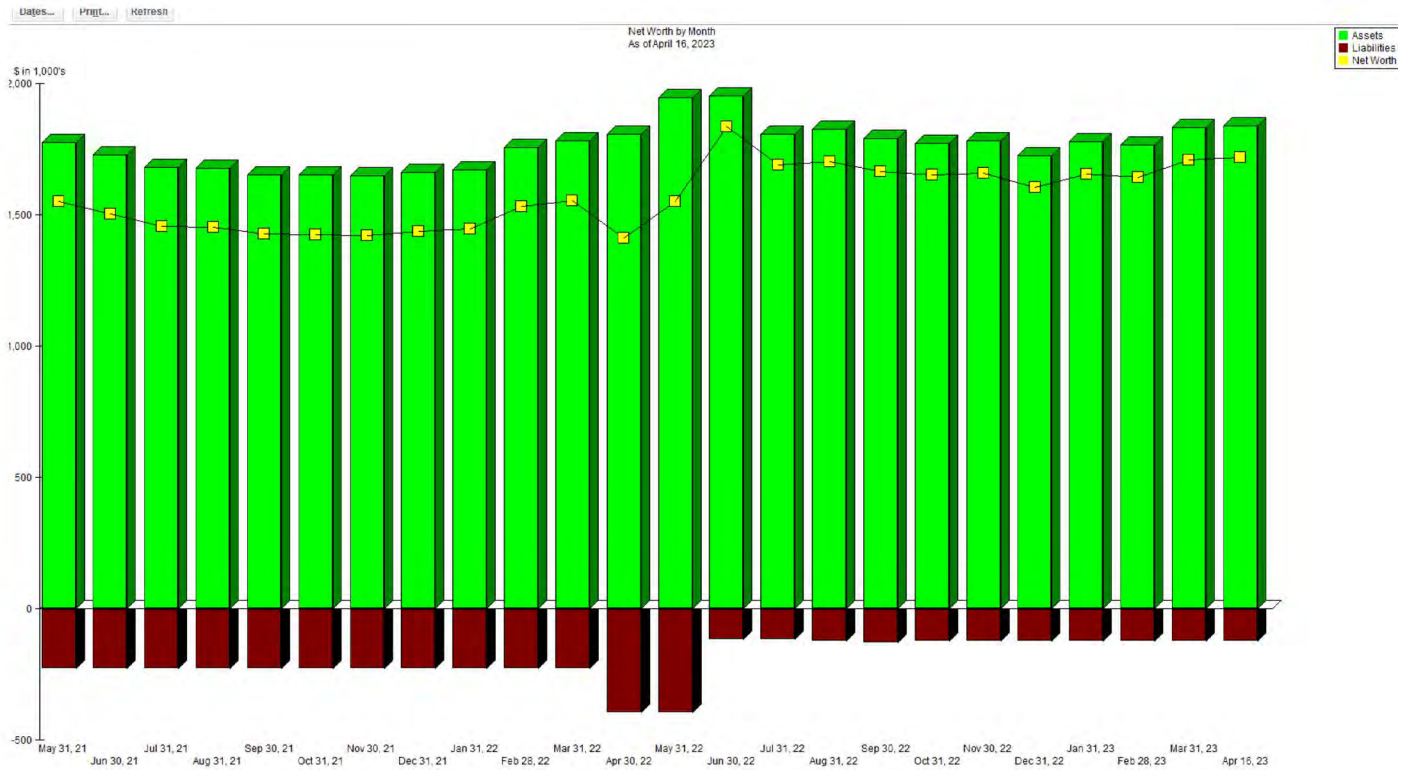


Fig. 1—Net worth throughout my tenure (2021–2023).

Another interesting nugget as this is my last column. I looked up who purchased the most stuff from SPWLA this fiscal year. It turns out it is Terry Hagiwara, formally of Aramco. Thanks for all your support over the years. You have left a mark on the SPWLA in more ways than one. We truly appreciate everything you have done for us over the years.

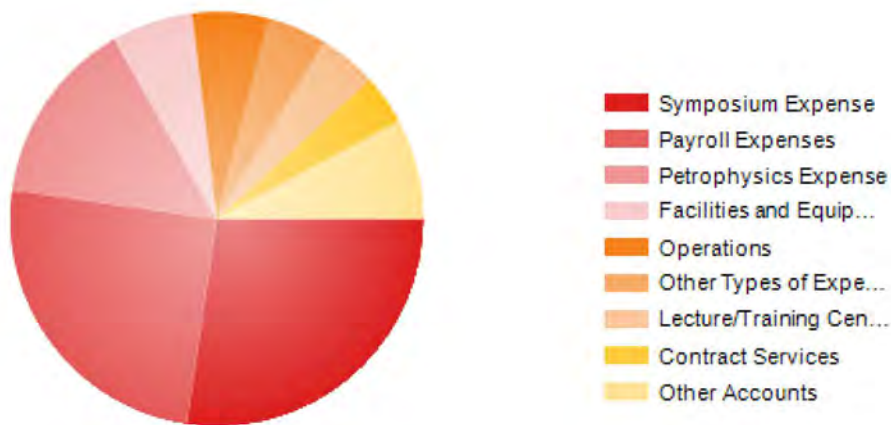


Fig. 2—Expenses by category.



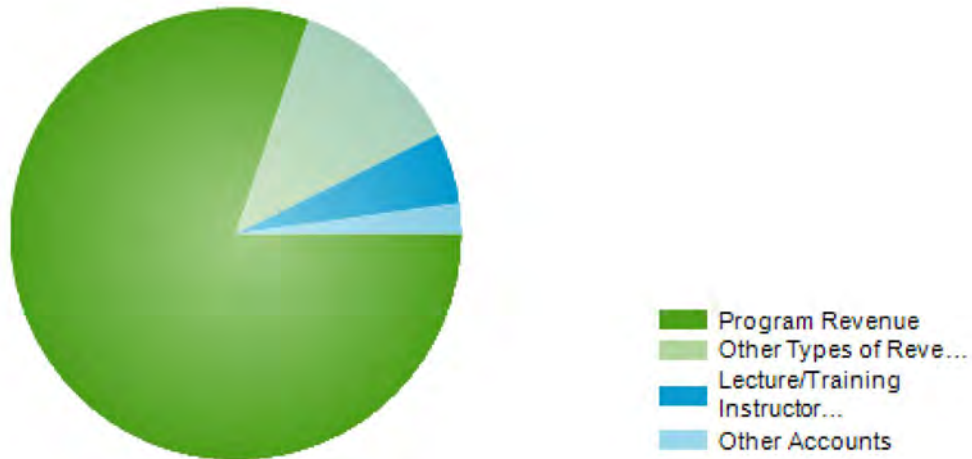


Fig. 3—Revenue by category.

This is my sign-off. Thanks to all who supported me in my term as VP Finance. Sharon and Stephanie from the office are wonderful, and their contributions also cannot be understated. I am happy to leave the board knowing our books are better than when I came on, even if it isn't under my control half the time. It is mostly up to you all. Encourage your fellows to attend our annual symposium. It is critical that we have good attendance each and every year.

Also, I can't sign off without mentioning the SPWLA Golf Tournament at Margaritaville. It is on June 9, with a shotgun start in the morning at 9 am. Please attend, if nothing else, to watch me struggle:

[https://www.spwla.org/documents/Symposium\\_64/SPWLA%20Golf%20Tournament%202023.pdf](https://www.spwla.org/documents/Symposium_64/SPWLA%20Golf%20Tournament%202023.pdf)

Adam Haecker  
2021–2023 VP Finance, Secretary, and Administration



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

### **Hello SPWLA Colleagues,**

I hope everyone has been eagerly awaiting spring here in the Northern Hemisphere. I know I have up here in Canada! The past 2 months since my last column have been very busy with webinars and the International Student Paper Competition. This would not have been possible without the help and support of all the SPWLA members volunteering to judge the abstracts and in person at the Annual Symposium. I thank them all here now, and I will again in June at the competition where we announce the winners. Good luck to all the students who entered, and the finalists will have been announced by the time this column is in print.

The competition has been supported by several board and ex-board SPWLA members, but most of the heavy lifting was done by our president, Tegwyn Perkins (WordPress guru), and by Artur Posenato Garcia, the ISPC Chair for the Symposium. Artur has been at the front of all the submissions and communications to all the students and judges to make sure everything is moving smoothly.

Spectacular job, Artur!

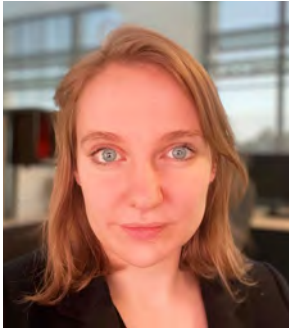
SPWLA Distinguished Speaker webinars are in their final moments with the Annual Symposium upcoming, and a new group of speakers will be selected by the members. Stay tuned to see which papers are chosen by you, the members. Make sure you get your rankings in for the papers during the Symposium!

There are two upcoming training courses in May from Patricia Rodrigues on Petrophysical Multimineral Analysis (May 10–11 in English, May 24–25 in Spanish).

We had to reschedule Gary Frisch's Cement Evaluation course as he had a health scare just before the course. Get well, Gary, and we hope to see you in Conroe.

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

Keep on learning,  
Kelly Skuce  
2022–2024 VP Education



**Mathilde Luycx**  
2021–2023 VP Social Media

Dear Colleagues,

This is my last “SoMed” newsletter column. For the last 2 years, it has been my pleasure to serve you as our organization’s first Vice President Social Media, and I am very grateful to all SPWLA members who trusted me with the position.

Before the VP Social Media role was introduced, the management of all SPWLA social media pages was under the responsibility of the Vice President Education, in addition to the Distinguished Speaker program, the organization of training events, the relationship with student chapters, and the organization of the Student Paper Contest. After holding this position for 2 years, I can clearly see the advantage of a board position dedicated to social media responsibilities.

**I would like to thank my colleagues on the board in 2021–2022 and 2022–2023, especially former President Katerina Yared, who convinced me I was up to the task.** As a young professional, volunteering on our organization’s board has also been an opportunity to grow personally and professionally and become more involved in the petrophysics community.

Over the past 2 years, **we have introduced tools to help manage and administer SPWLA**

**social media pages, launched the SPWLA Instagram account, and conducted a survey to prioritize social media and communication efforts.** The SPWLA Social Media LinkedIn account increased its following to over 3,600, and the posts’ engagement (active interactions, e.g., likes, comments, reposts) is up 1,000%! If you are curious, the most popular post of 2022 celebrated the results of the International Student Paper Contest, Master Level!

Before closing this column, I want to share one last reminder. Registration for the symposium is OPEN. Register early (before May 10, 2023!) to benefit from the SPWLA hotel group rate at the Margaritaville hotel. The symposium also offers many one-day workshops for a very reasonable price (\$375 for symposium attendees) during the weekend ahead of the symposium and a golf tournament on Friday, June 9!

**Chelsea Newgord**, my next-door colleague at ExxonMobil (literally!), will be taking over the position for the upcoming 2 years. Our co-location certainly helps to organize a smooth transition for the both of us! The position of VP Social Media is very new, so I am looking forward to her contribution and influence on the role. I am very confident she will do an excellent job keeping all of us informed and engaged within the SPWLA!



**Chelsea Newgord**  
VP Social Media-Elect  
2023–2025

Mathilde Luycx  
2021–2023 Vice President Social Media  
[VP-SocialMedia@spwla.org](mailto:VP-SocialMedia@spwla.org)



Most popular 2022 SPWLA post!



Javier Miranda  
2022–2024 North America 1  
Regional Director

As mid-year approaches, we are getting closer to our most important event of the year: the **SPWLA Annual Symposium**, the best venue to reach out to petrophysicists and other decision makers or influencers in data acquisition, reservoir characterization, and other important fronts of our energy industry. Both organizing and technical committees have worked hard to put together an excellent conference full of technical and networking opportunities that I am sure our members will be delighted with. If you have not done so already, please register to attend the conference, workshops, field trips, and other activities during our symposium in June. The list of exhibitors and sponsors keeps growing, and we encourage you to reach out to us if you have not done it yet to have your company in the right place at the right time with the right professionals! We appreciate the commitment of those companies that are in the program already. By the way, I will never get tired of thanking our extraordinary legion of volunteers who are putting together an extraordinary effort on all fronts to guarantee an excellent conference and exhibition. The table below shows their names and affiliation to properly recognize them for their volunteering efforts and their employers for their support to SPWLA. We remain with our doors open to additional volunteers as we get closer to June. Experience in past symposiums has taught us activity will increase exponentially as

we get closer to June compared to the first months of the planning stage. We will be just one month away from the symposium when you read my column, so don't delay your registration and plans to participate. The Annual Symposium will be at the Margaritaville Resort at Lake Conroe, Texas, on June 10–14, 2023 (**Picture 1**). Hotel registration at a special rate is still open. Do not wait until the last minute to secure your room! Please look at our promotional video in the link below if you have not. Elliott, my 15-year-old son, helped me prepare it: <https://drive.google.com/file/d/1wm5CnTyvNmXicFaLOYnxfzGgiE5bsg-5/view>

I am happy to see local professional and student chapters have several activities, with the first group focused on their technical seminars and networking activities and the second group focused on the internal student paper competitions. The final candidates from each student chapter are now selected and registered for the competition on June 11. Please contact Kelly Skuce and Artur Posenato Garcia if you are interested in serving as a judge. As you might have noticed, SPWLA International Board Members have different roles and regions assigned to serve our members better. However, that does not stop us from working on other fronts and interacting with members in other regions apart from the ones we serve or belong to. In fact, we collaborate with each other and often refer potential opportunities to our fellow board members. Speaking of which, I recently had the opportunity to have lunch with Alberto Ortiz, the new SPWLA Argentina Professional Chapter in Buenos Aires (**Picture 2**). This chapter has been very active with marvelous technical events for its members, and this has not gone unnoticed. They were nominated for Best Professional Chapter in 2023. Furthermore, their student chapter was also nominated for best chapter in their category, so SPWLA is really growing in Argentina with several opportunities not only in the oil and gas industry but in the energy sector in general. Great work, Nelson Suarez and the Argentina team!

The Houston Chapter remains very active now, with local activities occurring in every section (West, North, and Downtown). There is also a scheduled networking event on the last Thursday of the month in a convenient location for everyone in the Houston metro area. I hope to see you there! Bernd and his team continue supporting the Annual Symposium organization as host chapter.

I am pleased to announce I was recently contacted by James Lewis in Dallas, who is attempting to reactivate the SPWLA Dallas Chapter following its closure due to COVID-19. Prior to the beginning of the pandemic, they held their monthly meetings in the ground-level meeting room in the building where DeGolyer & MacNaughton resides. I am very happy to see this happening and look forward to attending some of the Dallas Chapter seminars, where I was a regular in 2017 while living there. Local chapters are the foundation of our society, and our growth starts there! By the way, I want to thank my employer for not only supporting my SPWLA involvement but also local activities in Dallas, Houston, and other locations.

In other areas, our oil and gas industry remains strong, with several new positions being announced every month and new mergers, acquisitions, and other interesting activities happening. I remain optimistic about our future as an industry and society. In fact, I recently observed on a recent trip to Europe how fossil fuels (gas specifically) are being highly used on different fronts, contrary to some perceptions we might have. The electric vehicle from my hired rideshare from the airport in London to my destination had to stop to recharge for some minutes before we continued due to unexpectedly high traffic that delayed our trip (**Picture 3**). The driver was not happy to do so, but I understood him. He complained about how expensive it was to charge and the need for frequent stops that take a considerable amount of time on long trips, making the service less convenient. Of course, with all the comments, I could not help myself from asking why he switched, and he replied, "I was forced by local regulations." I am not an expert in energy transition, and I do want a better planet for all of us and future generations. However, I firmly believe



## Regional Understandings–North America 1

this transition must happen in an orderly fashion, with fossil fuels remaining a key energy source for the future, and we, as a professional society, ready to support it. Looking at the source of electricity for electric vehicles in the USA or Europe or seeing so many heating devices in my hotel rooms or my friends' houses being powered by natural gas leads me to think so.

Finally, I want to welcome our new International Board! Congratulations to all the winners. I look forward to working with all of you to keep supporting our professional society and members, especially Clara Palencia, my new partner in North America! Special recognition goes to all those who volunteered to participate in the international election. You were all worthy candidates, and it was difficult to decide with so many excellent choices the election committee prepared for us!

Best wishes to all my fellow SPWLA members, especially those in my North America region. I am very much looking forward to seeing many of you during our symposium in June! Feel free to reach me at my official email address below for any recommendations, ideas, questions, etc.

Javier Miranda

2022–2023 North America Region 1 Regional Director

[Director-NA1@spwla.org](mailto:Director-NA1@spwla.org)

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



Picture 1—The SPWLA Annual Symposium location at the Margaritaville Lake Resort, Lake Conroe, Texas, USA.



**Picture 2**—Lunch with Alberto Ortiz, SPWLA Argentina Chapter President, and Javier Miranda, SPWLA North America 1 Regional Director, in Buenos Aires.



**Picture 3**—“Forced” stop to charge my electric vehicle rideshare service in a London station close to the M25 highway on my way from the airport to my destination.

## Regional Understandings—North America 2



**Matt Blyth**  
**2021–2023 North America 2**  
**Regional Director**

Matt Blyth  
NA2 Regional Director

By the time you read this column, we will be close to the end of the 2022/23 speaker season for most chapters and heading into the annual symposium in Conroe, Texas! I am looking forward to what should be a great annual symposium and hope I get to see many of you there. Chapter activity in the NA2 region has continued through the spring, with regular speaker meetings taking place in Denver and OKC, and I am glad to report that the Bakersfield Chapter appears to be recovering after a rough couple of years. The Permian Basin Chapter is also starting to hold more regular events, but our smaller chapters continue to struggle with attendance as the petrophysics community within North America has become focused on Houston. As you will have seen in recent announcements, the results of this year's board elections are in. I would like to congratulate Clara Palencia on her election to the NA2 Regional Director position for the 2023/24 season!! I will start my handover with her soon, and she will be fully up and running after the symposium. I am sure she will do an outstanding job as RD and will be a strong promoter of the local chapters at the board level!



## Regional Understandings–Europe



Eva Gerick  
2021–2023 Europe  
Regional Director

### Dear SPWLA Community,

You have voted for the new Board 2023–2024, and big congratulations to Mathias Horstmann, who will take over the Europe Director role at our next symposium in June. Knowing Europe will be in safe hands, I can relax and enjoy all the memories I've made during my 2 years with the Chapters and the Board. It has transformed my view of SPWLA, which has always played an important role in my professional life. Previously as a member, I thought it was all about knowledge and technology, but after these 2 years, I'd say – it's all about the people. It's all about our Chapter and Technical Committees, Student Chapters, SIGs, Board Members, Presidents, and Distinguished Speakers who make it work, keep it interesting, and help us get better at what we do. We need them and should appreciate all the personal time they invest in making SPWLA what it is. And a very special "Thank You" to the wonderful Board with Katerina and Tegwyn at the helm. I didn't quite expect how much I would learn, and I appreciate all of you guys. Thanks for having me!

Now let's move swiftly on and let Mathias introduce himself. Viel Glueck!

*Thank you all for giving me the trust and opportunity to serve our society as Europe Regional Director. I am ready to be a source of support and a bridging factor between the global mothership and our European chapters with their strong identities – somewhat like standing on the Eurasian and North American plates during the unforgettable SPWLA'16 field trip in Iceland!*

*As mentioned before, one of the most important tasks for us in Europe will be to engage with academia and research institutes to counter the trend of less academic teaching related to formation evaluation and subsurface geoscience. Connecting with new talents will ensure petrophysics stays important not only to classic O&G but will help to increase its visibility and contributions in the evolving energy framework we are in. My belief is transition times carry chances, so let's make SPWLA even more relevant and share our techniques with the new energy and storage communities, basically remaining a first-class forum for the latest knowledge exchange, a place and foundation for open discussions on innovative ideas.*

*While the next SPWLA Annual Symposium will not be held in Europe, we have seen the success of the recent one in Stavanger; hence, I would like, in the meantime, to plan a regional topical conference of size here on the European continent, preferably supported by the local chapters, possibly on "neutral" or new grounds!*

*Last but not least, I have to thank Eva Gerick. She did a fantastic job leading the European chapters, especially helping us in NFES during the critical times of the symposium planning and execution – this was exceptional, going above and beyond! Tusen takk for your thoughts, advice, and all the time you spent with us. Following in her footsteps is a great encouragement and a clear boost, so I really look forward to helping drive our technical society in the coming term and repeating the slogan: Let us have and be new energy!*

*~Mathias*

All the best,  
Eva Gerick  
2021–2023 Europe Regional Director  
[Director-Europe@spwla.org](mailto:Director-Europe@spwla.org)



Mathias Horstmann standing on the Eurasian and North American plates in 2016.



## Regional Understandings—Middle East/Africa



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

I hope this newsletter finds you well. Over the past few weeks, our chapters in the Middle East have been busy organizing local events. It is a pleasure to announce that we have a new chapter of SPWLA in the Middle East—welcome, SPWLA Iraq. This new chapter seeks to host its first technical event in the coming months. If you are in the region and would like to reach out to the board members to participate in their local events, please contact [Iraq.chapter@spwla.org](mailto:Iraq.chapter@spwla.org). **Mazin Al-Hilali**, the chapter’s president, and the rest of the board members are keen to start the activities soon.

On a similar note, our student chapters in the region are expanding as well. I would like to acknowledge the SPWLA KAUST Student Chapter in Saudi Arabia, which recently became an official SPWLA student chapter. The bylaws were accepted by the International Board of Directors during our last board meeting, and **Samuel Fontavol Guzman**, who is the chapter’s president, received the great news.

More news from Saudi: Our SPWLA Saudi Arabia Chapter (SAC) received a majority vote from the International SPWLA Board of Directors to be recognized for the **2022–2023 “Outstanding Professional Chapter”** award. I’d like to personally congratulate SAC for the outstanding work done in the past 5 years since its founding by a team of dedicated and motivated members led by Dr. Faisal Enezi and Mark Ma. Big thanks to all SAC board members for volunteering your time and energy to the SPWLA. This chapter in the region has been very active, holding multiple technical talks and supporting young professional events, such as the local student paper contest held earlier this year.

In Qatar, the SPWLA Qatar Chapter hosted its first talk for 2023 online. The event was well attended and gave the chapter a good momentum to carry out its activities locally.

Lastly, if you haven’t registered to attend SPWLA 64th Annual Symposium, please do so. Only 1 month to go!

Best regards,  
Jennifer Duarte  
Regional Director Middle East and Africa  
[Director-me@spwla.org](mailto:Director-me@spwla.org)



**Ryan Lafferty**  
**2021-2023 Asia Pacific/Australia**  
**Regional Director**

### **Hello to the SPWLA Community,**

My time on the Board of Directors has come to an end. I have enjoyed working with each of the board members and the support staff during this period. What I have also learnt is that there is a significant amount of work that goes on into keeping SPWLA running. It is the tireless efforts of the volunteers that make this happen, so thank you all, and I hope that I have made a positive contribution to the SPWLA during my time on the board.

I know it has been a challenging last couple of years with the remnants of COVID lurking and energy companies not splashing the big cash. I want to commend each of the regional chapters and the supporting committees for your hard work to “keep the lights on.” Within Asia Pacific, we now have eight professional chapters and six student chapters, including two new student chapters: Pakistan (*IGUP*) and the Philippines (*Batangas*). I want to commend both student chapters for their interest in the petrophysics discipline, and hopefully, this will lead to long and satisfying technical careers around the world. Again, congratulations, and keep up the good work!

One of my major goals at the start of my tenure was to get a topical conference up and running in the region. We were close but, unfortunately, never made it. I want to thank the FESM committee for their time in considering the event. Here is hoping that Asia Pacific can hold a regional topical conference or even the SPWLA Annual Symposium sometime in the not-too-distant future.

On that note, I would encourage any chapter in the region, should you wish to hold a regional conference or require support, do not hesitate to reach out to the SPWLA through your new regional director, Yuki Maehara from SLB (Japan), whom I am sure will serve the region well. I look forward to seeing Yuki succeed and wish him all the best.

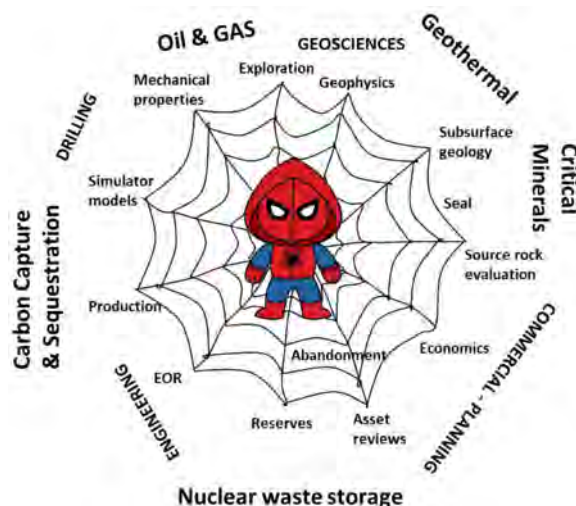
It has been an honour to serve, and I hope to see you around.

Regards,  
Ryan Lafferty  
2021–2023 Regional Director  
Asia Pacific

### Petro-Web – Call for Memos

Beyond log analysis and formation evaluation in terms of lithology, porosity, and fluid saturation, petrophysicists are key in developing the well framework. As such, petrophysics can be seen in the upstream as the “unifying discipline” between geoscience, drilling, reservoir engineering, and planning commercial functions. Moreover, petrophysicists are required in all life cycles of every field development (exploration, development, production, and abandonment) – not only for conventional or unconventional oil and gas but also with carbon capture, usage, and storage, geothermal, nuclear waste storage, or exploration/production of strategic (also called critical) minerals (helium, lithium, ...). Bottomline, petrophysicists have lots of exposure and significant depth and breadth of knowledge and experience to share to strengthen the community, better educate the end users of our products, and also learn from cross-functional collaborators.

*SPWLA Today* newsletter is thus opening a new section meant to exchange (1) basic knowledge, (2) “war stories” – success or misuses/mistakes, (3) exposure to new technologies or fields of applications, (4) viewpoints, and also (5) to provide a space for cross-functional colleagues to present their fields and challenges.



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

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

- General topics bypassed by seasoned petrophysicist but of value to generalists
  - o Openhole vs. casedhole/production logging
  - o Wireline vs. LWD; LWD vs. MWD
  - o Mud log vs. mudgas
- Clarification of jargon and even perhaps attempt to correct improper terminology
- Log (first principle, applications, limitations/concerns)
- Core analysis (first principle, applications, limitations/concerns)
- Technology/workflow – challenges (uncertainties, thin beds, ...)
- New field of applications
- Integration of petrophysics with other disciplines
  - o Geosciences (geochemistry, reservoir quality, rock physics, stratigraphy, assessment, ...)
  - o Drilling (pore-pressure, fracture gradient), Engineering (geomechanics, completion, ...)
  - o Planning – Commercial – Management



# PETRO-WEB

Connecting Knowledge, Experience, and Innovation in Petrophysics

- War stories – success/failure; “opinioned” viewpoints
- Old but recurring topics, such as VCL vs. VSH (PHIT-SWT vs. PHIE-SWE)
- And everything else about petrophysics you have a passion for sharing with others

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

## Average Water Saturation in Volumetrics

By Philippe Gaillot, Global New Opportunity, Exploration & New Venture, ExxonMobil, Houston

Volumetrics is a static measurement based on a geologic model that uses geometry to describe the volume of hydrocarbons (HC) in the reservoir. The purpose of calculating a volumetric estimation is to evaluate the reservoir value (“size of the prize”) and calculate the potential reserves of the reservoir in question. Volumetric estimation is a pluridisciplinary exercise, where data and interpretations from core, logs, seismic, and other surveys are integrated to feed the well-known volumetric equation (Eq. 1).

$$OHCIP = [CF_x GRV_x NTG_x PHIT_x(1 - SWT)] / FVF, \quad (1)$$

where

**OHCIP:** original-in-place HC volume, i.e., the volume of all molecules of HC in the area of interest (AOI) reported at stock tank condition in barrel of oil equivalent (BOE)

**CF:** conversion factor

**GRV:** gross rock volume of the reservoir

**NTG:** net to gross of pay

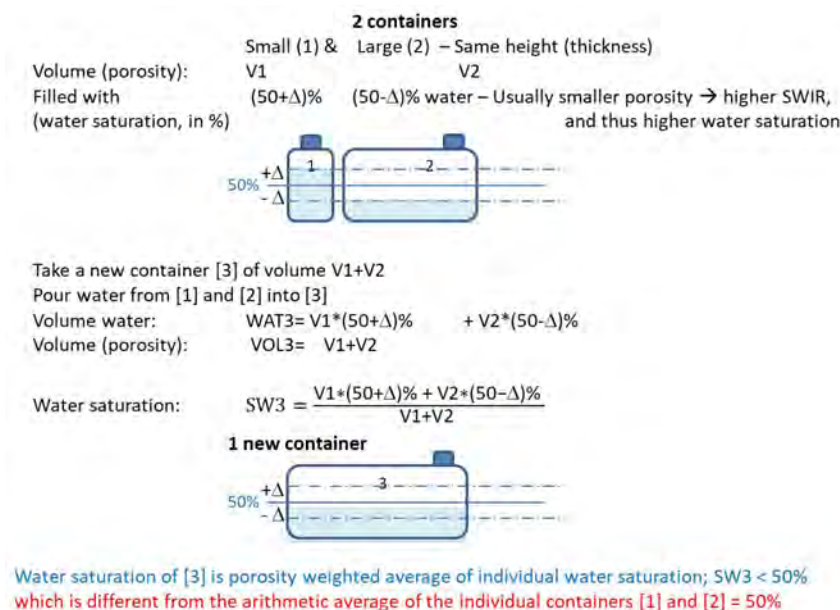
**PHIT:** total porosity, which is the fraction of pay rock volume that is available to store fluids

**SWT:** water saturation, which is the volume fraction of the porosity that is filled with water

**FVF:** formation volume factor, which represents the change in HC volume between the reservoir conditions and the standard conditions at the surface (oil shrinkage or gas expansion).

Unfortunately, it is not uncommon to observe that petrophysical outputs, and especially the *SWT* log, are often misused in volumetric assessment. As illustrated in Fig. 1, the objective of this short column is to provide a short shareable memo to remind practitioners that (1) the *SWT* term in Eq. 1 is a porosity-weighted average of *SWT* over pay and (2) using an arithmetic mean, readily available from common software, usually leads to an overestimation of *SWT*, and thus, underestimation of *OHCIP*.

There is enough uncertainty in reserve estimation that there is no need to introduce error by not properly averaging *SWT*.



### Definitions

$$SWT = \frac{BVWAT}{PHIT}$$

$$BVWAT = PHIT * SWT$$

### Mixing (integration) 2 components

$$SWT = \frac{BVWAT1 + BVWAT2}{PHIT1 + PHIT2}$$

$$SWT = \frac{PHIT1 * SWT1 + PHIT2 * SWT2}{PHIT1 + PHIT2}$$

### Generalized form

(N depth frames; Same Sampling rate)

$$SWT = \frac{\sum_{i=1}^N PHIT_i * SWT_i}{\sum_{i=1}^N PHIT_i}$$

### Porosity weighted average

#### Units

SWT	(v/v or %)
BVWAT	(v/v)
PHIT	(v/v)

Fig. 1—“Toy-model” and mathematical proof showing that the *SWT* term in the volumetric equation is a porosity-weighted average.

The column *Le Log*\* was purposely short. Surveys indicated that it was much read and popular because of its conciseness. The intention here is similar: just a few points about the energy transition.

## Sharing Universal Standards

Americans (and people from Liberia and Myanmar) might have a hard time fully understanding climate change reports because the analyses use temperatures in °C. Scientists' warnings that the Earth could warm up to 1.5 degrees above acceptable levels are difficult to comprehend for individuals in the US. To most, it is a small number. In Europe, a doctor is alarmed by a fever 1.5°C above normal. In the meantime, the American patient does not panic while the temperature is 101.3°F, 2.7°F above normal.

## Teamwork

All sources of energy have weaknesses and advantages. Trees take 30 years to grow. Nuclear plants also require a long time to build. They have a bad reputation (Three Mile Island, Chernobyl, Fukushima). Nuclear waste takes centuries to get controlled. Electric cars carry heavy batteries that are difficult to build, manage, and dispose of. Windmills destroy beautiful natural sites. Coal creates dust (particularly braunkohle in Germany), etc., etc.

Considerable entropy is deployed in endless arguments between overly decided partisans. This energy would be better used in finding multiple solutions as a single team.

## Nuclear Fusion, the Magic Solution

Controlled fusion is the holy grail of energy production. It is much less polluting and uses components readily available in large quantities.

Seventy years ago, controlled fusion was already under scrutiny. The Russian-designed tokamaks, "toroidal chambers with magnetic coils," were then the closest step to achieving efficient fusion. At that time, it was rumored that a successful process would be working within 25 years. Recent developments have been overly mediatized. But the end of the line is that success is still at least 25 years away.

## Energy Conservation

Increasing green energy is much talked about. What about consuming less energy overall? Or reuse it? In parallel with the development of sources of energy, a definitive effort should be made to waste less and recycle more. Watch the pictures and videos of the Bantar Gebang landfill, a few miles (km) from Jakarta, and be convinced to start garbage sorting and recycling. The Apex Regional Landfill in Las Vegas is the largest in the world. It covers about 2,200 acres (8.9 km<sup>2</sup>) of land and holds about 50 million tons (about 50 billion kg) of waste. With the recent garbage hills left in the streets of Paris because of strikes, somebody reported: *Cela pue vraitment*. It really stinks. The answer was: The whole Earth's surface, including the oceans, is a garbage fill. Time to act!

Ego management should also be reinforced to reduce the size of cars and trucks and favor vehicles that run gas mileages better than 50 (miles per gallon, equivalent to 21 km/liter). Ego-centric attitude should be replaced with eco-centric attitude.

Note: The help of ChatGPT was not called for to write this text.

\**Le Log*, penned by the author Philippe Theys, was a regular column that was published in *The Log Analyst* and *Petrophysics* journal between 1994 to 2000. Approximately 50 *Le Logs* were published.



*Intrepid Readers,*

*A few years ago, I had the pleasure of working with both Alan Byrnes and Bob Cluff. Alan worked at the same company as me, Chesapeake, and Bob was brought in to consult on a training course that Lesley Evans was spearheading. I found both men to be brilliant scientists, core analysts, petrophysicists, teachers, and mentors, and finally, both had irascible senses of humor. I like to think they had a big impact on my career, perhaps unknowingly. Bob died in 2016, unfortunately. He was a recipient of the Distinguished Service Award from the SPWLA. He is greatly missed. Alan is retired and living near Denver, I believe.*

*A few years went by, and I was working with another operator who had an interest in the Interlake Formation in North Dakota. I stumbled upon this gem in the SPWLA archives from the 33rd Symposium: Thin-Bedded Pertidal Reservoirs of the Silurian Upper Interlake Group, Nesson Anticline Area, Williston Basin, North Dakota by **Robert M. Cluff, Alan P. Byrnes, Roger W. Kolvoord, Suzanne G. Cluff, and Richard F. Inden.***

*Now, it is a very well-written paper with extensive, methodical data and conclusions and is very scientific until about page 11. On page 11, one of them had the temerity to insert this passage, which you are about to read. Only in SPWLA, with our no-holds-barred, gumption-rich environment, could something like this be gotten away with. I think the Technical Committee that year must have given them a pass. I hope you enjoy it as much as I did.*

*If you want to download the full paper, you can find it at [SPWLA](#) for \$1 with your membership benefits or also at [OnePetro](#).*

*Yours truly,*

*Adam Haecker, VP of Finance SPWLA*

### AN INTERLAKE PARABLE

The inability to differentiate pay from nonpay using wireline logs has caused serious grief for some companies. Let's look at a hypothetical but not too unrealistic example that may have happened to many companies.

ABC Oil drilled a deep test in North Dakota to evaluate the Upper Interlake. They were concerned about bad hole conditions and thus were reluctant to run any tests on the way down to total depth. Their engineer and log analyst felt they could make an adequate completion evaluation from mud log shows and wireline logs. The geologist wanted to drillstem test every show and every drill break encountered, which didn't happen in these frugal times.

After drilling through the Upper Interlake and encountering a steady stream of slight oil shows in cuttings samples and a constant gas background on the mud log, the exploration manager decided to stop drilling and run logs. The logs showed the usual story for the general area; the upper 100 to 200 ft of the formation appeared to be entirely wet, moderate to low porosity dolomite (75 to 85%  $S_w$ ; 8 to 15%  $\phi$ ) with some very high porosity (15 to 25%  $\phi$ ) as well as very low porosity streaks scattered throughout. The poor apparent saturations did not deter the geologist from immediately recommending they run pipe; after all, they had shows through more than 100 ft of the section, and everybody knows the Interlake calculates wet anyway. The formation must be fractured, it was reasoned, and the logs just can't see oil in the fractures. That or the logs just aren't any good, or they don't know how to run the numbers ("How do you know  $m$  isn't 1.2??").

The engineer and the log analyst were skeptical; the logs didn't look obviously fractured for one thing, and the saturations were really bad for another. But XYZ Oil Company did complete several good Interlake wells just a few miles away, and they had similar-looking logs and shows, so they are willing to sign off on the pipe running decision. The engineer asks the log analyst to provide a total pore volume calculation and a net hydrocarbon pore volume estimate from the logs, using an 11% porosity cutoff just to be on the safe side. The log analyst came back with a huge number for total pore volume and a ridiculously small number for hydrocarbon pore volume, which was no surprise to either since the whole formation looks wet. But they want the boss to feel good about running pipe, and it's too late to turn back now, so they assume 50%  $S_w$  and forge ahead. The engineer comes up with 875,000 bbl recoverable reserves assuming 320-acre spacing and 25% recovery—not bad. Since no one can tell exactly where the shows are coming from and all the high-porosity rock looks about the same on logs, they perforate the entire upper 100 ft of the formation with one shot per foot. After completion, they figured they could run production logs and go back in to add perforations in the best zones.

A day or two later, the cement has set up, the perforating crew does their job (15% of the perforations fail to completely penetrate the casing and cement, however), and they start to swab the well. The well makes 100 bbl of water per day and two bbl of oil. They keep swabbing, and the water starts to increase slightly. No change in the oil cut. They really start to pull hard, and the well goes up to 7 BO/150 BWPD. Something is wrong since 100 ft averaging 13 to 15% porosity with some even better

rock than that ought to be making a whole lot more fluid. After a full week of swabbing water with no improvement in the oil cut, it is clear they have a dry hole, and the search for the guilty party begins. The log analyst swears it was a wet well all along and never recommended running pipe. The geologist thinks the engineer blew the completion, and they probably have a lousy cement job. The engineer says the geologist probably didn't really see any shows (maybe it was just mineral fluorescence), and it was a lousy prospect anyway. Everybody starts thinking about spending the rest of their career in some remote jungle village bird-dogging seismic crews or being held captive by rebel insurgents.

### What Went Wrong With This Picture?

The shows were real, and the geologist and mud loggers were neither exaggerating nor incompetent. They were fooled by the steady stream of shows and mud log kicks into thinking the pay was dispersed uniformly throughout the formation, when in fact, it was all concentrated in 12 1- to 4-ft thick zones scattered throughout the top 150 ft, and the majority of the recoverable reserves were in just three of those zones with better lateral continuity and total pore volume. All of these zones happened to have porosities ranging from 7 to 10%, which was less than the 11% cutoff and thus was never really evaluated by the log analyst. When a porosity cutoff was picked, they unknowingly assumed a "normal" sandstone-type porosity-permeability relationship, where the rocks below the cutoff would presumably be too tight to flow. This is not the case in the Interlake, where the well-interconnected vuggy-fenestral porosity can have excellent permeability, even at very low total porosity levels.

Their next mistake was to compute reserves based on the total pore-feet in the formation, which will always yield a ridiculously large number. Most of that porosity is just what it looks like on logs—wet. Since the bulk of the Upper Interlake is fine-grained microcrystalline dolomite, the porosity in that nonreservoir mudstone dominates the total pore-feet of the formation. It is all at 100%  $S_w$  down to an irreducible saturation of 85% at best. Whatever hydrocarbon saturation was then assumed, either the actual log-derived values or an assumed saturation of 50% has no relevance. The pore volume under consideration bears no relationship to the productive porosity. Finally, it was a mistake to perforate the entire section with shows rather than selectively test thin zones. When the perforating job was completed, out of 100 perforations, 15 failed to penetrate the casing and cement, 30 were in a tightly cemented diagenetic soil zone at the top of the Interlake, 53 penetrated wet dolomite mudstones, and just two caught one of the reservoir beds—and not one of the better ones at that. The low fluid volumes reflect reality; the mudstones generally have low permeability and give up their water reluctantly.

There was no guilty party in this story; all of the technical decision makers considered the data available to them and came to reasonable conclusions. They simply didn't have all the facts in hand and didn't recognize the true nature of the reservoir. If they had high-resolution log data, if they had borehole imaging logs, if they had cut a core, and if they knew more about the petrophysical properties of the reservoir and nonreservoir rocks, they might have been able to pick out those three to 12 key zones, selectively perforated the critical 30 ft, and brought in a 350 BO/12 BWPD well instead of plugging it as a "dry hole."

# Chapter News

## ABU DHABI CHAPTER

### Recent Events

The Abu Dhabi Chapter hosted a one-hour online event in March. Brett Bouldin, the director of marketing and business development at Wireless Instrumentation Systems, based in Houston, presented to the local and regional chapter members an informative presentation titled “Wireless Downhole Production Monitoring.”



**Wireless Downhole Production Monitoring**

**Abstract**

The Wireless Downhole Monitoring technology uses a retrofit wireless downhole gauge, designed to restore live downhole data in a well. The technology is autonomously powered from production or injection fluid, measures pressure, temperature, and flow rate, and transmits data wirelessly to the surface.

It can be installed in a nipple with conventional lock mandrel, or anywhere in the tubing with an industry standard service packer. Shut-ins are no longer needed to perform more accurate PTA/RTA analysis. Live downhole flow rate is key to create more accurate reservoir models, optimize production, and increase recovery in the well.

**About the Presenter:**

Brett joined Wireless Instrumentation Systems (WIS) in March 2020 as Director of Marketing and Business Development. He has a BS Engineering degree from Texas A&M University and 40 years of experience in the development of drilling and completions products. Brett spent the last ten years with Saudi Aramco Upstream Research in Dhahran, Saudi Arabia and led many innovative production technology developments. He was also a founder and chief architect at Well-Dynamics who built the first Intelligent Completions systems, later acquired by Halliburton. Brett started his career at Baker Hughes developing completions products. Brett has published numerous scientific articles and papers and is an inventor on 29 granted patents.

## ARGENTINE STUDENT CHAPTER

### General News

In response to the increasing demand for activities during the past year, we have expanded our Board of Directors by adding two new positions: VP Social Media and VP Events. This decision has helped to distribute the workload more effectively, resulting in optimal teamwork and visible results.



**Board of Directors 2023-2024**

**SPWLA Argentine Student Chapter**

**Gastón Biolato**  
President

**Débora Quiroga**  
Vice President

**Rocío Crespo**  
Secretary

**Karina Martínez**  
VP Events

**Daiana Tapia**  
VP Social Media

**Jorge De Los Ríos**  
Treasurer

We are thrilled to announce that our chapter has secured sponsorship from Net Zero Carbon Solutions. As part of the sponsorship, NZC has generously offered to provide 10 paid student memberships for our chapter, including the past and current board members. This support from NZC Solutions will greatly benefit our chapter and allow us to continue to provide valuable opportunities and experiences for our members.



Recently, our Board of Directors has been meeting every Thursday at 3 pm (GMT-3) to discuss the presentation and internal organization of the board. During these meetings, we have designated two working subgroups and assigned individual tasks to each member. Additionally, we have streamlined our Google Drive to effectively manage applications, memberships, funding, social networking, events, and more.



At the beginning of the year, we are focusing on our Social Media strategy, updating and enhancing our LinkedIn, YouTube, and Instagram channels. Our goal is to establish a stronger online presence and engage with our members and followers. We have set a weekly goal of achieving 100 new connections on LinkedIn, which we have been able to achieve so far.

Additionally, we have created a short advertising video that presents what the SPWLA is, its mission, the benefits and privileges of being a member, and closes with our student chapter's social media channels. This video will help us to effectively communicate the value of SPWLA and attract new members to our student chapter: (<https://www.youtube.com/shorts/Neh-yVwNTbl>).

**Recent Events**

**8 March 2023**—We held a meeting with the SPWLA Argentine Chapter professionals, where members introduced themselves and discussed their expectations for 2023. The topics discussed included renewable energies, CCS, CCUS, programming and data analytics, artificial intelligence and petrophysics, and shale gas and shale oil. Furthermore, the possibility of organizing a visit to a gas and oil field was also discussed. This event provided an excellent opportunity for our student chapter to interact and learn from professionals in the industry.



We participated in the first meeting of the SPWLA Argentine Chapter, which was attended by Nelson Suarez Arcano (SPWLA LATAM Regional Director).

**26 and 30 March 2023**—We had the honor of holding in-person meetings with Nicolás Carrizo, our faculty advisor and SPWLA Distinguished Speaker, as well as Carlos Somaruga, a reservoir engineer and professor at the National University of Comahue, and Sergio Abrigo, the Secretary of Extension and Technological Linkage for the Engineering Department at the National University of Comahue. During these meetings, we were fortunate to receive valuable recommendations, insights, and advice from these industry experts, as well as contacts for planning a field trip to the Neuquina Basin later this year.

**8 April 2023**—Additionally, we also had a meeting with the SPWLA UIS (Colombia) Student Chapter. During this meeting, we had a fruitful exchange where we discussed the difficulties both chapters had faced in assuming their positions, the best and most challenging experiences we had encountered, and shared valuable tips and recommendations. It was a fantastic opportunity for cultural and educational exchange.



Meeting with the SPWLA UIS (Colombia) Student Chapter. (Clockwise from top left) Anngy Roman, Gaston Biolato, Debora Quiroga, Rocio Crespo, Kevin Sanchez, Jorge De los Ríos.

**9 April 2023**—We launched the first edition of “Informative Sundays,” a new section aimed at providing weekly information to our members. Our inaugural publication focused on “What Is Petrophysics?” and was well received by our members. We are confident that this initiative will be a valuable resource for our members, and we are excited to provide more informative content in the future.



Informative Sundays, First Ed.

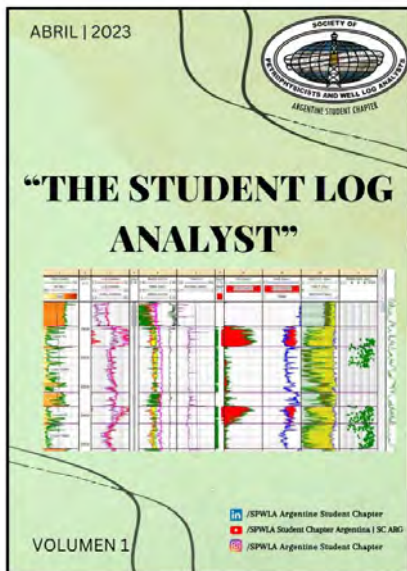


## Upcoming Events

In April, May, and June, we plan to organize meetings with professional contacts to explore possible events with our student chapter.

We are currently working on the dissemination and massive presentation of our chapter to 15 universities throughout the country. This includes the creation of a spreadsheet containing the contact information of professors and students from each Argentine university (four from each) to introduce them to the Student Chapter of SPWLA Argentina.

Our team is also working on the creation of a monthly bulletin titled “The Student Log Analyst.” The bulletin will include useful and updated information for our members, news about the industry, progress made by our chapter, and a summary of the talks done in that month and future ones.



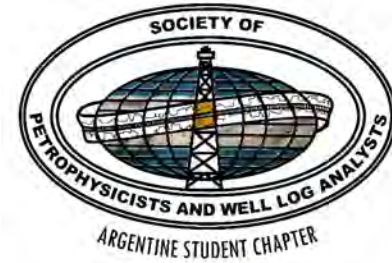
Our top priority for the year is to plan a series of conferences that cover a range of important topics, including Energy Transition, Geothermal Energy, CCS and CCUS, Petrophysics, and Data Analytics. These conferences will provide a platform for our members to share their knowledge and stay up to date with the latest industry trends.

### To learn more about us,

Mail: [spwla.arg.sc@gmail.com](mailto:spwla.arg.sc@gmail.com)

LinkedIn: [www.linkedin.com/in/spwla-argentine-student-chapter](https://www.linkedin.com/in/spwla-argentine-student-chapter)

Instagram: <https://www.instagram.com/spwlaarg/>



## ARGENTINA CHAPTER

### GENERAL NEWS

The SPWLA Argentina Chapter held its first two meetings of the year in 2023 under the leadership of the newly elected President, Mr. Alberto Ortiz. The meetings focused on discussing the meeting format, day of gatherings, and planned activities for the year, including areas of emphasis. Additionally, the proposed executive committee and various working groups were presented, along with the appointment of leaders for each team.

The meetings were online and were well attended, and there was a high level of enthusiasm among the participants.

### RECENT EVENTS

The first meeting of the SPWLA Argentina Chapter was held on March 3, 2023, when Alberto Ortiz was introduced as the newly elected President of the chapter. Alberto shared his vision for the chapter and initiated discussions on the meeting format and schedule for 2023.

During the meeting, there was a productive exchange of ideas regarding the preferred meeting format and day of gatherings. After a thorough discussion, it was decided that the chapter would hold monthly meetings on the third Wednesday of each month at noon.

Furthermore, the topics of focus for 2023 were also discussed. This year, the thematic focus of our chapter has shifted towards alternative energies, such as geothermal energy, decarbonization projects and technologies where petrophysicists play a significant role, and laboratory studies. Topics related to the petrophysical evaluation of unconventional reservoirs also remained a key area of interest. There have been valuable contributions from our members and invited experts who shared their experiences in these areas.

**5 April 2023**—The second meeting of the SPWLA Argentina Chapter, when the proposed executive committee and working groups were presented. The working groups

were proposed in the following areas: events, education, media, and technology. For each working group, a leader was appointed who will be responsible for organizing and leading the activities of the respective group. In addition, it was decided to utilize various communication tools, including social media platforms such as Instagram, YouTube, LinkedIn, and Twitter, to share our chapter’s activities and conduct surveys while maintaining close engagement with our audience.

**Upcoming Events**

The upcoming events will be soon defined in the calendar and will be focused on the previously mentioned thematic areas.

**BANGKOK CHAPTER**

**General News**

**2023 Chapter Committee Members are:**

- President .....Andrew Cox  
(petrophysics consultant)
- Technical Coord.....Numan Phettongkam  
(senior petrophysicist, Weatherford)
- Treasurer.....Panesa  
(Ammy) Panpheemachai (PTTEP)
- Social Media.....Alexander Beviss  
(geological consultant)
- Secretary.....Ronald Ford  
(operations and petrophysical consultant, Gaia Earth Group)
- Sponsorship.....Marvin Rourke  
(VP Technology, GOWell)
- Student Liaison.....Kruawun Jankaew  
(senior geologist, PTTEP)
- Communications.....Kulkunya (Fon) Aunguroch  
(technical sales, Weatherford)

Please visit [https://www.spwla.org/SPWLA/Chapters\\_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx](https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx) for local chapter news and information on upcoming meetings.  
Email: [bangkok.chapter@spwla.org](mailto:bangkok.chapter@spwla.org)

**Recent Events**

**March 2023**—Live Meeting (Jasmine City Hotel, Bangkok)  
**Gulf of Thailand Drilling Project Challenges: From Planning Through Execution Phases** was presented by Mr. Jirach Kamvan (Chevron Thailand). A development platform located in Dragon Field, Chevron Operating Area, Gulf of Thailand (GOT) proved to be a very challenging project in many dimensions. Mr. Kamvan presented a review of the challenges and the lessons learned, which can be used to sustain successful operations for the remainder of the project, lower development costs, and ensure positive ROI.

**April 2023**—This meeting was held at an alternate venue (Ploen Center in Chatuchak). **Integrated Petrophysics – Rock Physics Modeling Workflow and Its Application to Reduce Uncertainties in Seismic Reservoir Characterization** was presented by Anish Krishnapillai (senior technical specialist with Aspentech). Anish’s presentation provided a methodology that can be used to calibrate seismic data relative to reservoir properties, allowing an enhanced quantitative analysis.



Marvin Rourke (VP Technology, GOWell) and Jirach Kamvan (Chevron Thailand) at the March 2023 meeting.



Anish Krishnapillai (senior technical specialist with Aspentech) presented at the April 2023 meeting.

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

## BATANGAS STATE UNIVERSITY STUDENT CHAPTER

### General News

***“Great works are performed, not by strength, but by perseverance” -Samuel Johnson***

The SPWLA-Batangas State University Student Chapter is the first and only chapter in the Philippines to be part of the SPWLA International. As it thrived in its second year, various events were organized that upheld the core values of the local chapter.

Headed by the Vice President for External Affairs, Mary Jane Diasanta, the annual e-mentorship program has commenced. There was a total of four offered courses on the current term: Plant Design, Reservoir Engineering, Petrophysics, and Geology, in which each session was deemed successful. The e-mentorship program was attended by many student members upon registration and distinguished volunteer mentors. The course for Reservoir Engineering was mentored by Engr. Shahid Azizul Haq, followed by Engr. Kim Arida and Engr. Christian Dave Bauson for Plant Design, Ms. Fransiska Goenawan in Petrophysics, and Engr. Ezekiel Galanto for Geology.

A group study was arranged to help the student members with courses they may find difficult. It was entitled “Educational Group Study with SPWLA (EGSS),” and it catered to mentees and student mentors. The program was organized by the former Vice President for Internal Affairs, one of the student mentors, and current Technical Staff, Gabriel Malasique, along with Hannah Peñamante. The main objective of the EGSS is to help its student members understand the course of their choice and have a student-to-student mentorship to connect the members to its officers. The mentors for the group study were the current President Andrea Manalo, Secretary for External Affairs Alpha Joy Diasanta, and Technical Head Ciara Maquinto.

As the end of the semester approaches, officers are now preparing for an upcoming job opportunity and turnover ceremony.

### Recent Events

1. E-mentorship Program – The e-mentorship program is composed of four (4) specifications having three sessions each, namely: Reservoir Engineering, Petrophysics, Geology, and Plant Design. The event is an annual program designed to help the local student members familiarize themselves more with petrophysical studies. The proposed topics for each discussion were the general overview of the course, the technicality needed in the field, and the career advice that mentors can give to aspiring young professionals. The e-mentorship for Reservoir Engineering was conducted on the March 29, 30, and 31, 2023 with the guidance of Engr. Shahid Azizul Haq, current reservoir engineering advisor and reservoir domain head (Drilling & Measurements Segment). Under the supervision of Ms. Fransiska Goenawan, former Vice President of Education and current geoscientist for formation evaluation reservoir solutions (Halliburton), the mentorship for Petrophysics was conducted last March 31, April 7, and April 16. Due to some unavoidable circumstances, the discussion lectures for Geology were compressed into a single session tackling all the proposed topics. It was attended by Mr. Ezekiel Galanto, a geologist, on April 4, 2023. The Plant Design e-mentorship program was headed by Engr. Kim Arida, a former President of SPE Batangas State University Chapter and current drafter III (Fluor Daniels Inc., Philippines), and Engr. Christian Dave Bauson, current engineering technician II (Fluor Daniels Inc., Philippines); the mentorship happened on March 31, April 1, and April 12.
2. Group Study – The “Education Group Study with SPWLA (EGSS)” was organized for the benefit of helping members cope with a course they may find challenging. There were four (4) student mentors that attended the group study: Andrea Manalo, Gabriel Malasique, Alpha Joy Diasanta, and Ciara Maquinto. The chosen subject to be taught at EGSS was Well Test Analysis. Thus, it covered the types of fluid present in the reservoir, different flow regimes, flow geometry, Ei-functions, and well productivity. The sessions were conducted via spot virtual, an emerging virtual platform, last April 5 and 10.

### Upcoming Events

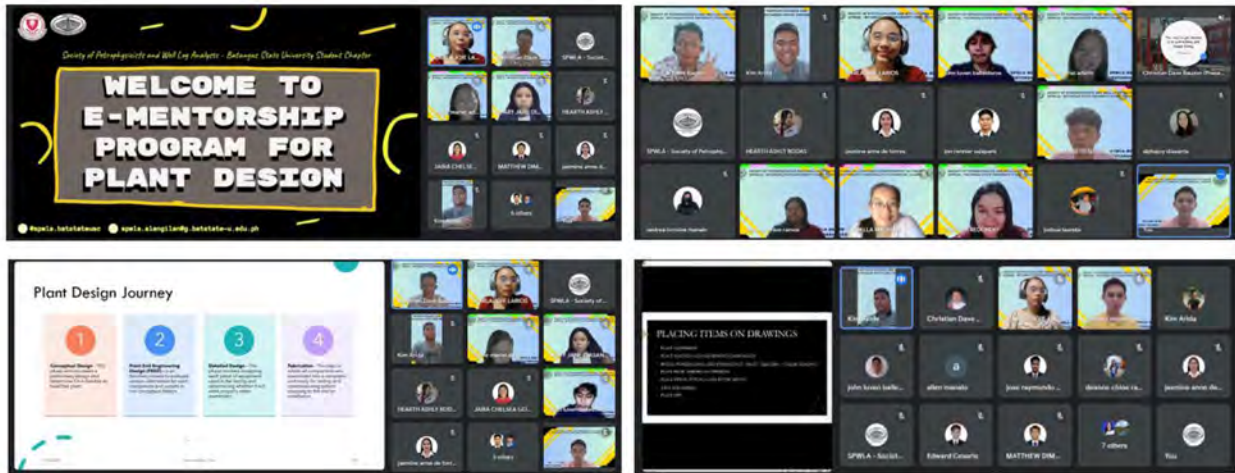
1. Election of Officers and Turnover Ceremony – The SPWLA Batangas State University Student Chapter aims to organize an event that would recognize the effort and hard work of both the committee officers and members



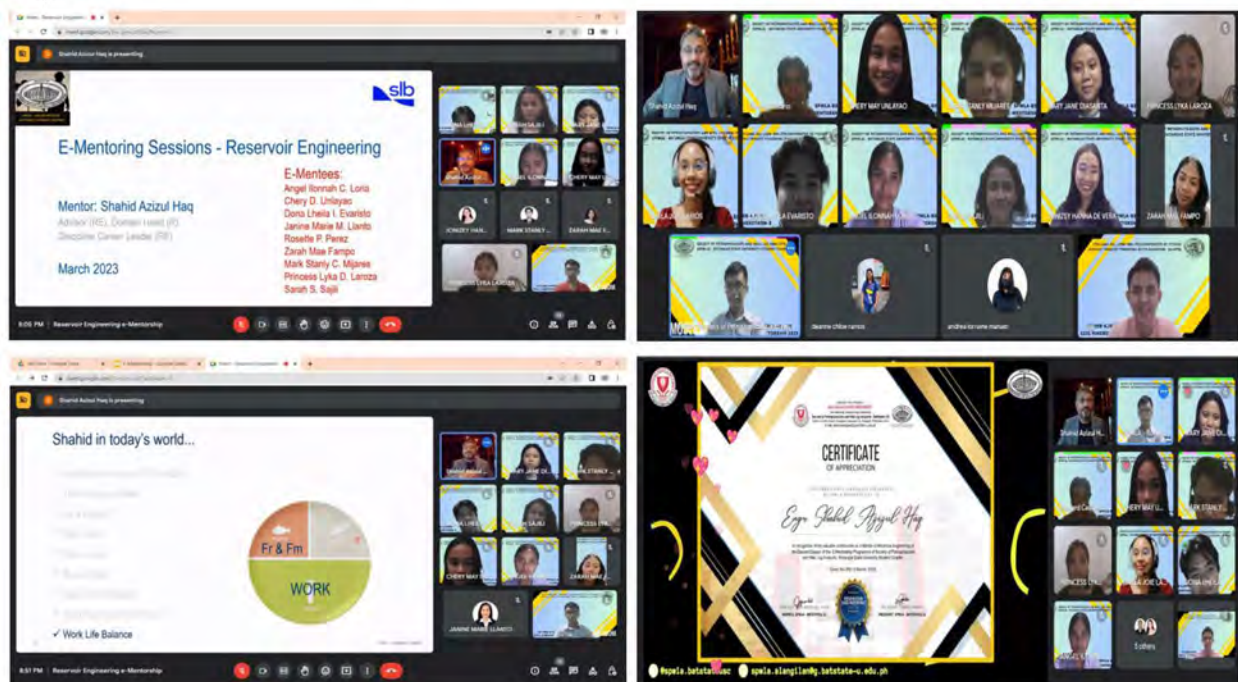
from the past term. The program will also allow its students to step forward and take the initiative to lead. The election of officers will take place in the last week of the semester, and a new set of officers is expected to emerge. The turnover ceremony marks the future of the organization headed by its new future leaders.

2. Preparation for Job Opportunity Webinar – In May 2022, the student organization aims to conduct a webinar

that will help their graduating student members with a successful transition into their life beyond the university and to broaden their vision in pursuing their chosen profession. The event will cater to all the student members and will invite professionals that can help answer their questions on the work competition in today's industry.

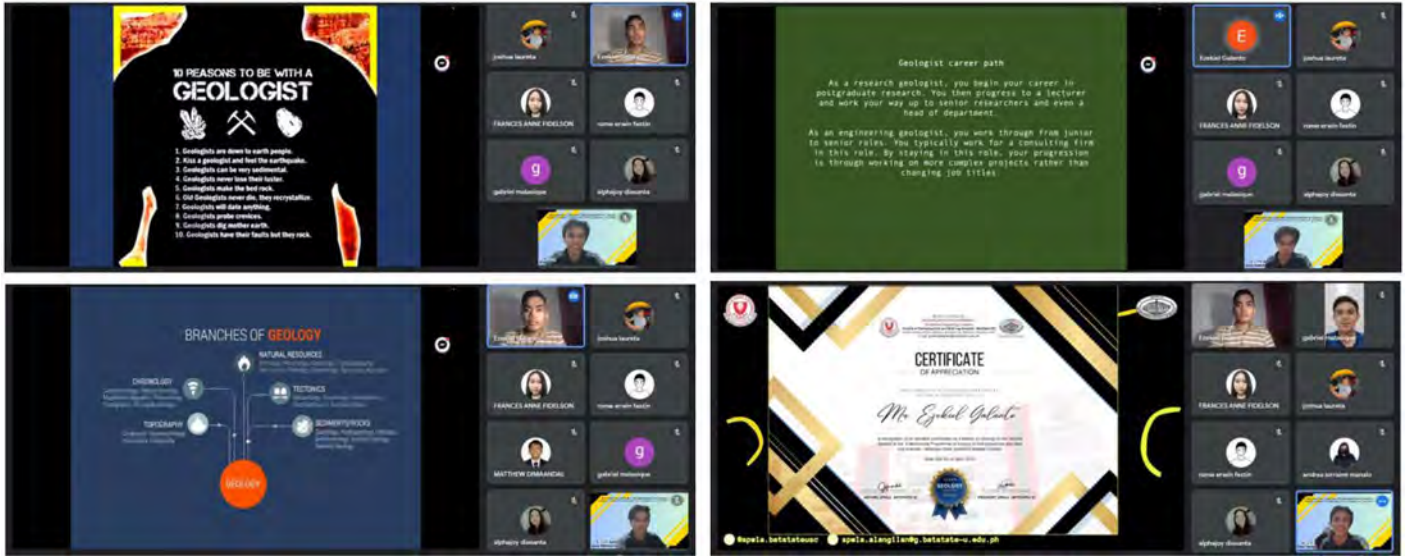


The photos were taken during the Plant Design E-Mentorship. Engr. Kim Arida and Engr. Dave Bauson discussed the step-by-step process of doing a proposed project design. It was attended by many student members, and the overall feedback on the discussion was positive.

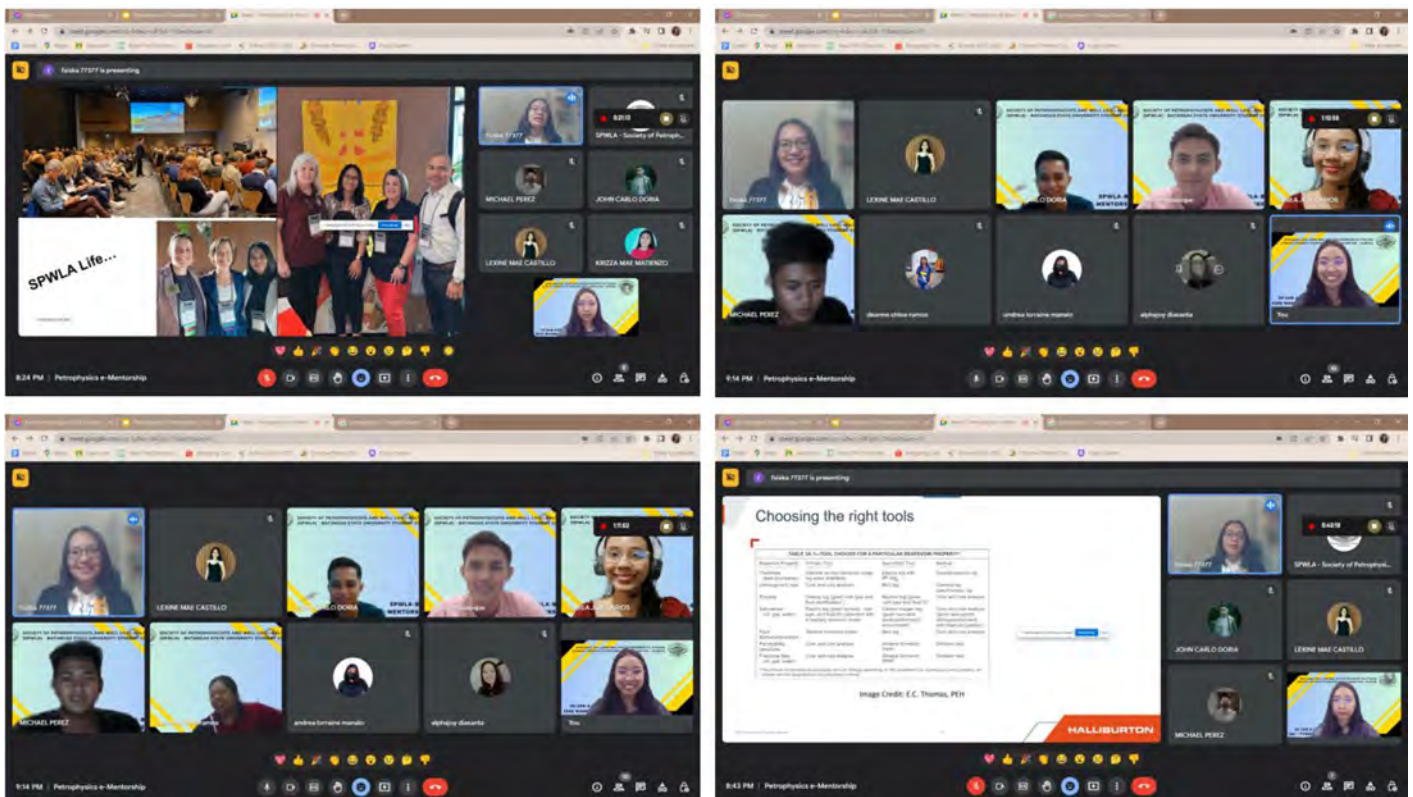


Presented are the photos taken during the Reservoir Engineering session under the supervision of Engr. Shahid Azizul Haq. The atmosphere during the discussion was interactive, and all attendees shared and learned from the guest lecturer. An appreciation certificate was given to the mentor as recognition for dedicating his time to the mentorship program.

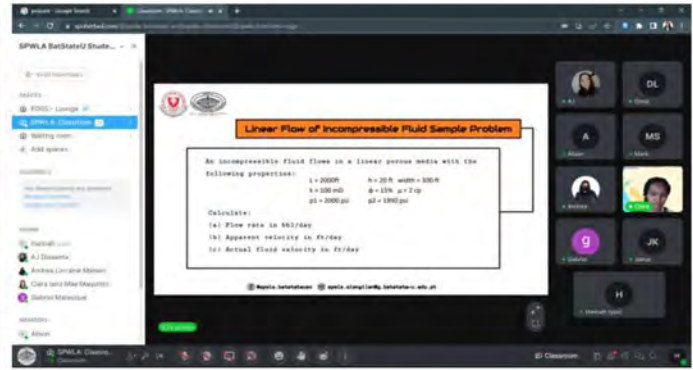
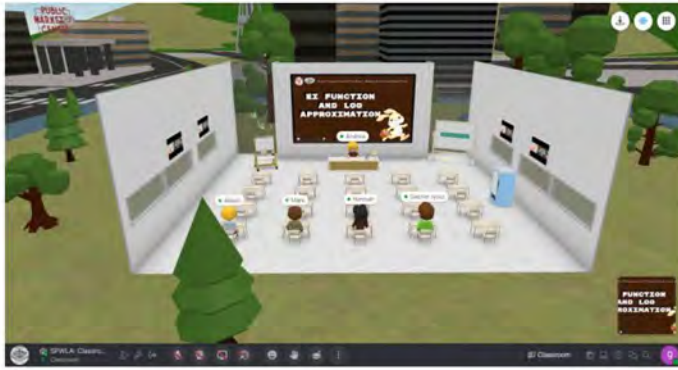




The Geology session was headed by Edward Cesario, Vice President for Internal Affairs of SPWLA – BatStateU SC, and was attended by a geologist, Mr. Ezekiel Galanto. The discussion tackled the different branches of geology and how it differs from each other. At the end of the e-mentorship, a certificate of appreciation was given to the guest lecturer.



The guest lecturer for the Petrophysics session was Ms. Fransiska Goenawan. As pictured, the mentor introduced herself to the students before tackling petrophysics and its characteristics. Tools and equipment were also introduced, and at the end of the discussion, a photo opportunity along with Ms. Siska Goenawan was taken. The e-mentorship was well attended, and the participants were given a chance to ask their questions and queries.



The EGSS group study session was attended by both the committee officers and members. Utilizing a new virtual platform, Spot, the attendees were able to explore and communicate with each other. The chosen course taught by the student lecturers was about well test analysis and was attended by their junior members.

**BOREHOLE IMAGING (BHI) SIG**

**General News**

The SIG is constantly gaining new members. We currently have 121 members.

**Recent Events**

**26 April 2023**—An online SIG meeting was held with presentations from Alfred Lacazette, Thomas Howard, and Bernd Ruehlicke. Furthermore, the latest results of our discussion around the standard exchange format for dip data will be discussed.



## Upcoming Events

At the SPWLA Annual Symposium, the SIG will organize a workshop about borehole image log analysis as well as a specially organized session about “Beyond Picking Dips From Image Logs.”

## BRAZIL CHAPTER

### General News

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

### SPWLA 65th Annual Logging Symposium

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

**28 February 2023**—We had Lucas Abreu Blanes de Oliveira (senior petrophysicist at Petrobras) and current president of SPWLA Brazil, give a talk entitled, “Improving the Calculation of Petrophysical Properties in Vugular Carbonates Using Logs and Rock Samples: A Case Study

in a Brazilian Presalt well.” The talk presented the application of the  $T_2$  decomposition methodology for the identification and quantification of vugular porosity, improving porosity, permeability, and water saturation estimates in Brazilian presalt reservoirs.

You can watch this webinar using the link below!  
<https://www.youtube.com/watch?v=CC4VjkTHQoI>



202ª Reunião Mensal  
Terça-feira, 28 de fevereiro, 16h - YouTube

**Improving the calculation of petrophysical properties in vugular carbonates using logs and rock samples: a case study in a Brazilian pre-salt well**

Lucas Abreu Blanes de Oliveira  
Petrobras



Invitation to February webinar of SPWLA Brazil Chapter.

**21 March 2023**—We had Tao Yang (senior specialist in reservoir technology at Equinor) present a talk entitled “Real-Time Reservoir Fluid Identification From Mud Gas.” There is a strong business need to provide accurate reservoir oil or gas identification while drilling. A newly developed technology identified a strong relationship between mud gas data and reservoir fluid properties using a machine learning algorithm. The new method turned the underused mud gas data into continuous reservoir fluid properties, highly valued for real-time well decisions. Field cases are given to demonstrate that the new technology created significant business values.

You can watch this webinar using the link below!  
[https://www.youtube.com/watch?v=KCRQsR\\_7fJU](https://www.youtube.com/watch?v=KCRQsR_7fJU)



Invitation to March webinar of SPWLA Brazil Chapter.



In February, Patricia E. Rodrigues (Seispetro Geoconsulting) shared with us her thoughts on pitfalls and lessons learned on the topic of “Natural Fractures Characterization From Openhole Logs.”

**18 April 2022**—We hosted Ole Petter Wennberg and Luz Elena Cartesio, who presented “The Characteristics of Natural Open Fractures in Acoustic Borehole Image Logs From the Presalt Barra Velha Formation.” Ole Petter Wennberg and Luz Elena Cartesio are senior geology specialists working for Equinor.



In March, we shifted a bit in talking about the interaction of completions data with petrophysics with a talk by Darby Witt (Cordax Evaluation Technologies) about “Cluster Efficiency Logging (Before and After Fracturing). Cordax Improvements in Completion Diagnostics!”

**DENVER (DWLS) CHAPTER**

**Recent Events**

In January, Ben Burke and Johanna Ostrum (Transitional Energy) presented to us a great overview of how petrophysics can aid in the geothermal energy evolution with their talk “Geothermal Systems in Sedimentary Basins.”



In April, we had Bob Lieber present “Rock Type Recognition Using Deterministic Methodologies for the Codell Sandstone of the DJ Basin.”





The 2023 DWLS Spring Workshop was a great success with the “off-record” event, where great discussions flourished in a “safe environment,” and new ideas came to life. The workshop title was “Core to Log and Log to Core: The Evolution of Tying Two Dimensions Together.”

The star-studded lineup was as follows:

1. Katie Joe McDonough (KJM Consulting LLC) and Sarah Compton (Intelligent Wellhead Systems)  
“Looking Back, Looking Forward—A Retrospective to Guide Future Data Integration & Upscaling”
2. Andreina Liborius (Diversified Well Logging LLC)  
“Integration of PCA and Clustering Analysis With Chemostratigraphy for Improved Lithofacies Characterization in Southwest Texas”
3. Milly Wright (RhomTek)  
“FTIR (Fourier Transform Infrared) – A Useful and Cost-Effective Tool for Core to Log Mineralogy Calibration”
4. Kristopher Farmer/ Stephen Drylie (Core Laboratories)  
“Workflow for Calibrating Wireline NMR Logs Using Laboratory NMR Measurements”

5. Clara Palencia (Intertek Westport Technology Center)  
“NMR and Log-Derived Porosity Comparison in the Wichita Reservoir in the Permian”

6. Dick Merkel (Denver Petrophysics, LLC)  
“Core-Log Techniques in Unconventional Reservoirs: Using Both Conventional and Unconventional Lab Measurements and Logs”

7. Laurent Louis (New England Research)  
“Working Across Scales in the Laboratory: Learnings and Challenges in the Integration and Delivery of Elastic and Geomechanical Data”

8. Dave Ratcliff (ResFrac Corporation)  
“Petrophysics to Production: Using a Coupled Reservoir and Fracture Simulator to Improve Petrophysical Models”

#### 9. Wrap-up and Open Discussion

Tom Bratton and others took us on a journey of discovery on how the adapted learning can be applicable in our energy space and beyond (CCUS) and what we all will end up dealing with no matter what.

#### Upcoming Events

**15 May 2023**—Our last event for the DWLS 2022/2023 is a Happy Hour. Come join us if you can!

### FRANCE CHAPTER

#### Recent Events

The SPWLA France activity in February and March 2023 alternated a Lunch & Learn and an in-person half-day event.

**24 February 2023**—A virtual presentation was given by Virginie Schoepf (senior petrophysicist at OpenField Technology) about production logging. Her talk was about “In-Situ Accurate Flow Diagnostic Using Innovative Ultra Compact Production Logging Tool.”

**31 March 2023**—A full afternoon in Paris at Société Géologique de France was organized about acoustic and anisotropy. The session was divided into four talks which gave four different interesting views on the topic: a historical overview of shear anisotropy and birefringence by Charles Naville (IFP-EN) with his paper “Velocity and Attenuation Anisotropies of Shear Sound Waves.” Then, a case study with Jeroen Jocker (acoustic domain expert with SLB in The Hague, Netherlands), who presented “TI Anisotropy Characterization on Basis of Sonic Data Sets From Multiple Wells: A Norwegian Sea Case Study.”

Pascal Debec (senior specialist in seismic reservoir characterization at Total Energies) gave a presentation on “An Example of Multiwell/Multiscale Approach for Anisotropy Characterization and Correction.” We concluded the session with a deep dive into data processing with “Machine-Learning-Enabled Automatic Borehole Sonic Shear Processing” with Lin Liang (scientific advisor and program manager in Schlumberger-Doll Research in Cambridge, Massachusetts, USA) and Ting Lei (principal research scientist in the Advanced Acoustics program in Schlumberger-Doll Research, Cambridge, Massachusetts).



This photo of the board and presenters was taken during the Acoustics and Anisotropy event on March 31 in Paris. (First row) Pascal Debec (TotalEnergies), Charles Naville (IFP-EN), Nadège Bize-Forest (SLB), and Jacques Delalex (Retired); (second row) Han-Woei Loo (TotalEnergies), Yani Meziane, Samira Ahmad (SLB), Emmanuel Caroli (TotalEnergies), Rose-Marie Belenguer (TotalEnergies), and Rubi Rodriguez (SLB); (third row) Sylvain Serbutoviez (IDP-EN), Jeroen Jocker (SLB), Michel Krief (Krief Models SASU), and Jan-Willem De Korver (TotalEnergies).

**21 April 2023**—The 2023 first semester program is finalized, and a few more sessions are planned each month until summer break. Anisotropy will continue with a Lunch & Learn talk by Martin Lüling (formerly theoretical physicist with SLB, now Luling Tech SAS) about “The Paradox of Anisotropy Generalized to Deviated Wells in Orthotropic Media.”

**Upcoming Events**

**May 2023**—Another webinar is planned with the Distinguished SPWLA Speaker Muhammad Nur Ali Akbar (MOL Hungary E&P West Hungary Field Development), who will talk about “Naturally Fractured Carbonate Reservoir Characterization: A Case Study of a Mature High Pour Point Oil Field in Hungary.”

**14 June 2023**—SPWLA France will co-organize a joint event with EAGE in Clamart at SLB-SRPC about Geothermal Energy in which the Distinguished Speaker Chiaki Morelli (senior borehole geologist from SLB) will present “Integrated Fracture Analysis with Borehole Geology, Acoustic, and Geomechanics for Flow Zone Identification; Case Study From Volcanic Geothermal Well in Japan.” This will close this theme about fractures and anisotropy before many more exciting petrophysical events later in the year!

**FORMATION TESTING (FT) SIG**

**General News**

The FT SIG formally added a number of regional facilitators who are supporting the SIG with technical content and input on events. Thanks, and welcome to the following:

Yon Blanco	Europe (including the UK)	SLB
Aldrick Garcia-Mayans	Jakarta (Far East Asia + Australia)	SLB
Andre Bertolini	Brazil	SLB
Anis Turki	Saudi Arabia	Halliburton
Guowen Lei	China	Baker Hughes
Jose Mario Hernandez	Ecuador	Halliburton
Marcus Turner	West Africa	SLB
Viraj Telang	UAE	Baker Hughes

**Upcoming Events**

**4 May 2023**—The FT SIG Annual Meeting and Conference was held in Houston. There were excellent technical presentations and discussions with industry experts. Due to submission deadlines for the newsletter, no photos were available, but they will be shared in the next newsletter.

Due to the work involved in planning the Annual Meeting and Conference, the Webinar Series was postponed. We will resume in Q3, and we are still planning to increase the number of webinars to monthly or bi-monthly. Check the SPWLA main website for abstract details, specific dates, and registration information.

**11 June 2023**—Formation Testing Workshop – This one-day event will take place as part of the 2023 SPWLA Annual Symposium. We have an exceptional list of industry experts lined up to provide instruction on theory and practical exercises covering a range of formation testing measurements and applications. The workshop is intended for petrophysicists, reservoir engineers,

operations geologists, and others who are directly involved with the acquisition or analysis of formation testing and fluid sampling data. This is intended as a foundation-level class for people with little or no experience in this field. The class size is limited to 30. Practical exercises will be done using Kappa Engineering software, and temporary licenses will be included. For additional details on any event, you can email us at [formation.testing.sig@spwla.org](mailto:formation.testing.sig@spwla.org).

## HOUSTON CHAPTER

### General News

The SPWLA Houston Chapter is committed to serving the local petrophysics community by providing informative and engaging technical seminars. Additionally, the Houston Chapter hosts numerous networking events, offering local professionals a social platform.

On the technical side, CCUS has emerged as a key topic and discussion point, naturally aligning with machine learning, which has also become a prominent topic within the greater petrophysical community. These related topics have been widely discussed during our seminars and on social networks.

To provide more networking opportunities, the SPWLA Houston Chapter plans to host networking events on the last Thursday of each month, from 5:07 pm to 8:08 pm, at the same location for easy recall.

On February 23 and March 30, we hosted two successful in-person social networking events. We thank CANAMERA for sponsoring the Chapter Networking event on March 30 at Cedar Creek. The entire SPWLA community was invited, and the outdoor party was attended by petrophysicists, geologists, geophysicists, engineers, managers, and others, including current and past SPWLA International board members.

Please join us at our monthly networking events on the last Thursday of each month. Hope to see you there!

The SPWLA Houston Chapter continues to host lunch seminars on various topics, with more in-person events taking place recently. The following seminars were held in March:

- March 1: “CCUS in Mature Fields: How Core-to-Log Data-Driven Analytics Enhances Mechanistic Models for the Purpose of Reservoir and Caprock Mineralogical Characterization,” presented by Marco Pirrone (Eni HQ).
- March 14: “Full Waveform Inversion of Fiber-Optic VSP Data From Deviated Wells,” presented by Olga Podgornova (SLB).

- March 30: “Challenges and Opportunities in Large-Scale Carbon Capture Storage (CCS),” presented by Zach Liu (WOOD).
- April 26: “Using NMR To Characterize Fluids in Tight Rock Unconventional and Shale Formations,” presented by Boqin Sun (Chevron). We thank Baker Hughes for sponsoring the event.

Slots are limited for in-person seminars. Please visit [spwla-houston.org](http://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.

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/>

### Recent Events

#### SPWLA Houston Chapter Lunch Seminar

- 1 March 2023**—Houston Chapter Downtown hosted a lunch seminar titled “CCUS in Mature Fields: How Core-to-Log Data-Driven Analytics Enhances Mechanistic Models for the Purpose of Reservoir and Caprock Mineralogical Characterization,” presented by Marco Pirrone (Eni HQ).
- 14 March 2023**—Houston Chapter Downtown hosted a lunch seminar titled “Full Waveform Inversion of Fiber-Optic VSP Data From Deviated Wells,” presented by Olga Podgornova (SLB).
- 30 March 2023**—Houston Chapter Westside hosted a lunch seminar titled “Challenges and Opportunities in Large-Scale Carbon Capture Storage (CCS),” presented by Zach Liu (WOOD).
- 23 Feb and 30 March 2023**—We hosted two in-person social networking events. SPWLA Houston Chapter appreciates **CANAMERA** for sponsoring the Chapter Networking event on March 30 @ Cedar Creek. 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.



## Chapter News

We plan to have such a networking event every last Thursday **monthly** from 5:07 pm to 8:08 pm at the same location to make it easier to remember.

**27 April 2023**—Seminar Downtown Houston: “Using NMR To Characterize Fluids in Tight Rock Unconventional and Shale Formations” presented by Boqin Sun (Chevron)

**27 April 2023**—Networking Happy Hour at Cedar Creek Bar & Grill



The event was well attended, with a full house. Zach's informative presentation was followed by an engaging Q&A session. Neal Cameron, Vice President of the Houston Chapter Westside, warmly greeted Zach Liu.



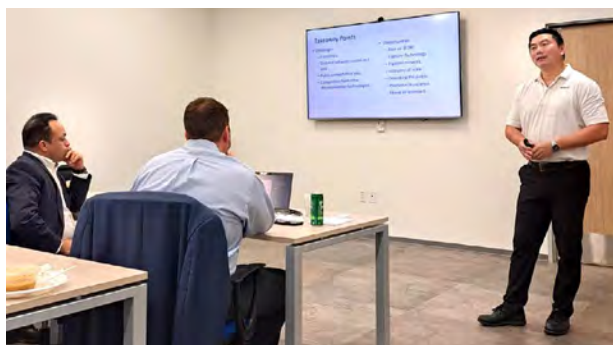
Olga Podgornova (SLB) made a presentation about DAS data processing at the Houston Chapter lunch seminar.



Artur Posenato Garcia, Vice President of the SPWLA Downtown Houston Chapter, warmly greeted the speaker and presented a gift as a token of appreciation.



Houston Chapter Networking time with guests. Happy to have current and past SPWLA International board members joining our event. A huge thanks to CANAMERA for sponsoring the SPWLA Houston Chapter Networking event on March 30.











At the Houston Chapter Westside lunch seminar, Zach Liu (Wood) discussed the challenges and opportunities in carbon capture storage.



The Houston Chapter will host the networking event **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><b>Bernd Ruehlicke</b> <b>PRESIDENT</b> <a href="mailto:president@spwla-houston.org">president@spwla-houston.org</a></p>	 <p><b>Amer Hanif</b> <b>VICE-PRESIDENT NORTH SIDE</b> <a href="mailto:vpnorthside@spwla-houston.org">vpnorthside@spwla-houston.org</a></p>
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**IGUP STUDENT CHAPTER-PAKISTAN**

**General News**

A meeting of the newly elected board members of the SPWLA IGUP Student Chapter-Pakistan is held to introduce them and outline their respective responsibilities. The team also introduced the SPWLA and its associated chapter in Pakistan and encouraged freshman-year students to give their full potential and use this prestigious platform to thrive in the industry and represent both their chapter and country internationally. The team also managed to execute a splendidly successful Internal Student Chapter Paper Contest (ISCPC-23) for students from all across Pakistan; both virtual and physical participants participated in it. The competition

developed a healthy environment for presenting the finest research as well as learning from it. The audience immensely benefited from the competition and came to understand the practical world and advancements of the respective fields and how they can contribute to it.

**The Board of Directors:** The names of the elected Board of Directors for the term 2022–2023 with their designation and contact details are as follows:

Sr. No.	Board of Directors	Designation
1	Dr. Muhammad Armaghan Faisal Miraj <a href="mailto:armghan_geo@pu.edu.pk">armghan_geo@pu.edu.pk</a>	Faculty Advisor
2	Miss Maha Ali Haider <a href="mailto:mahaalahaider26@gmail.com">mahaalahaider26@gmail.com</a>	President
3	Mr. Shan Shahzad <a href="mailto:shan.mphil_geo@pu.edu.pk">shan.mphil_geo@pu.edu.pk</a>	Vice President
4	Miss Pal Washa Shahzad Rathore <a href="mailto:palwashashahzad97@gmail.com">palwashashahzad97@gmail.com</a>	Treasurer
5	Miss Ayesha Ejaz <a href="mailto:ayesha.mphil_geo@pu.edu.pk">ayesha.mphil_geo@pu.edu.pk</a>	International Spokesperson Chairperson
6	Mr. Muhammad Hamza <a href="mailto:hamza-930233@pu.edu.pk">hamza-930233@pu.edu.pk</a>	Membership Chairperson
7	Mr. Muhammad Waqas Javed <a href="mailto:geo747@outlook.com">geo747@outlook.com</a>	Event Manager
8	Miss Syeda Fakiha Ali Zaidi <a href="mailto:fakihaali5@gmail.com">fakihaali5@gmail.com</a>	Social Media Chairperson

**Recent Events**

**18 February 2023**—The dedicated team of SPWLA-IGUP Student Chapter Pakistan (2022–2023) arranged the Internal Student Chapter Paper Contest (ISCPC-23) for students all over Pakistan to participate in it and present their research in order to contribute to the field and to gain confidence from this, as well as benefits the students/audience from the knowledge and also get evaluated for their better-quality work in future and to get appreciated. At the start of the event, the Director of the Institute of Geology, University of the Punjab, Dr. Naveed Ahsan, graciously welcomed all the participants and the audience, both in the hall and virtually, and boosted their esteem for the betterment and encouraged them to excel. He was followed by the Faculty Advisor, Dr. M. Armaghan Faisal Miraj, who also encouraged the students with his welcoming marks and started the event. Students from different institutes in Pakistan took part and presented their research. Three chief guests were invited from the oil and gas industry to judge the Internal Student Chapter Paper Contest (ISCPC-23), and they are as follows:

1. Mr. Ahsan Javed Deo [senior petrophysicist (RMD), OGDCL, Islamabad]
2. Mr. Muhammad Zahid [lead petrophysicist, MPCL, Islamabad]
3. Mr. Syed Asad Ali Kazmi [principal consultant petrophysicist, Halliburton, Islamabad]

We are really obliged to all of them for sparing their precious time to judge the paper contest and giving motivational words and recommendations to all the students. It will be helpful for all the students to improve their skills and work.

All the presenters were presented with great enthusiasm, and then judges shortlisted the three top candidates among the presenters, and shields were awarded to them.

**Position Holders:**

**1st Position – Dilshad Raza –** (Institute of Geology, University of the Punjab)

**Title:** “Missing Well-Log Curves Reconstruction Using Optimized Hybrid Deep Learning Architecture; A Case Study From Qadirpur Gas Field”

**2nd Position – Muhammad Maaz Ali –** (UET, Lahore)

**Title:** “Matrix Stimulation Based on Mineralogical Analysis of Sandstone Samples: Using an Experimental Approach”

**3rd Position – Khalid Hussain –** (NFC-Institute of Engineering & Technology)

**Title:** “Effects of Water Salinity on Different Properties of Drilling Mud”

Here are some glimpses of the ISPC-23 event:



The Faculty Advisor of SPWLA-IGUP Student Chapter, Pakistan, Dr. M. Armaghan Faisal Miraj, welcomed everyone and wished good luck to all the participants.



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



The President of SPWLA-IGUP Student Chapter, Pakistan (Miss Maha Ali Haider) introduced our esteemed judges and paid her regards for sparing their precious time to not only boost the confidence of the participants but to evaluate them fairly and formally begin the contest.





Showing some glimpses of presentations of physical and virtual participants of ISPCP-23.



Vice President Mr. Shan Shahzad briefed the successful students of the SPWLA-IGUP Student Chapter, Pakistan, and motivated them to give their best and see success.





The Director of the Institute (Dr. Naveed Ahsan) presented a plaque and certificate to our in-hall judge (Mr. Muhammad Zahid) in the left and upper right corners. The President of SPWLA-IGUP (Miss Maha Ali Haider) invited the top three position holders on the stage to receive an award from our judge in bottom right corner.



Mr. Muhammad Zahid gave a plaque to 2nd Position Holder Mr. Muhammad Maaz Ali.



Mr. Muhammad Zahid gave a plaque to 1st Position Holder Mr. Dilshad Raza.



Mr. Muhammad Zahid gave a plaque to the 3rd Position Holder Mr. Khalid Hussain (who participated virtually). Mr. Rehan Ali received the plaque on behalf of Mr. Khalid Hussain.



Group photo of all the participants and students who attended the ISPCPC-23 physically with their faculty advisor (Dr. M. Armaghan Faisal Miraj), the director of the department (Dr. Naveed Ahsan), and the whole team of SPWLA-IGUP Student Chapter, Pakistan (on the left side). All the female participants with the team (on the right side).



## INDIA CHAPTER

## Recent Events

**The 5th SPWLA India Symposium Covers All the Realms of Modern-Day Industry Challenges**

With an action plan to “Ideate, Innovate, and Integrate,” the two-day 5th SPWLA India Symposium 2023 on the theme “Petrophysics: The E&P Gateway From Discovery to Recovery & Beyond” was formally inaugurated on April 15, 2023, at NBP Green Heights ONGC Mumbai with an audio-visual message from Symposium Chief Patron Shri Arun Kumar Singh, (chairman and CEO ONGC) in which he emphasized the importance of such a confluence of industry experts, technology partners, academicians, students, and veterans, which immensely benefited the E&P industry as a whole. He conveyed that the two-day symposium would provide a platform for forging collaborations, technology partnerships, and industry-academia interfaces to further the cause for developing the energy system of tomorrow.

President SPWLA India Chapter Manoj Kumar Tewari (ED – Chief Logging Services, ONGC) welcomed the industry stalwarts and delegates from 14 nationalities and exhibitors from various service companies. He emphasized that in today’s epoch of paradigm shift and energy transition, our role is being redefined, especially in light of the global energy mix for defining the complete subsurface elements in terms of storage, producibility, and sustainability of different energy variants. He further emphasized that we are at the center of all subsurface activities across the entire E&P life cycle, from discovery, reserves estimation, development strategies, improved recovery, mitigation of well complications, engineering solutions, and economic planning to plugging and abandonment. “Petrophysics plays a critical and crucial role in envisaging and characterizing the complexities and uncertainties of the subsurface formations, which is necessary for making informed decisions about drilling, completion, and production strategies. Thus, very rightly, logging is referred to as the ‘Eyes’ of the E&P industry. Also, with the current advanced acoustic solutions, it is giving an “Ear” as well,” he added. He hoped that “Ideate, Innovate, and Integrate” would be the mantra that would guide the participants in gearing up for the global energy transition in a meaningful way.

Former President of SPWLA and global advisor for production management to Halliburton, Dr. Luis Quintero, delivered a captivating conference keynote address at the inaugural session on the interesting title “Looking Where We Can’t See – How Petrophysics Helps Meet the World’s Energy Needs,” which spanned the entire landscape from very fundamental baselines to the future energy paradigm. He



The devoted team of SPWLA-IGUP Student Chapter, Pakistan, with (from left) Miss Gull Fatima, Miss Syeda Fakiha Ali Zaidi, Miss Ayesha Ejaz, Miss Maha Ali Haider, Mr. Shan Shahzad, and Mr. Muhammad Hamza



The group picture of winners of the ISPC-23 with the director and the judge of the contest. (From right to left) Miss Maha Ali Haider (President), Muhammad Maaz Ali (2nd Position), Mr. Dilshad Raza (1st Position), Dr. Naveed Ahsan (Director), Mr. Muhammad Zahid (Judge), Mr. Shan Shahzad (Vice President) and Mr. Muhammad Ali (Colleague).

**Upcoming Events**

SPWLA IGUP Student Chapter-Pakistan is planning to organize webinars, hands-on software training for students, and a geological field excursion. The detailed tentative plan for the year (2022–23) is as follows:

Sr. No.	Upcoming Events	Timeline
1.	Field Excursion	1st week of May 2023
2.	Hands-on Software Training	3rd week of May 2023
3.	4th Episode of Webinar Series	1st week of June 2023
4.	Elections	3rd week of June 2023

**More details about the upcoming events will be updated on our social pages:**

**LinkedIn:** <https://www.linkedin.com/in/spwla-igup-student-chapter-pakistan-57b116219/>

**Facebook:** <https://www.facebook.com/SPWLA-IGUP-Pakistan-107338908181070>

**Contact Details:** [spwla.igup.pak@gmail.com](mailto:spwla.igup.pak@gmail.com)



further said that the standard of living is directly proportional to individual energy use. Over the last few decades, energy consumption and the standard of living have seen an uptick. The challenge is to make the growing energy demand more and more accessible and affordable. Dr. Quintero stressed that the hard data from logging and petrophysics are central and pivotal to addressing the growing energy needs. Elaborating on “why do we do what we do,” he said that we have to change the way we approach exploration and production of hydrocarbons and attempt to look for what we cannot see. The absorbing keynote address set the tone for a two-day technical conference.

Ms. Jennifer Market, SPWLA President-Elect, shared the purpose and goal of the international organization. She highlighted the various global distinguished speakers with whom the fraternity could interact and understand the latest developments in the industry. She also informed us about the various Special Interest Groups (SIGs) of SPWLA, which work on finding solutions to the various challenges being faced by the industry. Ms. Market also highlighted the grants/scholarships given by SPWLA to students and educational institutions for research in the field of well logging. Commenting on the role of logging, she said it is not only about hydrocarbons but energy in general.

During the inaugural session, the Lifetime Achievement Award was conferred on Mr. Dinesh Chandra (former President SPWLA India and ex-chief of Logging Services, ONGC) for his outstanding contribution to the domain of logging and petrophysics in the Indian context.

There were six technical sessions that thematically covered the entire gamut of the E&P industry life cycle through the sub-themes titled “Integrating Petrophysics in De-risking Exploration,” “Maximizing Asset Value in Brown Fields and Mature Basins,” “Testing, Completion, and Well Surveillance,” “Geomechanics in E&P Life Cycle,” “Hydrocarbon to Low-Carbon and No-Carbon: Attaining Financial Resilience in New Energy Paradigm,” and “Value Unlock From AI/ML Insights and Emerging Technologies.” With common objectives to understand better, quantify more precisely, reduce the risk, explore and expand our horizon, a total of 18 oral papers and 40 digital poster presentations covering studies and works from different genres and disciplines, with different perspectives and novel approaches were delivered by authors from different organizations of the E&P industry. Each session started off with thought-provoking and intriguing technical presentations by eminent and accomplished keynote speakers from across the globe.

The first technical session on “Petrophysics in De-risking the Exploration” was flagged off with an address

by exploration stalwart Sri R K Srivastava (former director (Exploration), ONGC and present advisor to DGH India). His vast experience and objective-oriented visionary outlook inspired the audience to reinvent themselves for new ideas. He underlined that petrophysics have had an important role from the beginning to where we are today in understanding the storage capacity of rock, its flowability, pore size, pore throat, and its spatial distribution. Ms. Jennifer Market, in her session keynote address, precisely outlined the role of petrophysics in light of the unique nature of the E&P industry, complex and unconventional regimes as well as in the new energy paradigms. The three oral papers in the session deliberated on interesting case studies primarily from seismic, geological, and petrophysics domains with the integration of other G&G disciplines for refined understanding and characterization. Also, six comprehensive studies were part of the poster presentation and intense deliberation.

The second technical session keynote by Mr. Tarik Abdelfattah (reservoir technical service director from M/s Baker Hughes) highlighted the criticality of subsurface data integration in brownfield development issues and discussed possible solutions to overcome them by using time-lapse multidisciplinary data. Integration of data sets and revisits was emphasized to develop better workflows, optimized well design, and suitable interventions to maximize the recovery. Case studies on an integrated approach for improving recovery in heterogeneous formations, the critical role of layer-wise formation pressure in understanding the fluid dynamics, and, in turn, designing effective commingled completions in multilayered reservoirs and new age analysis behind casing measurements were truly engaging. Along the same line, the deliberations during poster sessions included case studies across disciplines.

The keynote for the third session on “Testing, Completion, and Well Surveillance” was given by Mr. Pavan Srivastava (regional product manager from M/s Expro). The presentation titled “Wireless Monitoring and Advanced Reservoir Testing” aptly underlined the importance of well testing and cost savings by TCP/DST for investigating reservoir continuity, drainage area, nearby boundaries, and extent of reservoir compartmentalization. Interesting papers relating the usage of production logging in diagnosing and improving production petrophysics into customized cement slurry designing and intelligent use of crossfire technology were discussed during the oral presentations.

The third technical session marked the end of the day of activity on day one. After the action-packed first day with absorbing knowledge-sharing sessions, SPWLA India hosted a vibrant Cultural Evening for all the attendees. The cultural



program, which lasted for 2 hours, showcased a beautiful confluence of rich Indian cultural heritage involving artists from across the country who presented classical dances, folk dances, and spiritual performances. Mr. Stephen Devassy, the renowned pianist, left the audience enthralled with his electrifying performance. The cultural evening was followed by a networking dinner organized by SPWLA India for all the participants. The refreshing evening geared up the participants for the next day's activities in the remaining three sessions.

The fourth technical session keynote was by Ms. Jennifer Market on "Advances in Geomechanics for the Full Life Cycle: Energy and Mining." She emphatically defined geomechanics as the backbone of petroleum exploration and production for both conventional and unconventional reservoirs and the energy transition. She described how conventional geomechanics applications have evolved over the years and how these can be applied and extended to unconventional reservoirs (tight reservoirs, traps, basement, etc.). She also cited how geomechanics is significant in the assessment of the storage component of CCUS. The case studies in three oral papers and six digital poster presentations highlighted the role of geomechanics in optimizing drilling, frac delineation, basement characterization, HF designing, assessment of cap rock integrity in CCUS and EOR, etc. The case studies presented in the poster presentation as well evoked a very good response.

The session on "Hydrocarbon to Low-Carbon to No-Carbon: Attaining Financial Resilience in New Energy Paradigm" was planned with the burning and contemporary theme. The keynote was presented by Mr. Rinat Batyrshin (business line director – Evaluation Reservoir performance division, M/s SLB). His keynote titled "The Role of E&P in Supporting Energy Transition and De-carbonization – A Global Perspective" addressed the need and mode for de-carbonizing the industry by bringing and using the new innovative technologies for reducing the carbon footprint with new energy systems and embarking on digital initiatives. The session brought overwhelming participation with various facets and research areas presented from the field of CBM, gas hydrate, geothermal, H<sub>2</sub> initiatives, and CCUS in oral and poster sessions.

The sixth session keynote address by Mr. Vinay Malhotra (managing director, SLB-India, Bangladesh, and Sri Lanka) was on the topic "Role of Digital in Creating a Value Unlock From Emerging Subsurface Characterization Technologies." He mentioned that there is still a growing demand for fossil fuels, even though the world is talking about energy transition and moving towards net-zero goals. But the need of the hour is to have an improvement in technologies to reduce emissions

and bring more efficiency in oil and gas operations in such a way as to produce more hydrocarbons with a smaller carbon footprint. He brought out the role of artificial intelligence (AI) and machine learning (ML) in the pervading data-driven world to our energy vantage. The interesting papers on AI/ML and newer and innovative outlooks to see our data in a new light are the need of the hour. All papers presented in oral as well as poster sessions evinced a lot of interest and interactions.

All the papers from the oral category and digital posters category were evaluated by chairs and co-chairs involving industry veterans, domain experts and special invitees from abroad. All the papers were evaluated on multiple criteria, such as presentation skills, content clarity, the innovative approach adopted, and value addition. Based on these evaluations, the Best and Runner-up Awards were given in each category for the extra effort put in by individuals. The Best Paper in Oral Category was awarded to Ms. Srinivasabharathi VK for her paper on "Integrated Analysis of Deep Shear-Wave Imaging, High-Resolution Resistivity Imaging, and Geomechanics for Identification Sub Seismic Features – A Case Study From KG Offshore Basin, India." Runner-up in this category was Mr. Phoolchand Mahato for his paper "Enhancing the Efficacy of Hydraulic Fracturing Job for Production Improvement of Tight Oil Shaly Sands of Mandhali Formation of Cambay Basin, India Through Reservoir Characterization and Integrated Geomechanical Studies." Mr. PT Shaji was awarded Best Paper in the Digital Poster category on the topic "Critical Factors Affecting the Pulsed-Neutron Saturation Monitoring Log Analysis – Lessons Learned From the Case Studies of Brownfields in Cauvery Basin," and the Runner-up in the Digital Poster Category was Ms. Komal Chauhan for her Paper "3D Pore Pressure Estimation of Prospective Locale of KG Area for Future Well Planning."

Apart from technical sessions, the exhibition stalls got an enthusiastic response from different Indian and international companies as well as technical societies from the E&P industry. A total of 14 exhibition booths were reserved by Baker Hughes, Halliburton, Altus Intervention, Paradigm, NOV, Parveen Industries, SLB, Antares, HLS Asia, Welltec, Kappa Engineering, SPG India, and APG India to showcase their competence, technological advancements, and activities. The innovative approaches adopted by exhibitors caught a lot of attention from the participating delegates. The exhibition booths were also evaluated by experts on various parameters, and the "Best Exhibitor" award was conferred on M/s Baker Hughes.

As a prelude to the symposium, under the banner of SPWLA India, student engagement programs were conducted for the first time. These programs were conducted at

Ahmedabad, Kakinada, Rajahmundry, Nazira, and Dehradun with the sole sponsorship of the Indian national oil company (ONGC) and support of global service companies. In these programs, the students, the future workforce of the industry who are pursuing their graduation/post-graduation from reputed universities of India, were provided with industry exposure and kindled their interest in the latest technological developments. More than 100 students from renowned institutes/universities participated in the industry-academia engagement. Among them, 10 students were shortlisted for complimentary participation in the symposium.

Prior to the main conference, five pre-conference courses were also conducted by global industry experts on advanced topics from different facets of petrophysics and well logging, viz. "Value Addition Through Formation Evaluation," "Overview of Oilfield Geomechanics," "Advancements in LWD Technology, Role of AI/ML in Petrophysics," and "Perforation Techniques to Improve Production." The course contents were designed to cover the subject in depth and were participated in by industry practitioners. The courses were well appreciated by the participants.

The two-day event was attended by more than 500 participants in the form of industry stalwarts, distinguished speakers, domain experts, invitees, delegates from various E&P companies, service companies, and exhibitors from India and overseas. The keynote addresses by industry experts Luis Quintero, Jennifer Market, Tarek Abdelfattah, Pavan Srivastava, Rinat Batyrshin, Vinay Malhotra, and senior management from Baker Hughes and Halliburton joined the conference across continents and raised the bar of the symposium. SPWLA India hopes that the shared experiences, knowledge, networking, collaboration, and new innovative ideas gathered from the two-day-long technical conclave with intense deliberations will take us to a more efficient and sustainable growth curve. Special mention goes to all the sponsors, exhibitors, authors, and participants who played a vital role in making the symposium a grand success.



Dignitaries release technical proceedings.



Inauguration of Exhibition and Digital Poster Session.



Auditorium packed with participants.





Dignitaries at the Digital Poster Session and Exhibition booth.



Technical Sessions in progress.





Technical Sessions in progress.

**JAPAN FORMATION EVALUATION SOCIETY (JFES)**

**Recent Events**

**13 April 2023—The 120th Chapter Meeting** was held as a hybrid event. We welcomed 66 audience members and three lecturers for a series of technical presentations, which were followed by lively discussions.

**Presentation 1**

“Magneto-Telluric (MT) Method for Geothermal Resource Developments”  
 INAGAKI Haruhiro (West Japan Engineering Consultants, Inc.)

**Presentation2**

“Conceptual Model of Geothermal System and Geothermal Resource Study”  
 SOEDA Yoshio (West Japan Engineering Consultants, Inc.)

### Presentation3

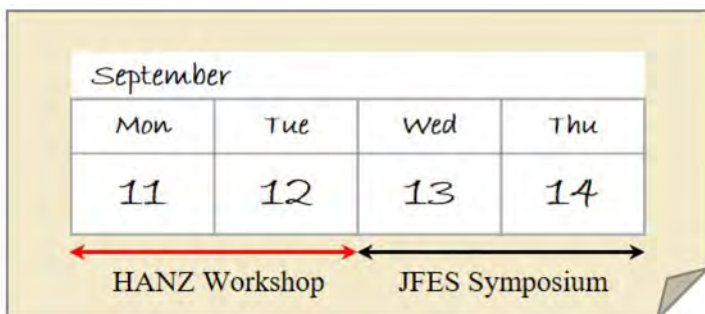
“Capturing Transient Phenomena in Fracture Type Geothermal Reservoir and Its Applications Using DTS”

IKEDA Naotsugu (West Japan Engineering Consultants, Inc.)

### Upcoming Events

**Late May 2023**—Distinguished Lecture

**11–12 September 2023**—**JFES Symposium collaborates on High Angle and Horizontal Wells (HAHZ) Workshop.** High Angle and Horizontal Wells (HAHZ) Special Interest Group and Japan Formation Evaluation Society (JFES) committee would like to invite all to join the 2023 HAHZ workshop at the Japan Oil, Gas and Metals National Corporation – Technology & Research Center (JOGMEC-TRC), Chiba, Japan. [https://www.spwla.org/SPWLA/Chapters\\_SIGs/SIGs/HAHZ/HAHZ.aspx](https://www.spwla.org/SPWLA/Chapters_SIGs/SIGs/HAHZ/HAHZ.aspx)



This workshop is open to all SPWLA, affiliated, and non-SPWLA members. We aim to facilitate knowledge sharing and multidiscipline collaboration specific to high-angle data acquisition, well placement, and evaluations.

<https://www.spwla-jfes.org/>

Email: [info@spwla-jfes.org](mailto:info@spwla-jfes.org)

### NORWEGIAN FORMATION EVALUATION SOCIETY (NFES)

#### General News

#### NFES joins the Region Stavanger Ambassador Program

On March 29, 2023, the Region Stavanger Ambassador Program appointed NFES President Mathias Horstmann as one of their ambassadors. On behalf of NFES and as the 63rd Symposium chair, he was awarded this prize, which goes to the region’s foremost representatives in academia, research, sports, the health, public, and various industry sectors for

their efforts contributing to more congresses, fairs, sports championships, and cultural events in the Stavanger region.

The mayor of Stavanger, Kari Nessa Nordtun, emphasized the importance of the initiatives and thanked the ambassadors for the enormous efforts they have put in to bring events to Norway and the Stavanger region. “We are here to pay tribute to these great ‘Yes-we-do’ people of our region! Through their efforts and dedication, these people showcase the Stavanger region and make it even more attractive. Their work creates value and long-term synergies that will benefit our region for many years – and which in turn will create new opportunities for the next generation.”

Mathias will represent the energy sector in his term and supports individuals and organizations to increase awareness of geoscience and formation evaluation within the evolving energy framework. Getting more conventions or meetings in various scales to the region will have ripple effects in such an innovative business community. Stavanger’s international environment, with enterprising academia in combination with the spectacular scenery, is a great combination to embody!



NFES board members with the Stavanger Mayor Kari Nessa Nordtun (second from left). Joining the award ceremony were Dier Mirza, NFES President-Elect and VP Membership (left), Torunn Hana, NFES VP Finance (third from left), and NFES President Mathias Horstmann (right).

#### Recent Events

#### Monthly Technical Meeting March 2023

**8 March 2023**—To close the first quarter of 2023, March’s technical luncheon encompassed a talk by Øystein Meling (Baker Hughes) presenting his “Experience with CICM (Casing Integrity and Cement Mapping) on the NCS; Drillpipe-Conveyed Ultrasonic Casedhole Logging.”



Øystein explained the CICM technology of the world’s first ultrasonic sonic drillpipe-conveyed logging tool. He elaborated on the technical features, its applications, and many lessons learned through case studies after its 18 months of operations on the Norwegian continental shelf. Thank you, Øystein, for this great update on evolving casing integrity logging technology – tusen takk!



NFES Technical Meeting March 2023 in Stavanger. Venkat Jambunathan (left), NFES VP Program, presents to Øystein Meling (Baker Hughes) the NFES ice bear in gratitude for his well-attended and delivered presentation.



NFES Technical Meeting February 2023 in Stavanger. Inge Bye (right) (BDM with Well ID) receives his keepsake for a great talk from Venkat Jambunathan (left), NFES VP Program.

**Monthly Technical Meeting April 2023**

**12 April 2023**—The technical presentation was given by Inge Bye (Well ID) with a new technology introduction of their “4D Radar Imaging of Wellbore Geometry While Drilling” tool, which enables to effectively determine the wellbore shape and size for large hole sizes while drilling. This novel electromagnetic LWD tool can measure the borehole shape and size in large holes (> 12.25-in. hole size), and Inge presented great images and 3D/4D visualization examples of wellbore shapes and size measurements, and its comparison of time-lapse intervals from ream or POOH passes, The evaluation of the time-lapsed measurements clearly showed developments and occasionally failing wellbores as a function of time. Great technology developed here in Stavanger, which clearly adds value to overcome challenging overburden and transport sections! A very interested audience enjoyed this technical meeting and had great networking at a fantastic Easter buffet in the Solastranden Gård.

**Upcoming Events**

**3 May 2023**—Please follow us for further information on nfes.org and our LinkedIn sites for the May meeting taking place on May 3 at 11 am in the Solastranden Gård.

**OKLAHOMA CITY CHAPTER**

**Recent Events**

**11 April 2023**—Jarret Borell and Josh O’Brien (Devon Energy) presented “Characterizing and Delineating Mass Transport Deposits in the Delaware Basin: An Integrated Workflow Using Image Logs and Core.”

**21 April 2023**—Carbon Capture Technical Exposition



## PETROPHYSICS DATA-DRIVEN ANALYTICS (PDDA) SIG

### Recent Events

#### SPWLA PDDA Annual ML Competition

The SPWLA PDDA SIG has started our third annual Machine-Learning Competition! This competition event is a great opportunity for participants to learn, collaborate, and network with other like-minded individuals who share a passion for machine learning. The event involves a well-log depth shift problem that is an essential task for every petrophysicist and well-log analyst. We believe that this competition event can be an excellent platform for participants to showcase their expertise in machine learning, meet other professionals in the field, and gain recognition for their work. The key dates for the 2023 ML competition are:

- **March 31, 2023:** Competition starts, and data releases on GitHub
- **May 26, 2023:** Submission deadline
- **May 31, 2023:** Announce winners
- **June 15/16, 2023 (tentative):** Award ceremony and presentations in the special session of the SPWLA Topical Conference at Houston.

We are still accepting ML enthusiasts to join the competition! To register, email [pdda\\_sig@spwla.org](mailto:pdda_sig@spwla.org) with team information (team name, member names, affiliations, and emails) to get the submission URL. More information can be found at the below link:

<https://github.com/pddasig/Machine-Learning-Competition-2023>

#### SPWLA PDDA SIG Workshop

**11 June 2023**—Our PDDA SIG will host a **workshop** at the Annual Symposium in Conroe, TX. This will be a one-day course from 8 am to 4:30 pm, and the list of instructors and their topics as summarized below table.

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

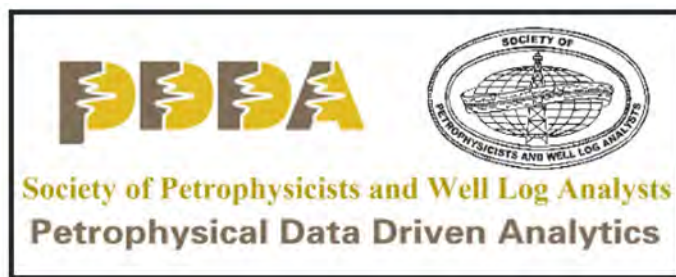
The workshop will introduce machine learning, lay out sample workflows and steps for ML applications, and summarize some of the use cases in the industry. Hands-on tutorials using no-code tools to analyze a publicly available data set will also be provided. Attendees will gain insight into the real-world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

<https://www.spwlaworld.org/2023-workshop-7/>

#### Sponsorship Opportunities

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

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

#### and the PDDA SIG LinkedIn profile

<https://www.linkedin.com/groups/13605420>

**Stay tuned!**

## PERMIAN BASIN CHAPTER

### General News

Our last technical talk was Tuesday, March 28, with Ben Johnson (USGS) presenting “Mapping Post-Permian Rocks From the Marfa Basin into the Delaware Basin: Aa Synthesis Using Geological Maps, Cross Sections, and Sample Logs From Wells.”



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



(From left to right) Jennifer Reeves (Applied Petroleum Technology (APT), Secretary, Erik Rylander (Tap Rock Resources visiting from Denver), Christopher Smith (Advanced Hydrocarbon Stratigraphy, Vice President, Bryan McDowell (Sabata Energy), Veronica Montoya (Axiom Petrophysics LLC), President, and Jennifer Reeves (APT), Secretary. **Missing:** Islam Mitwally (FractureID), Social Media Communications, and Sebastian Ramiro-Ramirez (Diamondback Energy), Treasurer.

**Recent Events**

Past Monthly Meetings

Date	Speaker	Title
February 28, 2023	Doug Hardman	Optimizer Development Strategies by Leveraging Log, Core, Microseismic, Geochemistry, and Simulation Data
March 28, 2023	Ben Johnson	Mapping Post-Permian Rocks From the Marfa Basin Into the Delaware Basin: Aa Synthesis Using Geological Maps, Cross Sections, and Sample Logs From Wells
April 25, 2023	James Greene	Integration and Upscaling of Core-Based Relative Permeability Measurements Into Petrophysical and Geological Modeling: A Case Study of the Delaware and Midland Basins

**Upcoming Events**

Upcoming Monthly Meeting 2023

Date	Speaker	Topic
May 23, 2023	Dana S. Ulmer-Scholle	Developing Class VI Injection Permits: Is It Different From Developing Prospects?



## SAUDI ARABIA CHAPTER

## Recent Events

**8 March 2023**—SPWLA Saudi Arabia Chapter (SAC) conducted its first nationwide Student Paper Contest, which includes all three divisions: BS, MS, and PhD, with students from King Fahd University of Petroleum & Minerals (KFUPM) and King Abdullah University of Science and Technology (KAUST). The students' research papers were evaluated by judges from Saudi Aramco and major service companies based on technical merits, relevance to petrophysics, and skills of presentations. Winners of the Student Paper Contest are Mohammed Alyousef (KFUPM) for the Bachelor division, Zhen Zang (KAUST) for the Masters division, and Mohammed Isah (KFUPM) and Evgeny Ugolkov (KAUST) for the PhD division.

**9 March 2023**—A day after the Student Paper Contest, SPWLA SAC organized a YP event with the theme of "Success Your Way." This unorthodox event brought together about 100 students from seven universities across the Kingdom, including KFUPM, KAUST, King Saud University, King Faisal University, Imam Abdulrahman Bin Faisal University, Prince Mohammad bin Fahd University, and Alasala University. The event started with an informative panel discussion discussing the development of people and the future of the industry with Mr. Richard Palmer (Saudi Aramco petrophysics professional development advisor), Dr. Wael Abdallah (director of SLB Dhahran Carbonate Research Center), and Dr. Theis Ivan Solling (professor of KFUPM and director of Integrative Petroleum Research Center at KFUPM), moderated by MS. Ghadeer Alsulami (SPWLA SAC VP for YP programs). The panel session was followed by a knowledge-sharing presentation by Mr. Nader Ajlan of SLB HR, who showed students tricks and lessons learned in preparation for job searching resumes and tips for professional growth. Before completing the YP event, the students were divided into a dozen groups, each led by a selected mentor, for an "Ask The Expert" face-to-face discussion of technical issues as well as concerns about professional developments in the industry. Close engagement like this was very much welcomed by all participating students.

In addition, Student Paper Contest winners were revealed at the Day 2 YP event. Each winner was honored with a trophy, and all participants were acknowledged by an SPWLA SAC certificate. This two-day program was wrapped up with student tours of research and operational laboratories at SLB, Baker Hughes, and Halliburton facilities in Dhahran Techno Valley, Saudi Arabia.



SPWLA SAC Student Paper Contest on March 8, 2023.



SPWLA SAC Success Your Way event on March 9, 2023.

**15 March 2023**—SPWLA Saudi Arabia chapter held a lunch and learn session conducted by SLB Well Integrity domain champion Abderrahmane Benslimani who gave a talk titled "Through-Tubing Cement Evaluation Workflow Using Machine Learning: What If You Can Assess Your Cement Integrity Behind Two Casing .... And Rigless?" Abderrahmane explained how it is now possible to evaluate dual-string barriers leveraging a combination of deep-array multimode sonic measurement (0.5 to 20 kHz) and multimodality ultrasonic measurement (100 to 500 kHz) with a case study. Lunch was provided by SLB following a Q&A session.





SPWLA SAC technical seminar – a technical talk by Abderrahmane Benslimani on March 15, 2023.

**UFRJ STUDENT CHAPTER**

**General News**

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

Board members:

- President: Gabriel Ferraz
- Vice president: Guilherme Lontra
- Treasurer: Sofia D’Orsi
- Secretary: Diana Tabach

Executive members:

- Bruno Valle
- Teresa Mourão
- Rodrigo Azambuja
- Iago da Costa
- Sarah Aleixo

Marketing members:

- Renan Camilo

Logistic members:

- Alexandre Nobre
- Enzo Borges

**Recent News**

We have been organizing an event in partnership with other UFRJ student chapters that consists of a presentation for geology students about the student chapters of UFRJ, aiming to disclose our activities and projects to attract more members, so we are going to open our selective process right after this event.

Recently, we contacted Laura Lima Angelo dos Santos, an ex-member of the chapter, and she accepted an invitation to give a presentation for the chapter. The presentation

would be similar to the one she gave to SPWLA global, called “Unsupervised Facies Pattern Recognition of Brazilian Presalt Carbonate Borehole Images.”



Flyer from SPWLA International about the presentation of Laura Lima Angelo dos Santos that occurred in February.

**Upcoming Events**

We managed to contact a Petrobras member to give us a presentation about natural hydrogen as a new energetic vector and exploratory frontier. We are trying to make this a presentational event that will occur in the next month.

Also, we are going to continue our post series of “O que é?” to make the chapter more active on social media and to disclose the petrophysics concepts for the society.

**UIS STUDENT CHAPTER – COLOMBIA**



**SPWLA UIS  
STUDENT CHAPTER**

COLOMBIA

Social Networks:  
@SPWLAUIS  
Instagram / YouTube / LinkedIn / Facebook

**Board of Directors**

**President:** Anngy Daniela Román O. Email: presidencia@spwlaui.com

**Vice president:** Karen Julieth Rojas O. Email: vicepresidencia.spwlaui@gmail.com

**Fiscal:** Julian David Anaya F. Email: fiscal.spwlaui@gmail.com

**Secretary:** Silvia Juliana Franco A. Email: secretaria.spwlaui@gmail.com

**Treasurer:** Lizeth Vanessa Blanco D. Email: contador.spwlaui@gmail.com

**Recent Events**

**8 April 2023**—A virtual meeting was held with the Board of Directors of SPWLA Argentina, where different topics of interest, such as the methodology of both groups, data processing, group operation, membership systems, activities, etc., were exchanged. In addition to sharing experiences, they had the opportunity to get to know the team as individuals, where each of the groups shared experiences in favor of improvement. Each of the groups had the opportunity to explain the functioning of the group and the Board of Directors and discussed ideas for mutual growth and future support for the growth of SPWLA Colombia and SPWLA Argentina.

**29 and 30 April**—We held the course “Petrophysical Characterization of Oil Reservoirs” by the geologist, master in oil and gas engineering Julian De Bedout. This course covered the fundamentals of petrophysics in reservoirs, geology, and models focused on petrophysics accompanied by digital tools. In addition, the course will be practical, where basic calculations will be performed addressing the concepts of geology and petroleum systems. At the end of the course, you will be able to recognize: the presence of oil and gas in rocks during (or after) drilling, how oil and gas are stored in rocks, and the tools that help to identify them. Also, you will understand laboratory tests applied in the field as well as models of rock types and the calculation of petrophysical variables.



**SPWLA UIS/ Social Networks LinkedIn:**

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

**Instagram:** <https://www.instagram.com/spwlaui/?hl=es-la>

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

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

**UNIVERSITAS PERTAMINA STUDENT CHAPTER**

**General News**

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

In order to keep up with each other, we usually held a monthly meeting on the second week of the month. We hope to improve and develop either hard or soft skills to prepare students to face a new journey in life—the work-life journey. In the year ahead, we will hold many work programs internally and for the public. Kindly follow us on our social media @spwla.upsc on Instagram!

**Recent Events**

**24 February 2023**—The SPWLA Fun Vol. 2 was successfully held offline and was well attended by officers of SPWLA Universitas Pertamina SC with the theme Hide & Share. The event was held by the Human Resources Department to keep up with other officers and to bond with each other to build stronger relationships.





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

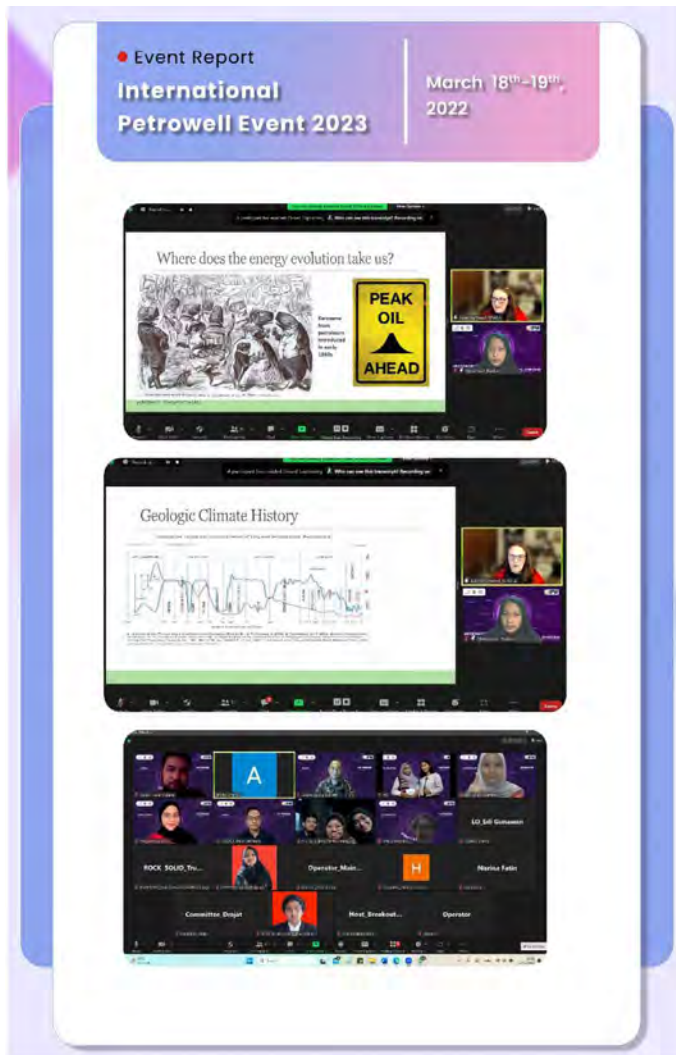


The benchmark event was successfully held and attended by both organizations' officers.

**11 March 2023**—Talk that Talk: Benchmark with SPWLA BatStateU SC: This benchmark event with SPWLA BatStateU SC was successfully held virtually. The purpose was to exchange insight and culture from each other's organizations. The benchmark was well attended by both organizations' officers.

**19 March 2023**—International Petrowell Forum: Our annual international event, named the Annual Symposium IPW 2023, was held virtually using Zoom. The event's speakers were Ms. Katerina Yared, SPWLA 63rd President, and Dandi Alveyed, an alumna who received the Petroleum Master Scholarship Awardee at King Fahd University. We also had the awardee night for the Petrowell Study Case Competition as we did for the previous competitions.



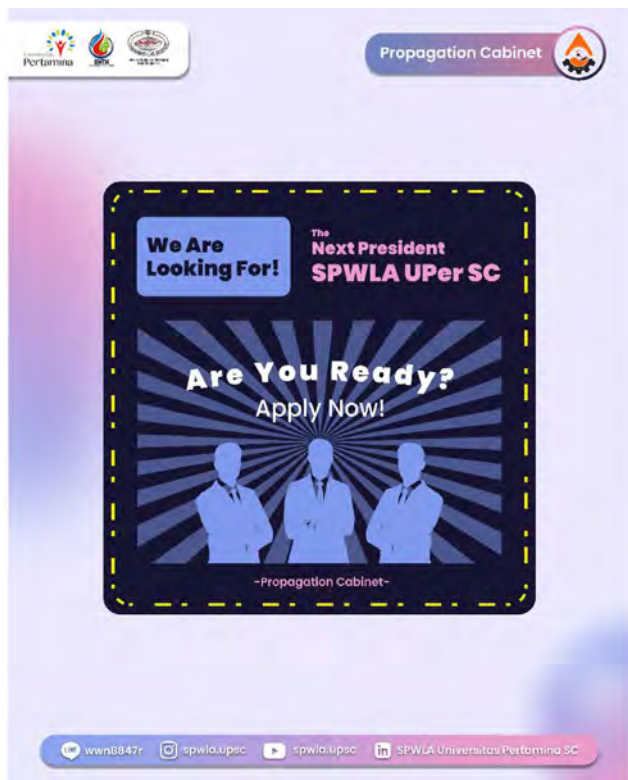


### Company Visit Goes to ExxonMobil Cepu Limited

The company visit was held offline by the officers in order to get a closer look at the work culture and company knowledge of ExxonMobil Cepu Limited. The event included approximately 60 people from the technology of exploration and production faculties. This is a new era to build collaboration between the Universitas Pertamina and ExxonMobil Cepu Limited.

### Upcoming Events

**SPWLA UPer SC President Election:** As the end of the Enhanced Cabinet 2022/2023 is nearing, we are preparing for a new chapter for the SPWLA UPer SC. As we mentioned before, we will be holding an election soon. We are looking forward to it soon!



SPWLA UPer SC President Election poster.

## THE UNIVERSITY OF TEXAS AT AUSTIN STUDENT CHAPTER

### General News

The Student Chapter of SPWLA at UT-Austin had a busy semester full of events, including several Distinguished Speaker seminars and the Internal Student Paper Contest.

### Recent Events

#### UT SPWLA organized the following technical talks:

- 2 March 2023**—A technical seminar by Vanessa Simoes entitled “Deep Learning for Multiwell Automatic Log Correction.” Vanessa is a team leader at SLB and one of the 2022–2023 SPWLA Distinguished Speakers.
- 10 March 2023**—A technical seminar by Marco Pirrone entitled “CCUS in Mature Fields: How Core-to-Log Data-Driven Analytics Enhances Mechanistic Models for the Purpose of Reservoir and Caprock Mineralogical Characterization.” Marco is a petrophysics team leader at ENI and one of the 2022–2023 SPWLA Distinguished Speakers.
- 23 March 2023**—A technical seminar by Laura Lima entitled “Unsupervised Facies Pattern Recognition of Brazilian Presalt Carbonate Borehole Images.” Laura is an interpretation development engineer at SLB and one of the 2022–2023 SPWLA Distinguished Speakers.

- 13 April 2023**—A technical seminar by Olga Podgornova entitled “Full Waveform Inversion of Fiber-Optic VSP Data From Deviated Wells.” Olga is a research scientist at SLB and one of the 2022–2023 SPWLA Distinguished Speakers.
- 21 April 2023**—We had our final technical seminar for the spring semester. We collaborated with two other student chapters to host a talk entitled “Carbon Capture and Storage: Technical Insights, Experience and Lessons Learned” by Kousic Kanneganti, who is a technical team lead, carbon and geothermal, for US Land (USL) Digital & Integration (D&I) in SLB.

All the talks were presented at the University of Texas and streamed via Zoom and were also available for all interested attendees, whether they were affiliated with UT Austin or not. The accessibility of the talks resulted in more interactions and questions from both in-person and virtual attendance.

### UT SPWLA YouTube Channel

UT SPWLA team created a YouTube channel for the chapter, where recorded talks are uploaded afterward and can be viewed by any interested audience (no registration required). You can subscribe now at [www.youtube.com/@spwla-utaustin!](https://www.youtube.com/@spwla-utaustin)

### Internal Student Paper Contest

We held our Internal Student Paper Contest on Tuesday, April 4. The contestants gave amazing presentations that showcased their impactful research. Congratulations to Landon Lockhart and Julio Cesar Villarroel for winning first places in the PhD and MS divisions, respectively. We wish them the best of luck in the upcoming international competition.

We would also like to express our gratitude to all the participants for their excellent presentations: Dany Hachem, Esmail Eltahan, and Feiyue Xia, and a special thank you to our dedicated judges Prof. Dr. Carlos Torres-Verdín, Prof. Dr. Zoya Heidari, and Dr. Wardana Saputra for their valuable time.

**Student name:** Landon Lockhart

**Paper title:** “Velocity-Based Pore Pressure Prediction With Late-Stage Erosion: Delaware Basin, US”

**Student name:** Dany Hachem

**Paper title:** “Wettability Alteration Using Silane to Improve Water-Alternating-Gas Injectivity”

**Student name:** Feiyue Xia

**Paper title:** “Finite-Difference Modeling of Multipole Acoustic Logging in Cracked Porous Formations”



**Student name:** Julio Cesar Villarroel

**Paper title:** "Accounting for Exterior Flow Using the Modified Logistic Growth Model for Unconventional Geopressed Shale Reservoirs"

**Upcoming Events**

Over the summer, we are planning to organize a Danomics Petrophysics Software Training by Cameron A. Snow, who is a co-founder and subsurface lead at Danomics, LLC.



UT SPWLA Team in a group photo with Vanessa on March 2, 2023.

**UT SPWLA Technical Session Series**  
Distinguished Speaker Program  
**DEEP LEARNING FOR MULTIWELL AUTOMATIC LOG CORRECTION**  
Vanessa Simoes  
Team leader, log quality control and improvement projects in the Digital Subsurface Intelligence  
**SLB, Houston**

Biased or consistently inaccurate data in the logs can confound ML approaches into learning erroneous relationships, which leads to inaccurate lithology prediction, reservoir estimation, and incorrect formation markers, etc. To overcome such difficulties, we have developed a deep learning method to provide petrophysicists with a set of consistent logs through an automated workflow. Presently, the corrections we target are systematic shifts or errors on the common logs, especially gamma ray and neutron logs, and to a lesser extent, local errors due to washouts. This workflow can be separated into two steps. The first step represents a semiautomated approach for selecting wells to be used as training and validation; this approach employs statistical analysis to detect and segregate wells with similar log distributions. The second step is the core process of this workflow. It samples intervals across multiple logs identified by the first step and trains a convolutional neural network (CNN) with a U-Net architecture to identify and correct systematic errors such as shifts, gains, random noises, and small local disturbances. The training process is self-supervised and does not require any human labels. This self-supervised deep learning methodology is capable of automatically discovering unique implicit features and contextually applying the relevant log correction. The proposed method has been applied to multiple oil fields around the world

March 2<sup>nd</sup>, 2023    12:00 – 01:00 PM (CT)    GLT. 4.102    Zoom Meeting    REGISTRATION

Publicity flyer for our second Distinguished Speaker Seminar for 2023 by Vanessa Simoes.

**UT SPWLA Technical Session Series**  
Distinguished Speaker Program  
**CCUS in Mature Fields: How Core-to-Log Data Driven Analytics Enhances Mechanistic Models for the Purpose of Reservoir and Caprock Mineralogical Characterization**  
Marco Pirrone  
Production Petrophysics Team Leader  
**eni**

This paper discusses how an integrated data-driven analytics (DDA), mechanistic petrophysical and mineralogical modeling can enhance the characterization of reservoirs selected for Carbon Capture, Utilization and Storage (CCUS) projects. The approach makes use of exhaustive core datasets to generate synthetic mineralogical curves at wells, hence expanding the available log information. This allows a robust and complete quantitative analysis of storage and sealing intervals through a DDA-informed physics-based methodology. The growth of interest around CCUS pushes towards in-depth analyses of reservoir layers, as well as of the sealing ones. In brown fields the available open-hole (OH) logs might not be enough for a detailed lithological and petrophysical characterization, which is mandatory to establish the storage capacity of the assets. Hence, the proposed methodology starts from X-Ray Powder Diffraction (XRD) core data representative of the field under investigation for both reservoir and non-reservoir sections. Next, DDA is used to generate synthetic volumetric fractions of given minerals after an ensemble learning relating core mineralogy and selected logs. The DDA-based log mineralogy and the other available OH logs are then input for conventional mechanistic models to obtain final petrophysical and mineralogical properties.

March 10<sup>th</sup>, 2023    12:00 – 01:00 PM (CT)    GLT. 4.102    Zoom Meeting    REGISTRATION

Publicity flyer for our third Distinguished Speaker Seminar by Marco Pirrone.



Attendees listening to Dr. Vanessa Simoes's talk.





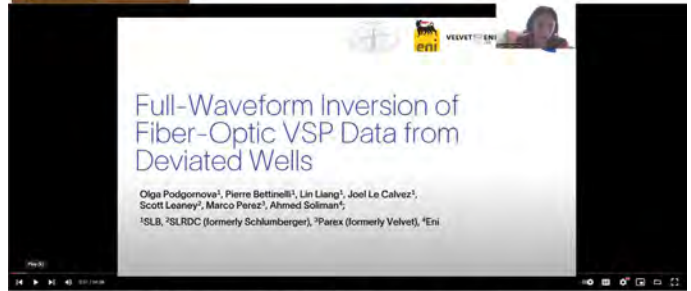
Attendees listening to Dr. Marco Pirrone's talk on March 10, 2023.




Dr. Olga Podgornova presented virtually on April 13, but that did not stop her from taking a wonderful group photo with some of the UT SPWLA team after the seminar.



Attendees listening to Ms. Laura Lima's talk on March 23, 2023.



Check out the UT SPWLA YouTube Channel for on-demand free technical talks at [www.youtube.com/@spwla-utaustin](https://www.youtube.com/@spwla-utaustin).




**UT SPWLA Technical Session Series**

Distinguished Speaker Program


**Full Waveform Inversion of Fiber Optic VSP Data from Deviated Wells**

**Olga Podgornova**


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In this paper, we present a formulation of the modeling and inversion specifically for DAS measurements as an averaged strain along the fiber. The algorithm does not require converting the data to velocities. The gradient of the misfit function, by adjoint formulation, is a cross correlation in time of the forward propagated wavefield and backward-propagated residuals injected from the receivers. For conventional sensors, the residuals are injected as force terms but for DAS data, the residuals are averaged in space first and then injected as moment tensor sources with the radiation patterns determined by the well deviation. For multi-offset in-plane and out-of-plane VSP acquisitions, a 2D algorithm has been developed which inverts for a 2D distribution of elastic medium properties and includes 3D well deviation effects. This paper will present the results of applying the inversion to real multi-offset, highly out-of-plane VSP fiber data acquired in a deviated well. Simulations confirm that the well trajectory has considerable impact on the data amplitude and must be included in the modeling and inversion to reproduce amplitude variations. The inverted compressional and shear velocities agree well with the reference model based on sonic data. Another real data example is a multi-offset walk-above acquisition where a targeted domain is located below a deviated portion of the well. The inversion matches reflections and produces an image in the target area.




April 13<sup>th</sup>, 2023




12:00 – 01:00 PM (CT)



GLT. 4.102



Zoom Meeting



REGISTRATION

Publicity flyer for our fifth Distinguished Speaker Seminar by Olga Podgornova.

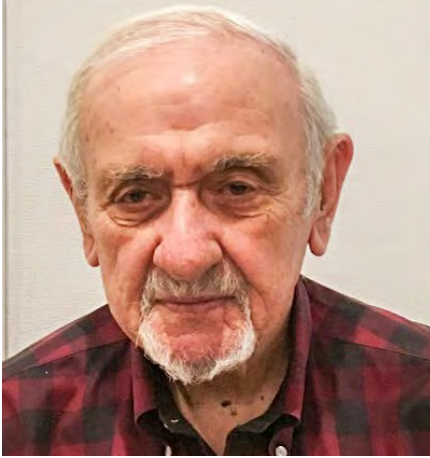


Some photos from the Internal Student Paper Contest.



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### **Marshall S. Levine** (1933–2023)

Marshall S. Levine, forever a free spirit, age 89, of Wayne, Pennsylvania, passed away from natural causes on March 16, 2023, in his cherished home of 53 years.

Born in 1933 in Worcester, Massachusetts, he earned a mechanical engineering degree from Worcester Polytechnic Institute in 1955. Ever the inventor/entrepreneur and always more comfortable at the helm than following orders, he went on to found and co-found multiple companies, including Geometric Data Corporation, a subsidiary of SmithKline; Thermal Data; Numar (which will, of course, be recognized by SPWLA members); Alpha Scientific Corporation; and the Institute for Human Development, a Philadelphia-based nonprofit. He developed numerous medical devices and other instruments with long-term impacts on blood testing, early illness detection, and residential energy conservation. He achieved breakthrough technological success in fields ranging from the use of pattern recognition to optically analyze the morphology of white blood cells to the development of a nuclear magnetic resonance tool in the oil-logging industry, as well as innovative computer-based marketing tools for the fuel oil industry and a line of disposables in the clinical laboratory that have been used billions of times across the globe. A born tinkerer, constantly trying to improve the world around him, he combined technological insight with a keen focus on marketing and business acumen. In recognition of his chutzpah and talent, he received the Robert H. Goddard Award for Outstanding Professional Achievement from his alma mater in 2005.

Generous with his time and treasure, he freely spent his “hard-earned savings” on causes and worthy hopefuls. Marshall made friends wherever he went, collecting strangers of all ages and turning them into close companions. He nurtured the raw talent and ambitions of others through investment in their professional and intellectual pursuits, sharing his wisdom, and making connections. He especially enjoyed the satisfaction of helping people directly: sponsoring an immigrant, securing a scholarship, co-signing a loan to help someone start a business, paying for another’s education, or eliminating someone’s credit card debt with a no-interest loan and a handshake to pay him back (someday). He found tremendous pleasure in the relationships that ensued and the many against-the-odds success stories he helped along the way. His phone frequently rang with prospective entrepreneurs on the other end that had been told, “You got to talk to Marshall.” He became a strategic adviser to many nascent businesses and loved to share his insights. He was notorious for destroying dreams with his “Yeah Buts,” “Watch Out Fors,” and “Brutal Honesty,” believing that it was always better to fail quickly and inexpensively than to waste precious time and money.

Most recently, he had been a valued adviser to an oilfield startup pioneering a logging tool for through-casing formation imaging. He will be missed by his associates at RocViz.

In lieu of flowers, the family asks that you keep his spirit alive—engage with a stranger, make a friend, and if someone needs a hand, find a way to “Marshall” their success. Gifts honoring Marshall are appreciated at any of the following organizations: Summertrios.org, which provided Marshall with so much musical joy; TzedekDC.org, which tackles the problem of health care debt; or SurreyServices.org, which enables independent spirits like Marshall to enjoy living at home as they age.



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**Iqbal, Sohail**, Core Laboratories, Rio De Janeiro, Brazil

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**Mast, Paul**, State Supervision of Mines, Purmerend, Netherlands

**Maure, Carlos**, Universidad Nacional Del Comahue, Neuquén, Argentina

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**Rodriguez, Yerayen**, Halliburton, Porter, TX, United States

**Rojas Lequerica, Salvador**, Kaust, Thuwal, Makka, Saudi Arabia

**Rosero Cepeda, Viviana**, SLB, Alausi, Chimborazo, Ecuador

**Rowaihy, Feras**, KAUST, Thuwal, Makkah Region, Saudi Arabia

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**Zerpa, Jordania**, KAUST, Thuwal, Mecca, Saudi Arabia

**Zhang, Zhen**, KAUST, Jeddah, Saudi Arabia

