spwla today

NEWSLETTER

VOLUME 4 - ISSUE 4

JULY 2021

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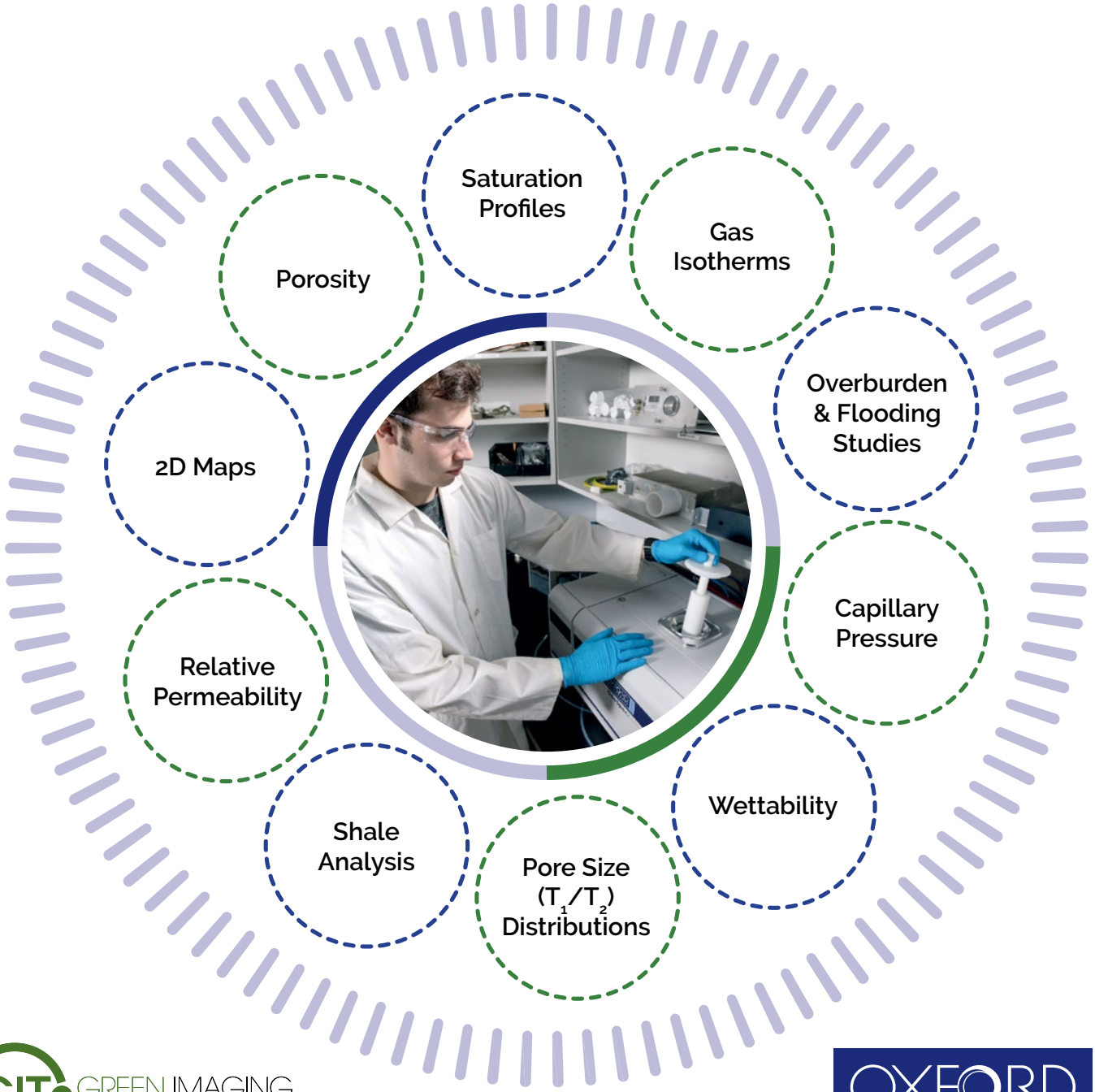

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INSIDE THIS EDITION

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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.

CALENDAR OF EVENTS

September 15–17, 2021
The 12th UPC International Symposium
Hosted by The East China Chapter of SPWLA
Theme – New Well Logging Techniques
www.spwla.org

September 22–23, 2021
Petrophysical Multimineral Analysis Training Series
Instructor – Patricia E. Rodrigues
SeisPetro Geoconsulting
www.spwla.org

September 30–October 1, 7, 8, 2021
The 26th JFES Formation Evaluation Symposium
Virtual Event
Special Session: Integrated Evaluation
http://jfes-spwla.org

October 21–22 2021
SPWLA Topical Conference
Topic – Unconventional Petrophysics
Houston, TX
www.spwla.org

November 10–11, 2021
Petrophysical Multimineral Analysis Training Series
Instructor – Patricia E. Rodrigues
SeisPetro Geoconsulting
www.spwla.org

June 10–15, 2022
SPWLA 63rd Annual Symposium
Stavanger, Norway
www.spwla.org

About the Cover
Set your sights on the SPWLA 63rd Annual Symposium to be held June 10–15, 2022 in Stavangar, Norway! Pictured on the cover is the Pulpit Rock (Preikestolen), one of the many things to see and experience while at the upcoming symposium.

From the President

Katerina Yared
2021-2022
SPWLA President

Dear Petrophysics Friends and Colleagues,

I would like to welcome again everyone on the SPWLA Board of Directors 2021–2022 and thank you for volunteering your time for our members! It is an honor and privilege to be part of this dream team!

This year's virtual 62nd Annual Logging Symposium was well attended, and the platform we used worked well for us. Considering the circumstances, I would call it a successful event. I would like to thank our SPWLA Boston Chapter for hosting our symposium and all the volunteers who worked extra hours and put a lot of effort into making this event flawless. THANK YOU!

In case you missed the symposium or would like to rewatch some talks or workshops, we have them available for on-demand viewing until August. You can find the link to it on our webpage under "upcoming events."

We have reached summer 2021, and I would like to share with you some great events we have coming up.

For the sixth year or so in a row, we have the "Best of SPWLA" special session taking place at the 2021 hybrid URTeC Conference, where we get to highlight some of the best unconventional reservoir-focused papers of our virtual SPWLA 62nd Annual Logging Symposium.

I hope to see you all in Stavanger for our 63rd Annual Logging Symposium!

At URTeC (an unconventional reservoir characterization-focused conference attracting thousands of attendees since 2014), I will be a panelist on the next "SPE Live" event on July 8, talking about the positive impact URTeC has brought to our society and how SPWLA can contribute to the overall success of URTeC with the expertise that only our members can provide. I hope to see you online or at the George R. Brown Center in July!

We thrive when collaborating with others. This year, the SPWLA is also an endorsing society for the American Rock Mechanics Association (ARMA), Dhahran Geoscience Society (DGS), and Society of Exploration Geophysicists (SEG) 2nd International Geomechanics Symposium taking place on 1–3 November 2021 in Al Khobar, Saudi Arabia. They have seen a record number of submissions, which is what great synergy brings.

We continue to provide a high degree of quality training this year with half-day online classes on the subject of multimineral petrophysical analysis, geomechanics, and nuclear magnetic resonance. We will have more classes this year with topics regarding casedhole petrophysics, rock physics, and the use of machine learning in petrophysics. Follow us on our social media channels, and you will stay up to date with the training schedule.

Nobody can deny change is imminent in the oil and gas industry and, in general, in our way of life AC (After COVID). I am embracing the change as it comes because the new way of working is just going to expedite results and deliverables for a more sustainable way of life for all using a diverse pool of energy sources.

However, one thing will remain the same—at the SPWLA, we want to be the place people go to for petrophysics and formation evaluation expertise. The knowledge we share will get more diverse in terms of the final end product (e.g., geothermal vs. an oil and gas well), but our people will remain part of the solution to the new way of life.

Email me your ideas and thoughts at president@spwla.org. I look forward to hearing from you!

SPWLA President 2021–2022
(+1) 720-431-7482
President@spwla.org

From the Editor

Songhua Chen
2021–2022
Vice President Publications

Greetings and welcome to the July 2021 issue of *SPWLA Today*.

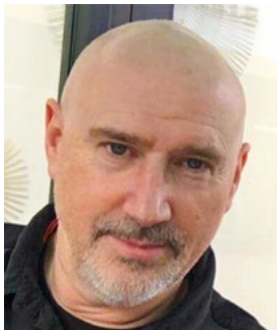
The July issue of the newsletter always features a lot of new information—after a busy season of SPWLA Symposium preparation and delivery, as well as the passing of the gavel from the old board to the new board. We missed the physical in-person gatherings (again!) that we so longed for after such a lengthy pandemic isolation and working from home, but hope is on the horizon. As the world opens up, albeit in different paths around the globe, we are optimistic that next year we will be able to meet and celebrate in the beautiful city of Stavanger, Norway.

The SPWLA 62nd Online Symposium was a great success. Despite being an online event, it had a jam-packed program, including workshops, a student paper contest, and four full days of oral papers in parallel technical sessions. Congratulations to the Technology Committees and specifically to Tegwyn and Fransiska for their wonderful work in bringing us such a successful program. There were many high-quality presentations. I checked my notes—there is a long list of papers I'm planning to read. I am sure you felt the same way.

Good news from the 2020–2021 board meeting—two new student chapters, the Institute of Geology University of the Punjab Student Chapter and the National University of Engineering UNI Peru Student Chapter, have officially joined the SPWLA family. Despite the ongoing pandemic and its impact on our industry, the enthusiasm demonstrated by these university students is the best proof that our industry is vital and resilient. Like the "changing crew" occurring in the petrophysical society, the next generation of petrophysicists has many great opportunities to grow their career. We on the *SPWLA Today* editorial team would like to encourage experienced petrophysicists to share their experience and lessons learned by writing inspiring articles. We also invite the early-in-their-career petrophysicists and students to share their learning experiences, career progression stories, and how the disruptive technologies that they know might shake up the way we do formation evaluation so that every generation of petrophysicists can learn from each other. Every bridge connects two sides, and so does "The Bridge"—the Young Professionals Newsletter in *SPWLA Today*.

Songhua Chen
Vice President Publications
VP-Publications@spwla.org

Up Next



Tegwyn Perkins
2021-2022 President Elect

Hello and welcome to my first column as President Elect for the *SPWLA Today* newsletter. I'd like to thank everyone who voted during the election—and not just those who voted for me. It's important to see membership involvement. My adversary, Jennifer Market, was an excellent candidate, and I encourage her to run for office again. I am humbled to have been elected and will strive to perform my duties to the best of my ability.

The online SPWLA 2021 Symposium is over, and the focus now turns to Stavanger for 2022. I am so looking forward to going to Norway next year and catching up with old friends and new ones. However, we are not quite done with this year's symposium. At the time of writing, I am receiving the paper presentation rankings from the Technology Committee (TC). As well as ranking live presentations, members of the TC have the option to revisit Pheedloop to watch other presentations they missed due to the dual sessions. In the next week or so, we will have identified the SPWLA 2021 Best Paper and runners-up, and they will be announced in the next edition of *SPWLA Today*. That edition will also contain a review of the symposium, including the feedback forms that you completed.

I found the "Energy in Transition" workshop extremely interesting. I don't see our industry going away any time soon, but I do see opportunities opening up all around us. The oil and gas industry is the technology leader when it comes to anything "subsurface," and the SPWLA plans to be at the head of that movement.

Calling all SPWLA Chapters!! Please start sending me your solicitations for the SPWLA 2023 Symposium proposals. Traditionally, odd years will be held in the US; however, we are not living in traditional times, so I am interested in all proposals.

I'd like to say a big thank you to my employer, Lloyd's Register, and my manager, Derek Crombie, for their continued support throughout my SPWLA "career." Finally, I'd like to thank my wife, Julie, for all her support.

Dewch ymlaen y Dreigiau Coch! Come on the Red Dragons!

Kind regards,
Tegwyn JP Perkins
+1 (713) 670-4976
President Elect 2021-2022
President-Elect@spwla.org

Carlos Torres-Verdín
2021-2022 Vice President
Technology

ONE SPWLA in Stavanger, Norway!

Many extraordinary and interesting events have taken place since June 2019, which is when I completed my second term as VP Publications and Board Member of the SPWLA. I knew that my commitment to the SPWLA was not going to wane, but I did not expect to be back serving on the SPWLA Board that fast, and this time around, commanding one of the most outstanding missions of the SPWLA: VP Technology.

Let me start this column by saying *THANK YOU* to our esteemed SPWLA membership for electing me as VP Technology for the 2021–2022 term. It is my honor and pleasure to serve the SPWLA in this volunteer role, and I remain immensely grateful to you for once again putting your trust in me. The main commitment for the VP Technology has traditionally been to organize the annual SPWLA Symposium. We have attended the last two annual symposia in virtual format due to the nefarious Coronavirus-19 world pandemic. Next year's symposium promises to be the end of the non-presential hiatus, hence a great occasion to celebrate in the beautiful city of Stavanger, Norway. The annual symposium machine has already been set in motion as we've recently had the first planning meeting with our great team members in Norway. And to celebrate in grand technical ways, we are planning a unique symposium replete with new dynamic interactive formats.

I would like to take this opportunity to heartily thank my predecessor, Tegwyn Perkins, for doing such an effective and professional job as VP Technology for 2020–2021. I know it was not easy to coordinate and execute the complex organization behind the annual symposium through the ether, and he and his team did it exceptionally well. Kudos to Tegwyn for setting up such an excellent precedent for us to follow! Tegwyn has also been very supportive of our efforts by providing me with substantial material and insights about his tenure as VP Technology, including a handover of lessons learned, results, and recommendations stemming from the successful organization of the 2021 SPWLA Symposium. We are definitely supported by the shoulders of giants and by the good hearts of colleagues like Tegwyn!

Additionally, you may recall that the election for VP Technology earlier this year was very close between me and my colleague, *Dr. Iulian Hulea*. We both chatted candidly about it and came up with the proposal to serve as joint technical chairs of the 2022 Symposium, and that's what we will do, thanks to the approval of the SPWLA Board! Iulian brings with him extraordinary technical and organizational talents, a unique operator perspective, and experience with the European chapters of the SPWLA. We complement each other in many ways to bring to fruition an excellent and original technical program together with exceptional in-person participation from across the world! *Iulian and I will be your two-person team to extol the technical depth and range of the SPWLA in Stavanger!*

Here are some of the ideas that Iulian and I would like to implement during the 2022 Annual Symposium:

(1) Parallel technical sessions during the second and third days of the symposium. No E-posters, only printed-poster sessions for those authors determined to only deliver their presentations in poster format.

(2) Special organized technical sessions. These are sessions to be championed by two-person teams who will be in charge of motivating potential authors to present their work on relevant contemporary subjects, as well as on technical trends of the future. Three examples of organized sessions could be (1) Formation Evaluation in the Energy Transition, (2) Petrophysics and Carbon Capture, Utilization, and Storage, and (3) Advances in Formation Evaluation for Groundwater Hydrology. The sky is truly the limit here! We hope that this new modality will give some of the reins of the technical symposium back to SPWLA members. An announcement will be made shortly soliciting proposals for special organized sessions. Stay tuned!

(3) Designated Keynote Speakers to showcase relevant trends in special technical sessions.

(4) A new format for submissions of abstracts that will provide an objective and more equitable and transparent forum for authors to describe their technical presentation proposals. We also expect that the new format will lend itself for efficient, non-biased, and objective grading by members of the SPWLA Technology Committee when ranking presentation proposals and selecting them for the final symposium program.

Furthermore, Iulian and I will soon be composing the new SPWLA Technology Committee. In so doing, we will attempt to widely and equitably represent all sectors of our professional society, reaching across gender, race, age, geographical locations, academia, and operating and service companies.

As an SPWLA Board Member, I will continue to make strong efforts for diversity, equity, and inclusion in all activities we do and all the decisions we make. ONE SPWLA for all our distinguished and esteemed membership, resonating the rich human fabric across formation evaluation!

Thanks for your continued support. Let us together make the 2022 SPWLA Annual Symposium a smashing success to showcase the great technical diversity, depth, and creativity across our beloved Society! Start planning your symposium abstracts now. You will not regret the wonderful ride ahead of us!

Sincerely,

Carlos Torres-Verdín, PhD, Professor
Brian James Jennings Memorial Endowed Chair in Petroleum and Geosystems Engineering
Hildebrand Department of Petroleum and Geosystems Engineering
The University of Texas at Austin
cverdin@mail.utexas.edu

Your proud co-leadership team for the 2022 SPWLA Annual Symposium

Carlos Torres-Verdín, PhD,
The University of Texas at Austin

Iulian Hulea, PhD, Shell, The Hague, Netherlands

Fransiska Goenawan
2020-2022
Vice President Education

Dear SPWLA colleagues,

I hope everyone is healthy and safe!

We just had a great 2021 SPWLA Annual Logging Symposium! This event was possible because of the hard work of the Boston committees in giving their best effort to host the symposium. My appreciation goes to Paul Craddock and the Boston team, Lin Liang, Tegwyn Perkins, AV hosts, Sharon, and Stephanie, who went the extra mile to make sure the symposium was delivered well.

As in previous years, I am continuing to accept nominations for the SPWLA Global Distinguished Speakers in addition to the SPWLA Distinguished Speakers selected from the 2021 Annual Symposium. If you know someone who would be perfect as a nominee, please kindly submit the nomination to VP-Education@spwla.org by Thursday, July 15, 2021 at the latest (self-nomination is not possible). Please include the following information in the nomination:

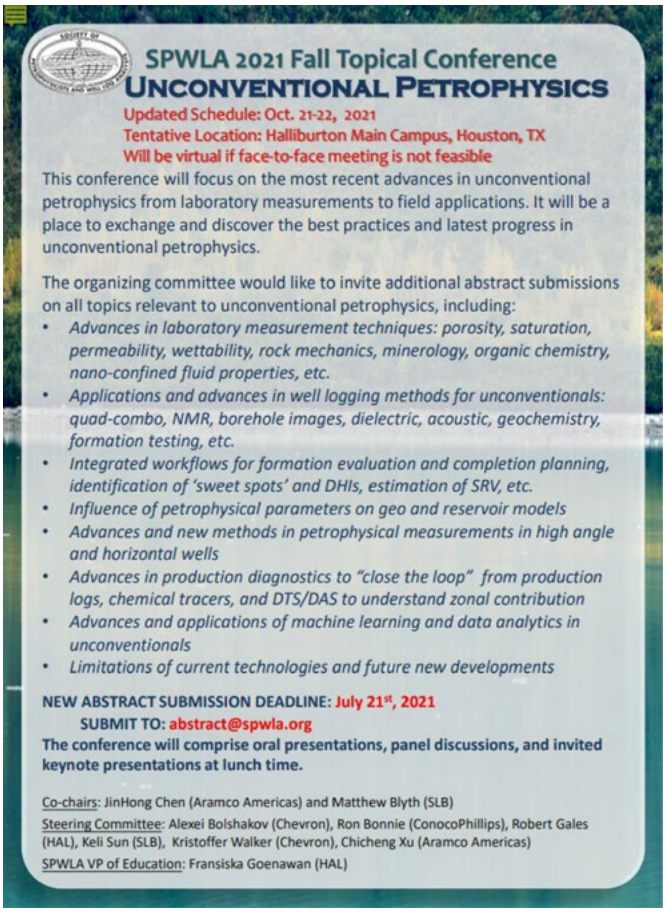
1. Full name, email address, affiliation, and bio of the nominee
2. Abstract of the Distinguished Talk from the nominee (300–500 words)
3. Maximum of 300 words on why the nominee should be considered as an SPWLA Distinguished Global Speaker

Hopefully, the list of Distinguished Speakers and Global Distinguished Speakers will be ready in August 2021.

I am also calling for anyone who is willing to share his/her knowledge using our Nuggets of Wisdom platform. Please kindly email VP-Education@spwla.org if interested. Additionally, you may access the past Nuggets of Wisdom on our SPWLA YouTube Channel.

SPWLA short courses are coming up. Please follow SPWLA social media or visit the SPWLA website for updates.

The SPWLA 2021 Fall Topical Conference on "Unconventional Petrophysics" is almost here. The conference will be held on October 21–22 at the Halliburton North Belt campus. The committee is now accepting abstracts until July 21, 2021.



Last but not least, I am very proud to present the winners from the 2021 SPWLA International Student Paper Contest.

Congratulation to all our winners and thank you to all participants. Special thanks goes to all judges and Martin Poitzsch who was the Chairman for the 2021 ISPC.

Thank you so much for reading my column, and let's continue to have an amazing year ahead!!

Kind regards,

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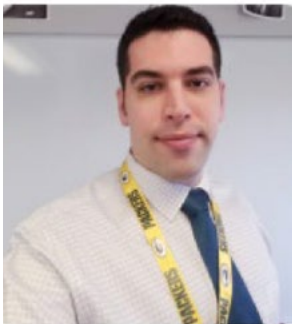


Adam Haecker
2021-2022 VP Finance, Secretary, and Administration

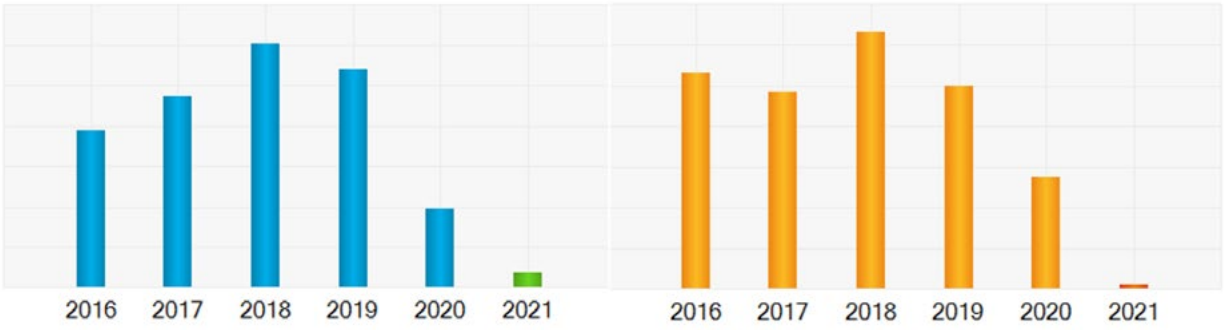
All,

This will be my first column as the VP of Finance, Secretary, and Administration for the SPWLA. First off, I would like to thank everyone who supported my candidacy for the position. Secondly, I would like to thank Doug Patterson for all his efforts with the previous two boards to keep things on the rails. As most of you might expect, the past two years have been a struggle for the society. Things are so bad down the street at SPE and AAPG that they are going to merge! I never thought I would see the day that engineers and geologists could get along. It will be like cats and dogs, I am sure. This has got to be a sign of the apocalypse, right? Queue Homer to the right->

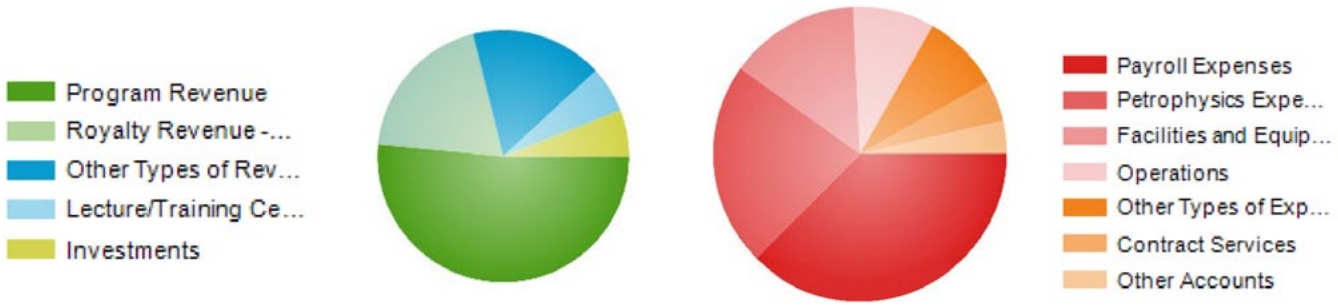
Thankfully, our forefathers left us a reasonable nest egg to get through hard times, and we have done a good job cutting costs. Last year, there was little to no travel from the Distinguished Speakers, which saved us over $50K+. Further, the recent symposium had higher revenues than the 2020 symposium, where we were unsure what we could charge for a virtual event. All these things combine to mean we are still in the red for 2020 and 2021, but we are less in the red than we could have been, and we certainly are not having to beg another society to merge with us (at least not yet!)

I hope you will continue to support our many workshops, and please tune in for "The More You Know" series. If you all have any ideas for new sources of revenue for the society, please reach out.

Here are some snapshots of the SPWLA's finances. To say 2020 was lean is an understatement. Left is revenue per year, and right is expenses per year. We can only reduce expenses so much.



Here is a breakdown of our revenue and expenses. Income is in green tones, and expenses are in red tones. All values are omitted for security reasons. If any member wants more details, contact me.



Here is the percent change of the society's finances over the last several years. You can see the board took great cost-cutting measures in 2019 and 2020 to reduce overhead. Our liabilities went down 26% and 58% each year. Unfortunately, the only year our assets went up was 2018. Every other year has been a slow bleed on our savings. I will say, though, to only record a loss of 5% during a pandemic is rather amazing! I don't know how they did it honestly.

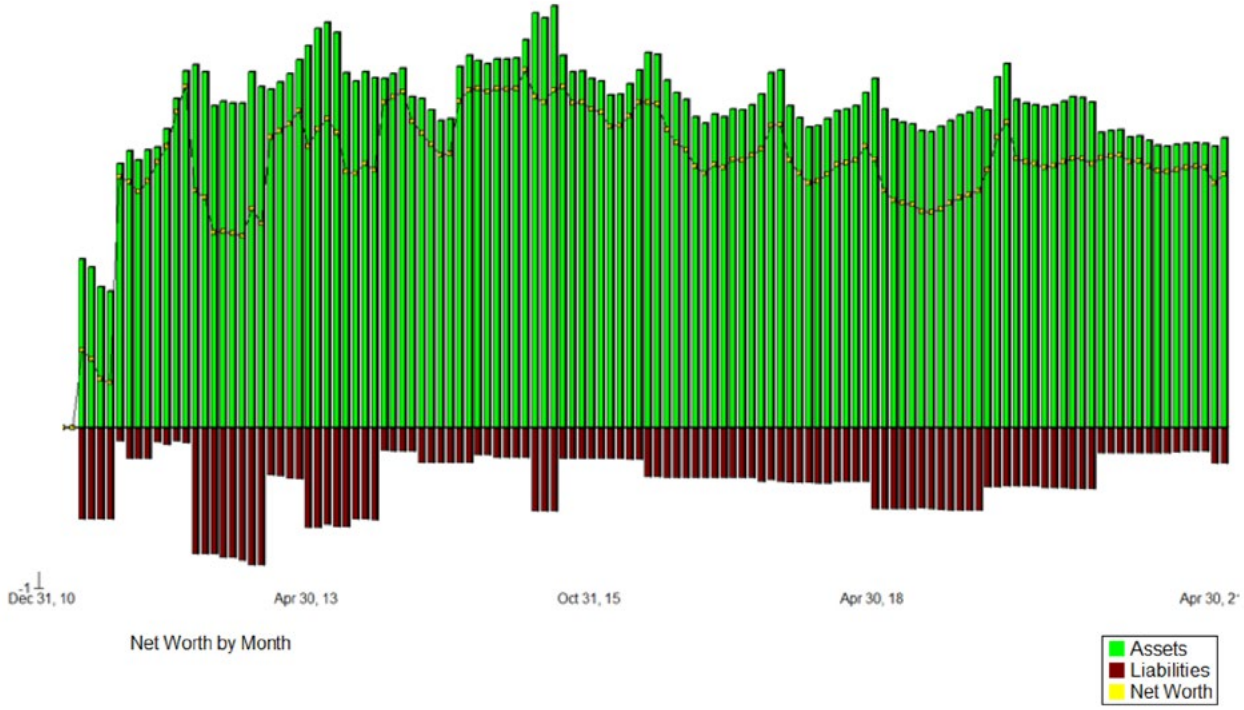
Balance Sheet % Change Summary

	Apr 30, 2017	Apr 30, 2018	Apr 30, 2019	Apr 30, 2020	Apr 30, 2021
ASSETS					
Current Assets					
Checking/Savings	-12%	7%	-11%	-4%	-1%
Accounts Receivable	-60%	-27%	-71%	51%	N/A
Other Current Assets	184%	-24%	66%	-52%	-84%
Total Current Assets	-10%	6%	-9%	-7%	-4%
Fixed Assets	-26%	-26%	-28%	-31%	-35%
TOTAL ASSETS	-11%	5%	-9%	-7%	-5%
LIABILITIES & EQUITY					
Liabilities					
Total Current Liabilities	11%	48%	-26%	-58%	43%
Total Liabilities	11%	48%	-26%	-58%	43%
Equity	-14%	-4%	-4%	5%	-9%
TOTAL LIABILITIES & EQUITY	-11%	5%	-9%	-7%	-5%

Membership Numbers

Date Reported	HM - Honorary Member	LM - Life Member	M - Member	SM - Senior Member	S - Student	TOTAL
6/9/2021	33	110	1478	112	152	1885

Finally, here is a nice graph of our net worth over the years. Assets are in green, liabilities in red, and net worth in the yellow line. *Y*-axis is, of course, omitted. You can see that our society's finances peaked in 2014 and have been slowly declining for the past few years.



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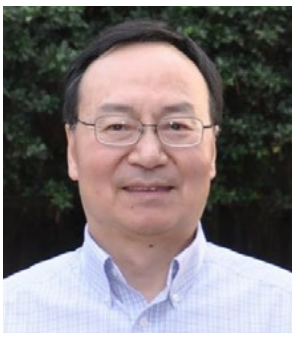
Informative Technology

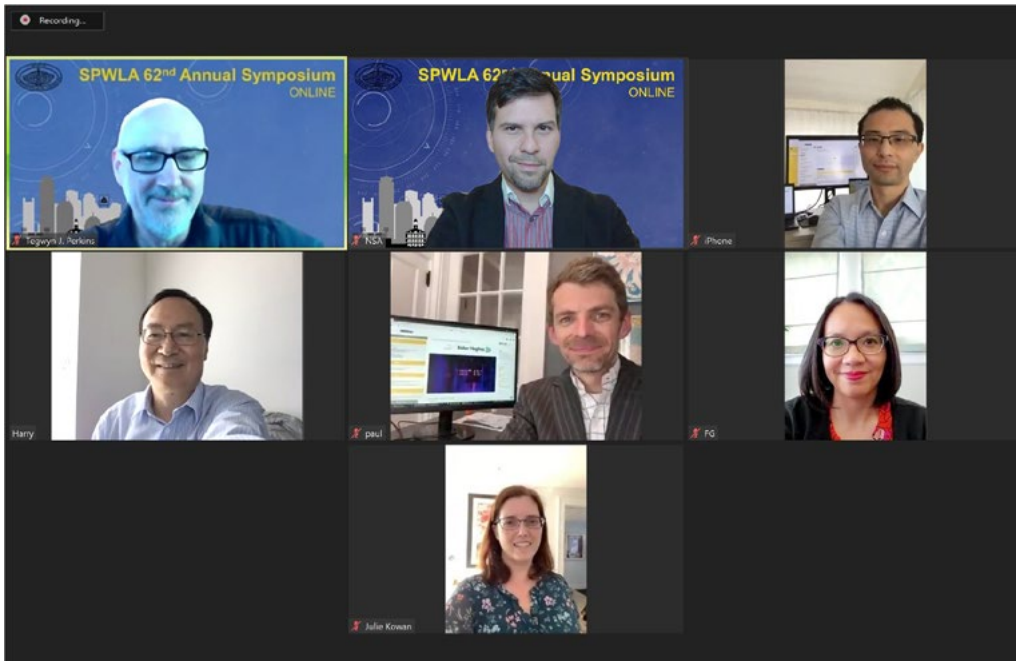


Harry Xie
2021-2023 Vice President
Information Technology

Dear Colleagues,

Welcome to my very first column for the *SPWLA Today* newsletter. As the newly elected VP IT 2021–2023, I am honored to have the opportunity to serve you all. Thank you for your support.

We have all witnessed the tremendous virtual symposium in May, which can be attributed to the marvelous management of the SPWLA Technology Committee and the Boston Chapter. I personally experienced the extensive preparation during the last couple of weeks before the symposium. I can proudly let you know that the secret to this successful symposium is that hundreds of hours of training, testing, debugging, and rehearsing made the entire event run very smoothly. To all the Technology Committee members, Organizing Committee, and the Boston Chapter, we owe you a huge thank you! I would particularly like to mention the AV Team for their dedication. Here are the dream team members: Tegwyn Perkins, Nelson Suarez, Lin Liang, Harry Xie, Paul Craddock, Fransiska Goenawan, and Julie Kowan.



The event of the symposium has passed, but the technical programs and workshops are still going on. Please follow the link on the SPWLA website to take advantage of such a wonderful resource.

We are eager to meet each other in person after this historically long period of "working from home" or "meeting remotely." I also look forward to meeting everyone at local chapter meetings, SIG meetings, and our symposium. Until then, let's meet online as often as we can. As the VP IT, I will try my best to facilitate all the meetings. Thank you again for trusting and supporting me.

Harry Xie
Vice President Information Technology
(+1) 713-328-2768
VP-InfoTech@spwla.org

Mathilde Luycx
2021-2023 VP Social Media

Dear SPWLA members,

I am grateful and excited to start my journey as the SPWLA's first VP Social Media. I am very thankful to all SPWLA members who participated in the election and am honored by their endorsement. I would also like to thank Katerina Yared and Fransiska Goenawan. Although the VP position is new, our organization has been present on social media for many years, and both Katerina and Fransiska have played a big role in engaging SPWLA members via our various social media platforms these past two years.

Speaking of platforms, many of you are already familiar with our Linkedin, Twitter, and Facebook pages, but do you know the SPWLA also recently added a YouTube channel that includes our most recent #TheMoreYouKnow and #NuggetsOfWisdom videos? It's a great way to enjoy the webinars on your own time or rewatch them at your own pace!

It is also my privilege to announce the launch of the SPWLA Instagram account @spwlaorg. Many SPWLA chapters already had one, and it was high time SPWLA International did, too! As part of the launch, Sonia Marino compiled a fantastic video of Throwback Thursday #TBT photographs. The video is only available on our Instagram account. To watch it, click the Instagram icon on the right and be sure to use this opportunity to start following @spwlaorg!

My goal throughout 2021–2023 will be to keep the SPWLA community informed of SPWLA events and engaged in our society happenings. To do that, I am pleased to rely on a team of current and former SPWLA student chapter presidents: Andres Gonzalez (President of the UT Austin Chapter, US), Dana Marcela Ramírez Niño (former President of the UIS Chapter, Colombia), Rodrigo Azambuja (President of the UFRJ Chapter, Brazil), and Sunita Patach (President of the Texas Tech University Chapter, US). If you are interested in joining the team, let me know at vp-social-media@spwla.org!

Finally, I would like to invite all SPWLA chapters who share their events and activities on social media to tag @spwlaorg and @spwlaSocialMedia so that we can help them spread the word about their great work! If you are interested in sharing a particular event, do not hesitate to reach out directly via email!

Thank you, and #letsdothis!

Mathilde Luycx
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Regional Understandings–North America 1

Robin Slocombe
2020-2022 North America 1
Regional Director

I am looking forward to starting the second year of my term as North America Director 1. I would like to thank Kelly Skuce and wish him the best after serving alongside him for the past year. I would also like to welcome Matthew Blyth. I am looking forward to us working together again! We went to university one year apart at the same college in Cambridge. We also served together on the board of the Houston SPWLA, and we are both long-term employees of Schlumberger. I continue my career at Schlumberger in my 23rd year, where I have worked in field operations, sales, headquarters, and technical leadership roles, mainly with wireline. I was transferred in 2020 to Qatar as a sales and commercial manager for the Reservoir Performance division. I will continue my duties as the North America Regional Director 1 for the remainder of my term since remote working is the new norm anyway!

In 2021, my vision for the role is to continue to nurture the student chapters, which are the lifeblood for the industry and the society. Professional chapters can run self-sufficiently with minimal oversight and support, but the benefit of a Distinguished Lecturer talk, judging a student paper competition, or even simply funding a pizza party is disproportionate for the student chapters.

I have seen society activities continue in the North American chapters, and we are starting to see them take advantage of the lifting of COVID restrictions. The Houston Chapter held a Happy Hour to coincide with the end of the Symposium, which I believe was one of the first in-person SPWLA events worldwide since early 2020. The student chapters have continued their active programs with access to centralized GoToMeeting support from Sharon Johnson very much appreciated. I hope to see the coordination between chapters continue—one of the few benefits of the massive disruption of the recent past.

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Regional Understandings–North America 2

Matt Blyth
2021-2023 North America 2
Regional Director

Robin and I have decided to share this column, both as an update on the North America chapters and by way of my introduction as the new NA2 Regional Director, taking over from Kelly. Indeed, it seems that Robin and I have been bouncing around the oil field together since graduation, although he has had far more geographical spread than me. We have taken another different path, and that is because Robin ended up in wireline logging, and I have spent my entire career in the much more exciting field of LWD (…I joke, of course. LWD is only slightly more exciting!). In my current role, I look after the long-term development of LWD acoustics and seismic technology, and many of you may know me from the SPWLA Acoustics SIG and a few recent sonic-focused webinars and papers. I am excited to be taking over the role of NA 2 Regional Director. With two terms as the President of the Houston Chapter, I know firsthand the importance of the connection between the local chapters and the international BOD. I also share Robin's commitment to support and develop the student chapters, and I am very happy to see so many still active within North America, despite a very turbulent few years for the industry and the uncertainty in the long-term outlook. As Robin mentioned, COVID concerns are finally starting to decline. Many people are now vaccinated, and the chance to resume in-person events is here. However, I don't think we will stop having an online component of our activities. It has allowed us to expand the reach of all events to an international level, which will always benefit the society.

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Regional Understandings–Asia Pacific/Australia

Ryan Lafferty
2021-2023 Asia Pacific/Australia Regional Director

Firstly, I would like to take this opportunity to thank all those members who voted in the Board of Director elections. Without your continued support, the society would not exist. I am honored to have been elected as the Regional Director for the Asia Pacific/Australia region, and I look forward to serving you all. I also want to thank my predecessor, Jennifer Market, for her last two years of service.

Asia Pacific/Australia is a diverse region with over 600 members across 13 active chapters (five of which are student chapters). Amongst us, we have a fantastic breadth of knowledge and experience that should be celebrated and shared within the region and further afield. As practicing technical professionals, we have an obligation to share our knowledge and continue to promote the petrophysics discipline within the industry. I look forward to working with you all to ensure we continue to achieve this.

I have already reached out to each of the regional chapter presidents with the intention of developing a more inclusive relationship between the chapters and the SPWLA Board. Thanks to those chapter presidents who have responded. I appreciate the work that all the serving committee members do, and I look forward to meeting you all virtually in the coming weeks. Please keep an eye out in your inbox!

One of my major goals in the coming two years is to ensure we hold a regional topical conference. It was very unfortunate that the regional conference, which was planned for Bangkok in 2020/21, was indefinitely postponed due to the pandemic. As one of the organizing committee members for this event, I know the disappointment felt, so I want to personally thank the technical and organizing committee for all their hard work. I also want to say thank you to all the authors for their submissions and, of course, to our sponsors. I do not want all this work to go to waste, so I hope we can announce a new regional conference in due course.

Keep safe.

Regards,
Ryan Lafferty
Asia Pacific/Australia Director
Director-Asiapacific@spwla.org

Regional Understandings–Europe

Eva Gerick
2021-2023 Europe
Regional Director

Dear SPWLA Community,

Firstly, a big thank you to you all for participating in the 2021 elections, and congratulations to all the new (and old) Board members! I feel privileged to be your new Europe Regional Director and would like to recognize our outgoing Director, Craig Lindsay, for dedicating his time and energy to this community over the last two years.

What an exciting year ahead for Europe, as our Norwegian Chapter will be hosting the next SPWLA 63rd Annual Symposium 2022 in Stavanger. I've already been part of a couple of meetings, and I can tell you that a lot of heart and soul is put into the organization on both a technical and logistical level. So, get it into your calendars—10–15 June 2022. We'll see you in Stavanger!

The other big topic for me in the upcoming year will be around energy transition and how to help demystify the role of petrophysics outside oil and gas. The European chapters are already well into this journey, with SAID (France), DPS (Netherlands), and LPS (London) having hosted excellent technical talks on gas storage, CCS, geothermal, and radioactive waste disposal in May and June. Something else we could do more of are testimonials to understand better how oil and gas petrophysicists have transformed themselves into new energy/environmental areas. Which skills were directly transferable? Did they do some additional training or certification? Let me know if you'd like to see more testimonials via Director-Europe@spwla.org.

And before I go, I'd like to encourage you to keep checking other chapters' events in your time zone as most talks are still virtual and might remain hybrid, even after all COVID restrictions have been lifted. You might find some nuggets you could otherwise have missed!

All the best,
Eva

Eva Gerick
Europe Director
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Bruno Menchio Faria
2020-2022 Latin America
Regional Director

Hello Petrophysical Community,

I want to start my column by complimenting the SPWLA Brazil Professional Chapter, which is encouraging a closer approach of the universities with our professional association. Recently, we had a very interesting presentation on the influence of mineralogical heterogeneity on the contact angle in carbonate reservoirs, given by São Paulo University professor João Vicente Ferrari. I encourage all professional chapters to seek this very important approach between companies and universities.

A growing activity here in Brazil is the revitalization of mature fields, a topic that is gaining more and more visibility. We recently had a meeting where professionals from several companies who are members of the professional chapter and the student chapter (UFRJ) of SPWLA Brazil were present and discussed the feasibility of organizing this event.

The Argentina Professional Chapter has been working to support young professionals looking to enter the workforce through the JPA group (Jóvenes Profesionales Argentinos, Jovens Profissionais da Argentina). Many initiatives will be started in terms of professional cooperation to help future professionals in the oil and gas industry. Technical conferences are also being planned for throughout the year.

There is a new board for the UIS Student Chapter in Colombia. I would like to wish the new members a warm welcome and congratulate former president Dana Marcela for her excellent work. I also wish the new president Luis Chinomes a lot of success. New ideas are taking shape, and we will have news soon.

The students in the UNI Chapter Peru are organizing lectures and continue to post their activities on LinkedIn. Anyone interested in learning more about their activities can check them out at: https://www.linkedin.com/company/spwlaunisc/.

Mexico and Venezuela, which are extremely important countries for Latin America in terms of the oil and gas market, do not have active professional or student chapters. I highlight this point as one of my most important goals for this year. Resuming activities in these key countries is something I will pursue by the end of my term.

The third GIPEX (Annual Guyana International Petroleum Business Summit and Exhibition), at which I will give a talk, was postponed until the end of the year. As Guyana continues to make new hydrocarbon findings, the country has attracted the world´s attention with the prospects of becoming a major hydrocarbon producer.

If you want to contact me, you can do so through my Linkedin profile or SPWLA email address provided below.

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Regional Understandings–Middle East/Africa

Nelson Suarez Arcano
2012–2022 Middle East/ Africa
Regional Director

I am very excited to start the second year of my term as the Middle East/Africa Regional Director. For those who don't know me, I have been working since 2009 for the Dubai Petroleum Establishment, where I have had the chance to work both in the formation evaluation of both offshore/onshore, conventional and unconventional, carbonate and sandstone, and shallow and deep gas—all interesting reservoirs of the Dubai Emirate in the United Arab Emirates.

My vision for the role in 2021 is to continue to bring all the strong regional chapters we have together. I am very happy to speak with you about all the opportunities we have and to keep spreading knowledge! Kindly remember to take advantage of the Distinguished Lecturer program.

Although some locations are still working remotely (like me), we would like to see the SPWLA have more involvement from our student chapters—involvement that inevitably decreased during the pandemic. Thus, if you are reading this, we want you to know that we are looking for you, even if there is no local chapter in your area. Please feel free to reach out to us.

Finally, I would love to meet you all in person, but as restrictions are still in place, please take advantage of the virtual meeting I have with each of the regional chapters during the second week every two months. Let's discuss your concerns, and let's talk petrophysics!

Nelson Suarez
Middle East/Africa Director
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DISTINGUISHED TECHNICAL ACHIEVEMENT AWARDS

Chanh Cao Minh joined Schlumberger Overseas as a field engineer in 1978 after earning an ME degree in electrical engineering with honors from the University of Liege, Belgium. During a 42-year career span, Chanh has worked in Europe, the Middle East, Asia, Africa, and North America.

He was a senior research scientist at Schlumberger-Doll Research in Ridgefield, Connecticut, and was the engineering manager for multiple generations of the Combinable Magnetic Resonance (CMR) tool in Sugar Land, Texas. In 2008, Chanh was named "Schlumberger Fellow and Director of Measurements," in which role he guided Schlumberger's measurements roadmap until his retirement in 2020.

Chanh loves to discuss petrophysics and takes pride in mentoring young engineers. He is a lifetime member of SPWLA and a century club member of SPE. Chanh holds 27 patents and has written 80 conference papers, eight peer-reviewed publications, and 10 professional articles on a wide range of petrophysical topics in conventional and unconventional reservoirs.

A firm believer in using physics-based insights to interpret logs, he pioneered many graphical methods to provide petrophysicists with the necessary visual solutions, such as

- The multidimensional NMR maps for interpreting fluids type, saturations, and wettability
- The Rv-Rh **butterfly** chart in thin-bedded sand/shale laminations with anisotropic shales
- The Sigma-Resistivity **boomerang** chart to estimate continuously saturation and salinity in unknown salinity environments
- The Density-Neutron porosity and saturation **fan** charts in unknown salinity and freshwater reservoirs

Chanh's other passion is to maximize data information, leading to early data analytics initiatives, including NMR factor analysis, class-based formation evaluation, and stochastic techniques for time-lapsed LWD data.

Lalitha Venkataramanan is the reservoir performance – data science advisor at Schlumberger-Doll Research. She is also a scientific advisor and an associate editor for NMR for *Petrophysics*. She was a regional Distinguished Speaker for SPWLA for 2018–19. She was on the board of SIAM and NSERC, as well as the Business-Industry-Government Math network. Her current interests include machine learning, mathematical modeling and inversion, optimization, probability, and stochastic processes. Trained as an electrical engineer, she obtained her MS and PhD degrees from Yale University (1998). She has coauthored more than 40+ peer-reviewed publications and has over 24 granted US patents and 18 pending patent applications.

Zoya Heidari is an associate professor in the Hildebrand Department of Petroleum and Geosystems Engineering at The University of Texas at Austin. Before joining The University of Texas at Austin, she was an assistant professor at Texas A&M University in College Station from September 2011 to August 2015. Zoya was the founder and the director of the Texas A&M Joint Industry Research Program on "Multiscale Formation Evaluation of Unconventional and Carbonate Reservoirs" from 2012 to 2015. She has been the founder and director of the University of Texas at Austin Industrial Affiliates Research Program on "Multiscale Rock Physics" since 2016.

She received a PhD (2011) in petroleum engineering from the University of Texas at Austin. Zoya was one of the recipients of the 2020 SPWLA (Society of Petrophysicists and Well Log Analysts) Young Professional Technical Award, the 2019 EAGE (European Association of Geoscientists and Engineers) Arie van Weelden Award, the 2019 AIME Rossiter W. Raymond Memorial Award, the 2019 SPE (Society of Petroleum Engineers) Distinguished Membership Award, the 2019 Departmental Teaching Award from the Hildebrand Department of Petroleum and Geosystems Engineering, the 2017 SPE Cedric K. Ferguson Medal, the 2016 SPE regional Formation Evaluation award, the 2015 SPE Innovative Teaching Award, the 2014 TEES (Texas A&M Engineering Experiment Station) Select Young Faculty Fellows Award from the College of Engineering at Texas A&M University, and the 2012 SPE Petroleum Engineering Junior Faculty Research Initiation Award. She has been the holder of Anadarko Petroleum Corporation Centennial Fellowship #1 in Petroleum Engineering at UT Austin since 2016. Zoya has supervised 27 graduate students since 2011 and published more than 180 papers in peer-reviewed journals and conference proceedings.

She served as the Vice President of Education for SPWLA from 2016 to 2018. She has also served as an associate editor for the *SPE Reservoir Evaluation & Engineering Journal* and *Geophysics* journal and has been engaged in many other activities serving petroleum engineering and geosciences professional communities. Her research interests include petrophysics, rock physics, multiscale formation evaluation, borehole geophysics, integrated reservoir characterization of carbonates and unconventional resources, and completion petrophysics.

DISTINGUISHED SERVICE ACHIEVEMENT AWARDS

Michel Claverie retired last May after 38 years with Schlumberger as the technical director of the petrophysics domain for Schlumberger Wireline. His portfolio included the technical and interpretation support of dielectric dispersion, magnetic resonance, nuclear spectroscopy and porosity, and resistivity.

Michel holds an MEng degree in petroleum engineering from Herriot-Watt University, Edinburgh, Scotland (1986), and is a graduate from the Ecole Nationale d'Ingénieurs, Tarbes, France (1980).

He was the editor of the SPWLA *Petrophysics* journal and VP Publications from 2011– 2014 and the SPWLA Regional Director for Europe for 2015–17. Among other pleasurable activities with SPWLA, Michel:

- Organized the January 2006 SPWLA South-East Asia Conference in Kuala Lumpur at short notice after the dramatic cancellation of the Bali Conference in November 2005
- Co-organized with Philippe Theys the SPWLA France (SAID) 2007 Conference and field trips to the Schlumberger museum in Crêvecoeur, Normandy, and the Péchelbronn oil field in Alsace, the site of the first-ever electrical log in September 1927
- Presented the applications of dielectric dispersion at the short course of the 2019 SPWLA Woodlands Symposium
- And (hopefully, by the time this is being read in public) organized the short course on Uncertainties in Petrophysics and presented the section on Common Petrophysics Uncertainties examples at the 2021 Boston SPWLA Symposium

Shouxiang Mark Ma serves SPWLA in many different capacities, including *Petrophysics* associate editor responsible for coring and core analysis, Saudi Arabia Chapter Technical Events VP who led a team of petrophysicists that organized nine topical workshops in the last five years with thousands of participants, Education SIG member who codeveloped the society's Petrophysics Skills Set, Annual Symposium Technical Committee Member and Session Chair, Scholarship and Grant Committee Member, International Student Paper Competition Judge, and Board of Directors (2018–20) representing the Middle East and Africa region. A Chairperson of SPE Formation Evaluation Award Committee, SPE ATCE Formation Evaluation Committee, and IPTC Education Week Committee, Mark served on the *JPT* Editorial Board for two terms (2015–20) responsible for formation evaluation. He is also a judge for the 2021 SPE MENA Regional Student Paper Contest–PhD Division, and a Session Chair of 2021 SPE MEOS and numerous other technical events. A senior consultant at Saudi Aramco, Ma had worked at Exxon Production Research Company, Wyoming Western Research Institute, New Mexico Petroleum Recovery Research Center, and Yangtze University. With 100 technical papers and 40 patents and patent applications, Mark was awarded the Technical Achievement Award from SPE KSA (2010), SPE Formation Evaluation Award from SPE MENA region (2019), SPE Distinguished Membership Award (2020), and SPWLA Distinguished Service Award (2021). Ma holds a BS degree from China Petroleum University and MS and PhD degrees from New Mexico Tech, all in petroleum engineering.

Tom Neville is the managing director of Asia-Pacific Formation Evaluation Services, which—as the highly imaginative name suggests—provides formation evaluation services to the oil and gas, mining, and groundwater industries, primarily in the Asia-Pacific region. Tom started his career in 1990, working as an exploration and development geologist with several oil and gas companies in Brisbane, Australia, before joining Schlumberger as a petrophysicist in 1996. Over the following 21 years, Tom had a variety of management and technical roles in operations, engineering, and research with Schlumberger around the world, including research director for reservoir geosciences at Schlumberger-Doll Research, formation evaluation software discipline manager at Schlumberger's Beijing Geoscience Centre, and petrophysics domain advisor for Schlumberger Wireline in Asia/Australasia. Tom returned to Brisbane in 2017 to start Asia-Pacific Formation Evaluation Services.

Tom has degrees in both geology and petroleum engineering. He has coauthored over 35 peer-reviewed technical papers, conference papers, and other technical publications, including the Best Paper at the 2007 SPWLA Annual Logging Symposium, and is co-inventor on 11 US patents. Tom is a member of AAPG, SEG, SPE, and SPWLA. Tom has served on the SPWLA International Board of Directors as Vice President-Information Technology (2007–2009), Regional Director–Asia/Australasia (2011–2015), and Vice President Publications (2019–2020). He was also an SPWLA Distinguished Speaker (2007–2008), an SPWLA Technology Committee Member (2012–2017), and has been a technical reviewer for *SPE Reservoir Evaluation & Engineering* since 2009. Tom is currently on the organizing committees for FESQ (the Queensland Chapter of the SPWLA) and the Queensland Chapter of the SPE.

MERITORIOUS TECHNICAL AWARDS

Chicheng Xu is currently working at the Aramco Houston Research Center as a research petrophysicist with a focus area in petrophysics data-driven analytics that utilizes advanced computational techniques and artificial intelligence/machine learning for interpretation, classification, and modeling based on multiscale and multiphysics data integration. He obtained his PhD degree in petroleum engineering from the University of Texas at Austin in 2013 and previously worked in various technology departments of Schlumberger, BP, and BHP Billiton. He was selected to receive the SPE Gulf Coast Regional Formation Evaluation Award in 2018 and the *SPE REE* journal's Outstanding Associate Editor Service Award in 2020.

Julie Kowan is a geomechanics advisor at Baker Hughes, where she enables operators to drill safer, more cost-effective wells by reducing nonproductive time (NPT) from wellbore instability. Julie earned a BS degree from Rutgers University and an MS degree from Brown University, after which she joined GeoMechanics International (GMI) in 2005. Since then, Julie has performed over 125 geomechanics studies worldwide, held various positions at both GMI and Baker Hughes, and operated her own consulting company for 2 years. She has expertise in unconventional reservoirs, pore pressure prediction, stress constraint, wellbore stability, fracture permeability, and compaction. Julie served as the Vice President of the Boston Chapter of the SPWLA (2017–2019), as Secretary (2015–2017), and was named an SPWLA Distinguished Speaker for the 2020–2021 series.

Pingjun Guo is a senior petrophysical advisor at ExxonMobil. He holds a PhD degree in nuclear engineering from North Carolina State University. He was a post-doctoral fellow at NC State (1995–1997) and was a senior scientist at Baker Hughes in Houston, Texas (1997–2005). Pingjun joined ExxonMobil in 2006 and has held various assignments in the Upstream Research Company, Production Companies, XTO Unconventionals, and Upstream Integrated Solutions Company. His professional experience spans from logging tool design, petrophysics research, log modeling and interpretation software development, teaching in-house formation evaluation schools, and mentoring young petrophysicists to doing project petrophysicist assignments in both conventional and unconventional asset teams. Pingjun is a corporate subject matter expert on nuclear and casedhole logging. He has been awarded 15 US patents and has over 30 journal and conference publications. Pingjun has been an associate editor for the *Petrophysics* journal since 2014. As a strong advocate of the journal, he works hard to ensure that *Petrophysics* publications meet the same high scientific standards as other peer journals. He co-organized the special issue of *Petrophysics* on emerging nuclear logging technologies in December 2020. He has dedicated many years to recruiting and mentoring graduate students during summer internships and is proud that eight of his graduate interns are employed as tool physicists or formation evaluation specialists in the oil and gas industry.

MERITORIOUS SERVICE AWARDS

Thuy Rocque is currently retired after 31+ years in the petroleum industry, working in various technical and management roles in engineering and petrophysics. Her position prior to retirement was director of petrophysics for Anadarko Petroleum Corporation, where her team provides formation evaluation support to all Anadarko's exploration and production operations globally. In that role, Thuy also enhanced Anadarko's competitive advantage by creating a very successful grassroots hiring, training, and development program to recruit MS PE and Geoscience graduates for internships and full-time hires as petrophysicists. This program helped Anadarko navigate through the industry shortage of petrophysicists due to an aging technical population and the rise of unconventional resources. Thuy has a BS degree in petroleum engineering from the University of Texas at Austin. She was honored to have been invited to be a guest lecturer in the Well Logging course at her alma mater.

Thuy was active in the petrophysical community where she served as VP–Northside in the Houston Chapter of SPWLA for 5 years, as Regional Director–North America I in the International SPWLA Chapter for 3 years, and as VP Finance, Memberships, and Administration on the Board of the International Chapter of SPWLA for 4 years. As an avid golfer, she also coordinated several golf tournaments and events for SPWLA members. Thuy focused on recruiting new and young members to SPWLA and supported student chapters in various universities. In addition to petrophysics, Thuy was also passionate about advocating for technical women, so she participated in numerous events and organizations that support this goal. Notably, Thuy was a delegate in the first-ever API Women of Oil & Gas group to speak to lawmakers in Washington DC. She was a panelist for the AAPG PROWESS (Professional Women in the Earth Sciences) Conference and a panelist for the Oil & Gas Women Offshore Conference. Thuy feels that her greatest achievement was to bring petrophysics to a status it deserves within her own companies and the industry and cultivated the next generation of petrophysicists.

Michael O'Keefe is the principal reservoir engineer for Schlumberger at the "Wireline Domain Center," a global hub for technical expertise in Bucharest, Romania. He is engaged in exploration and appraisal projects across North America and Canada Land, Africa, and India. His focus is on deep transient testing and fluid analysis, integrating the dynamic model provided by wireline formation testers into a geomodel populated by petrophysics and calibrated by borehole geology.

Michael has a long history of involvement with the SPWLA. A member since 2003, he was nominated as a Distinguished Lecturer (2010–11), followed by SPE Distinguished Lecturer (2013–14). He joined the London Petrophysical Society (LPS) in 2013 as VP Publications and was subsequently elected as President for two consecutive years in 2016 and 2017. During his presidency, the LPS increased both membership numbers and diversity, bringing renewed focus to interpretation. He was part of the committee that successfully bid for and hosted the 59th SPWLA Annual Symposium in London.

In 2019–20, Michael was elected to the SPWLA International Board of Directors, serving as Vice President Technology. In this position, he managed a Technical Committee of 46 professionals to deliver 104 publications at the 61st Annual Symposium (June 2020), which was the very first online conference for any major O&G society. More recently, he has been helping to establish the very youngest SPWLA chapter, now inaugurated as the Central European Formation Evaluation Society (CEFES).

In his 30 years at Schlumberger, Michael has published 27 technical papers and journal articles (of which five are peer reviewed) and authored 15 US patents. He developed strong operational experience after working a decade in the field, then became involved in the development of many new technologies—from the very first focused sampling probe to an innovative downhole pH measurement, identification of compositional grading in real time, coauthor of the first Schlumberger publication on LWD pretests, deep transient testing, the introduction of an advanced Grating spectrometer, and characterization of a live fluid downhole density sensor. Michael respects and enjoys the unique engagement that SPWLA has with new technology and interpretation techniques across our industry.

Javier Miranda is a senior petrophysicist for DeGolyer and MacNaughton—the leading independent consulting firm focused on the petroleum industry since 1936. He works on different world-class projects related to reserves and reservoir studies around the globe. Javier has more than 22 years of industrial experience as a petrophysicist. He started his career at PDVSA, where he worked in operations, data acquisition, and reservoir studies for 13 years from heavy oil to gas fields in different postings and basins. Then, Javier moved to BP America Inc., where he worked for 5 years on Gulf of Mexico projects as a reservoir description and operations petrophysicist, including some of the most prolific fields in the region.

Javier earned a BSc degree from Universidad del Zulia and an MSc degree from the University of Texas at Austin, both in petroleum engineering. He also holds a Diploma in integrated petrophysics from the former PDVSA School of Petrophysics (based on former Amoco Petrophysics School). On the academia side, he served as an adjunct professor and lecturer for Formation Evaluation at Universidad Zamora (Venezuela) for 3 years and a graduate research assistant at the University of Texas at Austin Joint Industry Research Consortium on Formation Evaluation for 2 years.

Javier is an active member of SPWLA, SPE, AAPG, SEG, and HGS in technical meetings organization, as a technical editor for publications, and in managing and founding SPWLA and SPE sections and groups. He is the current President of the SPWLA Houston Chapter, where he started as VP. Javier is also VP of the SPWLA Reserves SIG and part of the technical and organizing committee for the SPWLA Symposium 2021. He is co-founder of the SPWLA YP Global Group, where he serves as chairman of the board and editor for the SPWLA Today YP Newsletter, *The Bridge*. Additionally, Javier is a past SPWLA and SPE officer in other chapters in the US and Venezuela, as well as a committee member for past symposiums.

His research interests include petrophysics, well-log analysis, core-log integration, and integrated reservoir characterization while working in multidisciplinary and multicultural environments. Outside of work, Javier enjoys spending time with his family and friends, reading, and traveling.

Yanxiang Yu currently works as an artificial intelligent resident at Shell since February 2020 and focuses on machine-learning modeling for upstream applications. Before joining Shell, he worked as a senior research scientist at GOwell International for 5 years, where he focused on developing the well-integrity evaluation logging tools. He has been serving as Vice-Chair for the SPWLA PDDA SIG since 2019 and previously served as the Secretary of SPWLA Resistivity SIG (2017–2019). Yanxiang holds a master's degree from the University of Houston and a bachelor's degree from the University of Electronic Science and Technology of China, both in electrical engineering.

YOUNG PROFESSIONAL TECHNICAL AWARDS

Bin Dai received a PhD degree in analytical chemistry, with a specialization in chemometrics and optical spectroscopy, from the University of Kentucky and an MBA from Washington University in St. Louis, Missouri. Bin joined Halliburton in 2013 and currently serves as a senior scientific advisor in the Halliburton sensor physics department, leading the data science and modeling group responsible for downhole fluid identification sensor design, formation pressure test and sampling modeling, and automation of wireline formation testers. Prior to joining Halliburton, he worked for Monsanto Company and the Procter & Gamble Company, focused on developing optical sensors, NMR instruments, and chemometric algorithms for various industry applications. Since 2019, he has served as Secretary of Publications for the SPWLA PDDA (Petrophysical Data-Driven Analytics) SIG and organized the first PDDA SIG annual meeting in 2019.

Huangye Chen is a petrophysicist for ExxonMobil in Spring, Texas. Before joining ExxonMobil in 2018, she was a research petrophysicist at Aramco Service Company. She obtained her PhD in petroleum engineering from Texas A&M University (2016), her MS degree in applied physics from Syracuse University (2012), and her BS degree in applied physics from the University of Science and Technology of China (2009). In her professional career path, she has gained a lot of support, guidance, and help from her mentors, supervisors, colleagues, and professional societies. She would like to express her sincere and heartfelt gratitude and appreciation.

Huangye has published 17 research papers in peer-reviewed journals and conference proceedings, covering multiphysics formation evaluation, fluid flow simulation in subterranean reservoirs, upscaling techniques, electric and dielectric characterization of unconventional rocks, etc. She received the 55th SPWLA Distinguished Speaker Award for her publications on dielectric permittivity evaluation. She engaged in designing an innovative laboratory system to measure stress-dependent permeability that overcomes the problem of long-experimental time and multiple-test runs by steady-state and pulse-decay experiment in the industry (this innovation was a finalist in the 2020 World Oil Awards' New Horizon Idea award). She has nine US patents on the characterization of the gas flow in tight and unconventional formations and detecting gas leakage in permeability measurement systems. She was awarded the Research and Innovation Excellence Award from Aramco Services Company for her contributions. Since she joined ExxonMobil, she has gained broad experience and insights in both theoretical and practical petrophysical applications in different formations around the world, developed expertise in borehole acoustic, and provided creative solutions for high business and technical impacts projects. She was also the recipient of the SPWLA Vicki King Memorial Scholarship, the SPWLA Foundation Scholarship, and the Unconventional Resources Special Interest Group Scholarship for her PhD research.

Huangye served as Vice President of Information Technology of the SPWLA TAMU Chapter (2014–2016). She is a reviewer for *Petrophysics*, *SPE Journal*, *SPE Reservoir Evaluation*, and *Journal of Science and Technology*. She has actively engaged in many other activities serving petroleum engineering and petrophysics communities.

Paul Craddock is a geochemist and senior research scientist in the Modeling & Interpretation Department at Schlumberger-Doll Research Center, Boston. His research addresses oilfield petrophysics and formation evaluation using nuclear, X-ray, infrared spectroscopy, and most recently, machine-learning methods. He has developed methods to: derive resistivity-independent saturation from spectroscopy logs; indicate zones for favorable well placement and production in shale (Reservoir Producibility Index, RPI); combine cuttings and logs for enhanced petrophysics in data-poor shale wells; and optimize kerogen properties for global shale evaluation (Thermal Maturity-Adjusted Log Interpretation, TMALI). Paul received a PhD in chemical oceanography from the Massachusetts Institute of Technology (2009) and has coauthored 50 journal and conference publications. His paper "Thermal Maturity-Adjusted Log Interpretation (TMALI) in Organic Shales" was awarded Best Paper at the SPWLA 60th Annual Logging Symposium. Paul is twice an SPWLA Distinguished Speaker (2016–17, 2019–20) and an SPE Distinguished Lecturer (2020–21).

Thanks for having me as President for the past year. The SPWLA will be in the hands of a very capable and experienced board for 2021–2022. I'm looking forward to seeing many old friends at our "hopefully in-person" symposium in 2022.

Best Regards,
James Hemingway,
SPWLA President 2020–2021

INTERNATIONAL STUDENT PAPER CONTEST WINNERS

BACHELOR (BSc)

1st Place

Teddy Ivan Sudjana

Erwin Fernanda

Tunggul M Pratama

Universitas Pertamina

2nd Place

Luis Miguel Salas–Chia

3rd Place

Luis Alberto Chinomes

Universidad Industrial de Santander

MASTER (MSc)

1st Place

Juadh Odiachi

2nd Place

Asiman Saidzade

UNIVERSITY of LOUISIANA LAFAYETTE

3rd Place

Juan Camilo Acosta

DOCTORATE (PhD)

1st Place

Sidi Mamoudou

2nd Place

Eduardo Maldonado Cruz

3rd Place

Felipe Cruz

OUTSTANDING CHAPTER RECOGNITIONS

Outstanding Professional Chapter Awarded to Boston

Outstanding Student Chapter Awarded to Colombia Universidad Industrial de Santander (UIS)

OUTSTANDING *PETROPHYSICS* PAPERS 2020

TITLE: A New CEC-Measurement Proxy Using High-Frequency Dielectric Analysis of Crushed Rock (2020 April, 179–188)
AUTHORS M. Rebecca Stokes, Z. Elton Yang, Prince Ezebuiro, Timothy Fischer

TITLE: Classification of Adsorption Isotherm Curves for Shale Based on Pore Structure (2020 October, 417–433).
AUTHORS: Yuanyuan Tian, Qing Chen, Changhui Yan, Hucheng Deng, Yanqing He

TITLE: A History of Nuclear Spectroscopy in Well Logging (2020 December, 523–548)
AUTHOR: Richard Pemper

TITLE: Self-Compensated Pulsed-Neutron Spectroscopy Measurements (2020 December, 570–584).
AUTHORS: Tong Zhou, Dave Rose, Jeffrey Miles, Jason Gendur, Haijing Wang, Michael Sullivan

TITLE: Formation Chlorine Measurement From Spectroscopy Enables Water Salinity Interpretation: Theory, Modeling, and Applications (2020 December, 549–569)
AUTHORS: Jeffrey Miles, Laurent Mossé, Jim Grau

OUTSTANDING *PETROPHYSICS* JOURNAL REVIEWERS 2020–2021

Mark Bowers, ExxonMobil

Maolin Luo, Aramco

Yegor Se, Chevron

SYMPOSIUM BEST PAPER PRESENTATION 2020

Best Paper Presentation

TITLE: MAXIMIZING VALUE FROM MUDLOGS: INTEGRATED APPROACH TO DETERMINE NET PAY

AUTHORS: Mayank Malik, Scott A. Hanson, Simon Clinch

Runner-Up Best Paper Presentation

TITLE: FORMATION CHLORINE MEASUREMENT FROM SPECTROSCOPY ENABLES WATER SALINITY INTERPRETATION: THEORY, MODELING, AND APPLICATIONS

AUTHORS: Jeffrey Miles, Laurent Mossé, Jim Grau

DISTINGUISHED AND REGIONAL SPEAKERS 2020–2021

SPWLA-5060 UNLOCKING DATA ANALYTICS FOR THE AUTOMATIC EVALUATION OF CEMENT BOND SCENARIOS; Dario Reolon, Eni S.p.A.

SPWLA-5065 DELINEATING THE GEOTHERMAL STRUCTURE AND FLOW PROPERTIES IN A SUB-HORIZONTAL WELL WITH THE USE OF WIRELINE AND LWD DATA IN A MULTIPHYSICS APPROACH; Erik Wielemaker, Schlumberger

SPWLA-5078 FIRST LWD FULLY TRIAXIAL CO-LOCATED ANTENNA SENSORS FOR REAL-TIME ANISOTROPY AND DIP ANGLE DETERMINATION, YIELDING BETTER LOOK-AHEAD DETECTION; Hsu-Hsiang (Mark) Wu, Halliburton

SPWLA-5009 FORMATION CHLORINE MEASUREMENT FROM SPECTROSCOPY ENABLES WATER SALINITY INTERPRETATION: THEORY, MODELING, AND APPLICATIONS; Jeffrey Miles, Schlumberger

SPWLA-5050 CONCLUSIVE PROOF OF WEAK BEDDING PLANES IN THE MARCELLUS SHALE AND PROPOSED MITIGATION STRATEGIES; Julie Kowan, Baker Hughes

SPWLA-5077 REVEALING HIDDEN INFORMATION: HIGH-RESOLUTION LOGGING-WHILE-DRILLING SLOWNESS MEASUREMENTS AND IMAGING USING ADVANCED DUAL ULTRASONIC TECHNOLOGY; Matthew Blyth, Schlumberger

SPWLA-5028 MAXIMIZING VALUE FROM MUDLOGS: INTEGRATED APPROACH TO DETERMINE NET PAY; Mayank Malik, Chevron

SPWLA-5044 DETERMINING WATER-FILLED POROSITY OF TIGHT OIL RESERVOIRS WITH A NEW INTERPRETATION METHOD FOR DIELECTRIC DISPERSION MEASUREMENTS; Nikita Seleznev, Schlumberger

SPWLA-5015 IDENTIFYING FRACTURE FILLING MATERIAL IN OIL-BASED MUD WITH DIELECTRIC-BOREHOLE IMAGING; Peter Schlicht, Schlumberger

SPWLA-5004 PETROLOGICAL AND PETROPHYSICAL IMPLICATIONS OF MAGNESIAN CLAYS IN BRAZILIAN PRE-SALT DEPOSITS; Ronaldo Herlinger Jr, Petróleo Brasileiro S.A

SPWLA-5011 FORMATION EVALUATION WITH NMR, RESISTIVITY AND PRESSURE DATA – A CASE STUDY OF A CARBONATE OILFIELD OFFSHORE WEST AFRICA; Ting Li, Chevron

SPWLA-5081 SELF-COMPENSATED CASED-HOLE PULSED NEUTRON SPECTROSCOPY MEASUREMENTS; Tong Zhou, Schlumberger

WHAT WE HAVE LEARNED FROM THE PETROPHYSICAL EVALUATION OF THE VACA MUERTA FORMATION DURING THE PAST 7 YEARS OF UNCONVENTIONAL SHALE PLAY EXPLORATION AND DEVELOPMENT?; Alberto Ortiz, YPF S.A. - South America

ELECTRICAL PROPERTIES OF SHALES; Ali Ousseini Tinni, University of Oklahoma - North America

FROM HOMOGENEOUS TO HETEROGENEOUS ROCKS–UNDERSTANDING FUNDAMENTAL CONTROLS OF HYDROCARBON SATURATION: PERCHING EFFECTS; Iulian Hulea, Shell - Europe

THERMAL MATURITY-ADJUSTED LOG INTERPRETATION (TMALI) IN ORGANIC SHALE; Paul Craddock, Schlumberger - North America

AN INTEGRATED PETROPHYSICAL EVALUATION FOR RESERVOIR CHARACTERIZATION AND MODELING IN FIELD DEVELOPMENT; Muhammad A. Gibrata, Dragon Oil - Middle East

CASED HOLE FORMATION EVALUATION: AN ALTERNATIVE TO OPTIMIZE DATA ACQUISITION AND REDUCE OVERALL COSTS IN MATURE FIELDS; Pablo Saldungaray, Schlumberger - Middle East/South America

RESERVOIR PRESSURE IN TIGHT GAS FORMATIONS FROM A PRESSURIZED CORE SYSTEM; Luis Quintero, Halliburton - North America

A SIMPLE AND CONVINCING WATER SATURATION VS. HEIGHT FUNCTION FOR RESERVOIR MODELLING; Steve Cuddy, Baker Hughes - Europe

A Brief History of Schlumberger, Part 2

By Mark Mau

ABSTRACT: Founded by the two brothers Conrad and Marcel Schlumberger in Paris in 1926, Schlumberger started its life as an electrical prospecting and well logging company. It gradually spread its activities on the oil field and today stands as the world's leading provider of upstream technology to the oil and gas industry. In 2015, it had a 12% market share among the top 400 service companies, and it is the most important developer of new technologies with no other company matching the research and development expenditures of Schlumberger.

Explaining company milestones and key periods of Schlumberger's history, this article portrays its leaders and shows their impact on the evolution of the company. It argues that the company culture embodied by the values of people, technology, and profit has been and still is crucial for the company's growth and success.

DISCLAIMER: The views expressed in this article are those of the author and do not necessarily reflect the views of Schlumberger management.

"A Brief History of Schlumberger" initially appeared in the 2016 *Oil-Industry History*, Volume 17, pages 111–140. It is reprinted with permission from the Petroleum History Institute, publisher of *Oil-Industry History*.

This is the second installment of a six-part series. And then, there was the first logging job.

FROM ELECTRICAL PROSPECTING TO WELL LOGGING

In his research, Conrad realized that metal ores should be distinguishable from their surroundings by measuring their electrical conductivity, as ore-bearing rock would be more conductive than what was around it. Conrad performed early experiments in the basement of the École des Mines, where he constructed a makeshift potentiometer. On Sundays, his wife and daughters often joined him. His daughter Anne Gruner Schlumberger (1905-1993) recalled, "I was fascinated by the earphones and electric wires that came out of a crate and went into a copper bathtub filled with water where two sticks—also connected to wires—floated. I was sure that my father was a magician. Had I not seen him bending over a black box and finding coins buried in sand or clay?"[13]

When Conrad's wife felt it was time to go home, he would reply, "Yes, yes, Louise, let's go, but I haven't finished." Anne wondered why his father always said he wasn't finished, and one Sunday on the way home she asked him. "Because every piece of work, however modest, requires lots of time and patience," Conrad replied. "How much?" She asked. "As much as it takes to finish the work and finish it well," he said.[14]

In those early days, Conrad already showed great respect for money. "When I was a child," recalled Anne, "my father told me, 'You must not forget, Annette, if we ever have money, it will bring responsibility. Money is earned with great difficulty, and you are not allowed to waste it for yourself. Never.'"[15]

In 1912, using very basic equipment, Conrad recorded the first map of lines of equal potential, equipotential curves, at the family's estate near Caen in Normandy—which came into the family through Conrad and Marcel's maternal grandparents, the de Witt's—before extending his surveys to iron mines in the area (Fig. 4). In 1913, at Saumont in Normandy, electrical measurements allowed to define the extension of a mineral layer, which had been displaced by a fault. However, progress was severely disrupted by World War I.[16]

Fig. 4—Conrad Schlumberger, performing surface electrical experiments to map the subsurface at his parents' summer residence, Val-Richer, in Normandy in 1912 (courtesy of Schlumberger).

Conrad and Marcel served in the French Army yet came unharmed through the war, although the war horrors marked Conrad profoundly, and he dedicated himself to research and work for world peace. In 1919, he wrote a small book about social equality and peace. But his father persuaded him to return to the sciences. Realizing the great potential of his two sons, the father brought Conrad and Marcel together to form a small enterprise. Paul made a covenant with his sons. He agreed to fund the brothers 500,000 francs, almost a million US dollars in today's money, to develop a business for "determining the nature of the subsurface," but demanded at the same time, "The scientific interest in research must take precedence over financial interest."[17]

At first, measuring the electrical resistivity of rock was assumed to have application only for finding ore deposits. But recognizing that salt was highly resistive, Conrad and Marcel started looking for salt domes, accumulations of salt that rise dome-like, distorting the overlying rock layers and creating hydrocarbon traps. In 1923, they successfully tested their new method at the prolific Ariceştii field near Ploesti, Romania. Three years later, the Schlumberger brothers carried out a large electrical survey in Meyenheim, Alsace, outlining the crest of an elongated underground arch nearly seven kilometers long where the salt layer bowed up. These experiences encouraged Conrad and Marcel to found a company in Paris in July 1926 under the name Société de Prospection Électrique—the genesis of the Schlumberger company.[18]

The first client was the Pechelbronn Oil Company, named after the eponymous village near Strasbourg, Alsace. Oil had been excavated by hand since the 1740s, and the region had become a leading oil province in France. The Schlumberger family had been a shareholder of the Pechelbronn Oil Company since 1919, and Conrad was a member of its board of directors. On July 12, Schlumberger entered into a service contract with the Pechelbronn Oil Company. The contract provided that in return for a monthly fee of 12,000 francs, a crew was to be made permanently available to Pechelbronn; it further provided Schlumberger with the right of access to boreholes for the purpose of continued testing and development of new techniques. The Pechelbronn oil wells thus became a kind of extension of the company's engineering office in Paris.[19]

In early 1927, the management of the Pechelbronn Oil Company discussed with Conrad Schlumberger the idea of making resistivity measurements in the borehole to improve their understanding of oil and gas formations. The opportunity came at the right time for Conrad and his brother Marcel. They had just lost a lucrative contract with Roxana Petroleum, a Shell subsidiary, after delivering disappointing results along the US Gulf Coast using surface electrical prospecting. At the same time, they were facing competition from other geophysical methods such as magnetics, gravity, and especially seismics.[20]

Marcel had already experimented with some borehole resistivity measurements six years earlier, when he had the idea of using borehole resistivity measurements to confirm the results of surface surveys. Building on those experiments, the Schlumberger brothers would now make a milestone breakthrough resistivity measurement that would change formation evaluation forever. On September 5, 1927, Henri-Georges Doll, Conrad's son-in-law, and two colleagues, Roger Jost and Charles

Scheibli, proceeded to a Pechelbronn well called Diefenbach 2905 and conducted the first electrical logging operation in an oil well. The well was 500 meters deep, and they logged an interval of 140 meters, starting from a depth of 279 meters. They rigged up a hand-operated winch that lowered into the hole three insulated wires—cables of the type used for lighting fixtures—tied together here and there by friction tape. The longest of the wires was used to inject current into the well and formation, with a return at the surface. The other two wires, shorter and of slightly different lengths, measured the resulting potential field and provided the resistivity measurement. Measurements were made point by point at intervals of one meter; the entire operation took five hours (Fig. 5).

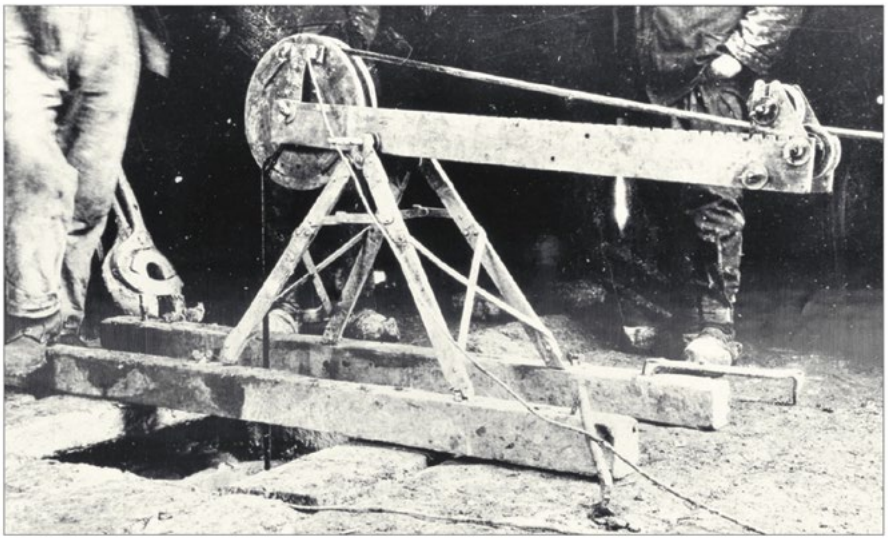

Fig. 5—The cable pulley used in the first oil well logging operation in 1927, near Pechelbronn in Alsace, France. The pulley was placed on top of the hole and conveyed the cable up and down the well. The cable connected to a winch powered by a truck engine (courtesy of Schlumberger).

The result was a resistivity log that distinguished between the many layers of sand and shale pierced by the borehole.[21]

Continuing through 1928, resistivity logging was conducted throughout the Pechelbronn oil field, and the resulting correlations of resistivity from one well to the next revolutionized the stratigraphic understanding of the field. In 1929, the new logging technique went global. Schlumberger logging crews were engaged by Shell for their explorations in Venezuela, the US, and the Dutch East Indies, and by the Soviet Union for the oil fields of Grozny, Chechnya, and Baku, Azerbaijan. Crucially, in July 1929, the Schlumberger brothers signed a contract for electrical surface prospecting work with Groznieft, and a year later it was extended to all of the Soviet trusts through Soyousnieft, overseeing the entire Soviet oil industry. From December 1929, downhole logging was also performed. By 1931, 15 of the Schlumberger's 24 engineers were working in the Soviet Union.[22]

Schlumberger's fortunes, like everyone else's, were rocked by the world depression that hit in November 1929. But the company's Soviet contracts saved it, as the economic crisis did not touch the Soviet Union. At the same time, Conrad and Marcel decided to divest the surface prospecting business because well logging seemed to have the greatest potential for future growth. In March 1931, the Schlumberger brothers set up a new company, jointly with the French government and another French geophysical company, Société Géophysique de Recherches Minières: the Compagnie Générale de Géophysique (CGG) that took over Schlumberger's surface-prospecting methods.[23]

By the end of 1932, drilling activities worldwide revived, and especially in the US, the market started to grow rapidly. Schlumberger's logging expertise was in high demand, soon resulting in more than half of the company's teams working in the United States. The teams, however, were still managed from Paris by the Société de Prospection Électrique, which meant difficult communication and administration. To provide better service for the company's US clients, a separate North American entity, the Schlumberger Well Surveying Corporation, was founded in Houston in 1934. Schlumberger's electrical logging method was now widely accepted and valued.[24]

Conrad and Marcel became frequent travelers around the globe. While returning from a business trip to the Soviet Union in May 1936, Conrad suffered a stroke in Stockholm and died. This left Marcel alone at the steering wheel, and soon he had to show his ability to command the company in choppy waters.

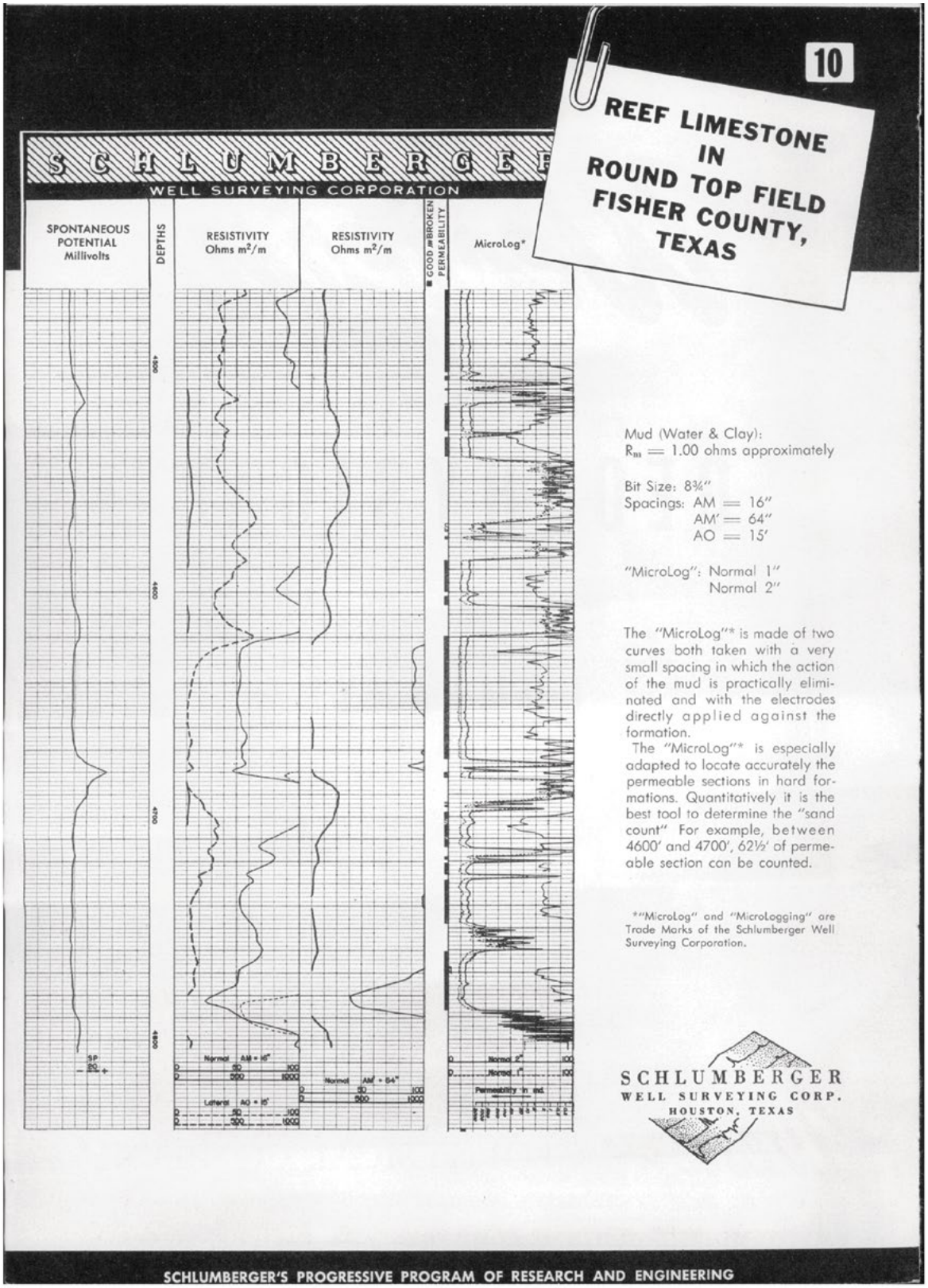

Fig. 6—Advertisement for Schlumberger's Microlog, published in the *AAPG Bulletin*, January 1950 (courtesy of Schlumberger).

In 1940, when the German army had invaded Belgium and was poised to overwhelm France, Erle Halliburton, the head of the Halliburton Oil Well Cementing Company, Schlumberger's main rival, paid a visit to Marcel Schlumberger in Houston. It was clear that France was going to be defeated, that Paris would be cut off from Houston, and that Schlumberger would run into difficulties. Halliburton offered to buy Schlumberger for US$ 10 million. Marcel made no reply but slowly rose from his chair and beckoned Halliburton to follow him. They walked silently to the elevator, where Marcel thanked his visitor and said goodbye.[25]

For Marcel, the hostile takeover bid was not only an attack on his company but also on his beliefs. In a speech at the 50-year anniversary of the first log in New York in 1977, the later CEO of Schlumberger, Jean Riboud, told the audience the most important thing he had learned from Marcel was, "To have an independent mind—to think for oneself, to analyse by oneself, not to follow fashions, not to think like everyone else, not to seek honor or decorations, not to become part of the establishment, but to preserve one's independence at all cost, one's freedom of thought."[26]

World War II inevitably slowed the rapid spread of logging technology and in 1940 made it necessary for the company to move its headquarters to Houston, although Marcel Schlumberger remained in France, where he and his team continued to innovate. Logging trucks were modernized, equipped with a winch and an electrical cable capable of operating a wide range of services in ever-deeper boreholes. New devices, designed to complement electrical logging tools, provided measurements of borehole parameters such as diameter, temperature, and inclination.[27]

The war years witnessed the first activities of Schlumberger outside the oil industry. Early in 1940, the French Ministry of Armaments ordered Doll, who also was a reserve commander in the French Artillery, to work on a new system for detecting land mines. By coincidence, on the other side of the Atlantic, the US Army Corps of Engineers had received orders to start development of new mine detectors, including a detector that could be mounted on the front of a tank or a jeep. As the Nazis approached Paris, Doll escaped to the US, where he immediately offered his services to the US Army for mine detector research and early in 1941 set up a subsidiary, Electro-Mechanical Research (EMR), to carry out the development work. Doll capitalized on earlier induction ideas and by 1944 developed a precision electronic circuit that was able to separate out the small signal created by secondary currents induced in the subsurface that might signal the presence of a mine.[28]

In the years following the end of World War II, the promise of electronics as a powerful and commercially viable ingredient in data recording and transmission was starting to be realized. Schlumberger began incorporating electronics into several of its new tools, enabling the company to provide smaller, more robust equipment. Development efforts were now focused on two types of sophisticated electronic sondes, or probes. The first type was capable of taking high-resolution measurements close to the borehole wall and in very thin beds—tools such as the Microlog, introduced in 1948, a high-resolution array of three electrodes and an insulating pad that could detect permeable zones across which mudcake had formed when it was applied to a borehole wall (Fig. 6). The second type, the induction log, which was developed based on Doll's earlier work at EMR, took measurements farther from the borehole in areas of the formation unaffected by the presence of the well, making it suitable for wells drilled with oil-base fluids.[29]

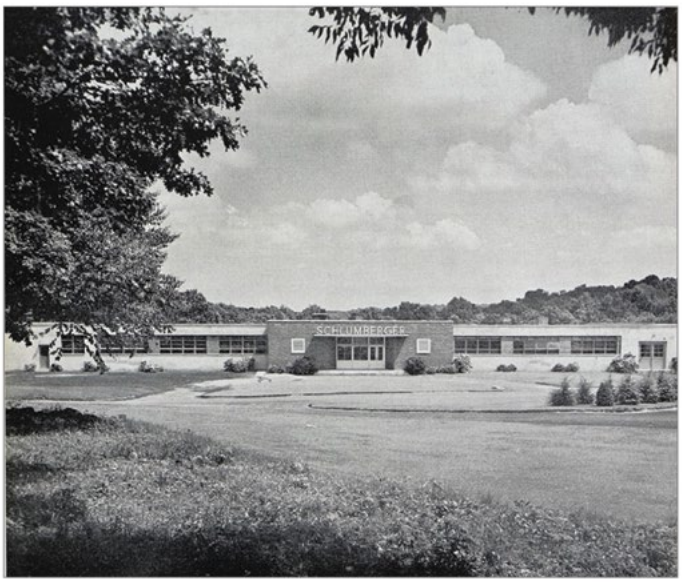

Fig. 7—Schlumberger's first research center in Ridgefield, Connecticut, about 55 miles (90 km) north of New York City. The New England location was chosen because of its proximity to the major universities of the northeast: Princeton, Columbia, Cornell, Yale, Harvard, and MIT. Ridgefield became the town of choice because the Doll family used to spend weekends there during the war hosted by Doll's collaborator in the US Army making mine detectors (courtesy of Schlumberger).

Keeping ahead of competitors required substantial investment in cutting-edge research. In 1948, Doll was charged with establishing a new research center in Ridgefield, Connecticut, renamed the Schlumberger-Doll Research Center in his honor in 1967 (Fig. 7). The Center provided the springboard for the technological breakthroughs that would define Schlumberger success in the second half of the 20th century.[30]

In the first post-war years, drilling experienced a new boom, especially offshore, with the first offshore drilling taking place in the Gulf of Mexico in 1947. Schlumberger wanted to take part in the boom and, for the first time in its history, applied the new strategy of acquiring other oilfield services companies, purchasing 50% of each of the French drilling companies: Forage et Exploitations Pétrolières (Forex) and Société Languedocienne de Forages Pétroliers in 1952.[31]

~To be continued~

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Richard Bateman

Richard Bateman is a veteran of the oil patch and an occasional contributor to the SPWLA's publications, both as a petrophysicist and as a raconteur. He is now retired and living in the Appalachians.

There exists a particular strain of oil patch madness known as a "Geologic Field Trip." Mildly deranged geologists, not content with their own suffering in the back of beyond in search of rocks, derive sadistic pleasure from observing others follow in their footsteps to share the pain.

I have been fortunate in escaping all but two of these fun-filled day trips. The first one started out from Mineral Wells, a charming west-central Texas town that in mid-summer is blessed with 100° days and scorpions, snakes, and spiders the size of dinner plates. The mosquitoes and no-see-ems, by contrast, are just mildly annoying but not life threatening. Our group set off in an air-conditioned hired bus. A geology professor from one of the more prestigious Texas universities conducted the group through a number of interesting educational exercises. One of these, in particular, I recall well. We were told that about a mile along a disused railroad track was a cutting that showed a perfect example of a particular type of geologic fault. I forget now whether it was supposed to be a normal fault or a reverse fault.

To walk along this disused railroad was not easy. If you kept to the wooden sleepers, you either had to take abnormally long steps, which were quite tiring, or step one foot on the sleeper and the next on the bedrock, which was worse since you had to bob up and down like a peg-legged kangaroo. The alternative was to stick to the undergrowth at the side of the track. This lush vegetation was knee high in places and harbored strange reptilian forms that slithered off from under one's foot. Progress was slow, and we spent at least an hour traveling this way to arrive at the spot marked X on the professor's map.

"Here we are!" he pronounced proudly.

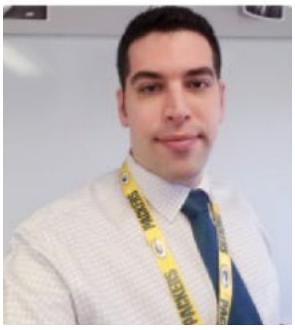
We looked in all directions for the beautiful example of a fault, but there was nothing to be seen. It had been so long since our professor had been down the track, he didn't know that the ground cover had completely covered the cutting and that not a square inch of rock was to be seen anywhere. We returned to the bus, hot, thirsty, bitten by insects, scared by unseen but menacing critters of all sorts, and dived for the cooler that had been well prepared with ice-cold beer.

At the next stop, the professor announced that with a mere half-mile trek, we would be able to witness some other geologic wonder, not to be missed at any cost. He had few takers, some hardy souls who followed him out into the blistering heat, but the majority of us went on strike, stayed in the air-conditioned bus, and drank all the beer.

My second experience with this kind of amusement occurred some 15 years later when I was bamboozled into taking an all-day meander down the Brazos River from south Houston to Angleton, near Galveston Island. The first stop was on Highway 6 South near Sugar Land. Civilization was still in sight. Cars sped past. There were gas stations and horses in fields. Not a sign of a snake or a spider. How foolish we were to think that all was well. Within half a minute of stepping from our vehicles to listen to the spiel about oxbow lakes, we were savagely attacked by fire ants that crept into our sneakers and socks and wrought havoc.

Beating a hasty retreat from the ants, we were directed thence to a gravel pit located at a strategic bend in the river where on the opposite side, there was a massive cut bank. Gently rusting at the base of this massive bank was a 1934 Chevrolet. On top of the Chevy was a 1952 Ford, and topping it all off was a late-model Subaru. The concepts of timelines and sequence stratigraphy were beautifully displayed. However, the professor on this trip would have none of these modern depositions and insisted that we shovel out a pit the size of a decent grave in order to demonstrate the direction of foreset beds and other fine sedimentary details.

Only in America and only those hardy enough to endure a "Geologic Field Trip" can expect to be treated to such riches.



Hello Loyal Quiz Takers!

The last two months have had much more participation in the quiz. Thanks for taking the time to "test your might" on the questions. The month of May was written in anticipation of the symposium, which was held at the midpoint of that month. The June quiz was written to honor the "best of the symposium," where quiz questions were sourced from actual SPWLA papers with citations. I am glad you guys enjoyed both. I think I will start increasing the difficulty a bit since you all are getting too good at getting high scores. The median was still a healthy 6/9 for both months. As always, if you have questions or ideas, please contact Mathilde or me. We are always happy for any ideas relating to fields that I may not have as much expertise in.

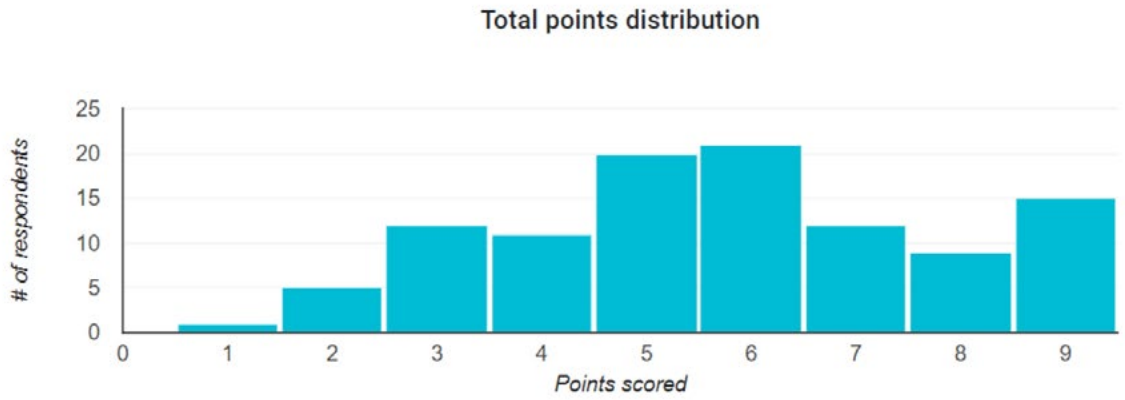
As for the answers, the image log question from June proved to be surprisingly difficult. I put an acoustic image with the reference and asked what kind of image it was. Many people chose resistivity, despite it having no pad gaps and very limited bed variation. The final question of May asked which session people were most looking forward to at the symposium. Unsurprisingly, machine learning and unconventional reservoirs tied with 19 votes each. Quite surprisingly, though, more people voted "not to attend the symposium." If you are going to take the quiz, come to the symposium so that you can learn the answers!

In June, for the last question, I reiterated the question from Zach Liu and Mark Ma's great paper and asked how does one become a petrophysicist? The majority of you, 92 in fact, said, "an expert integrating all data to make sense of formation evaluation performance of wells." Right or wrong, we all got here somehow.

Respectfully,
Adam Haecker

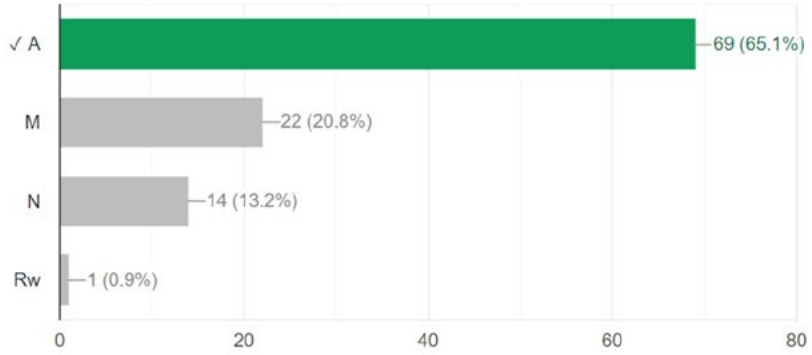
May Quiz Answers:

Average	Median	Range
5.74 / 9 points	6 / 9 points	1 - 9 points



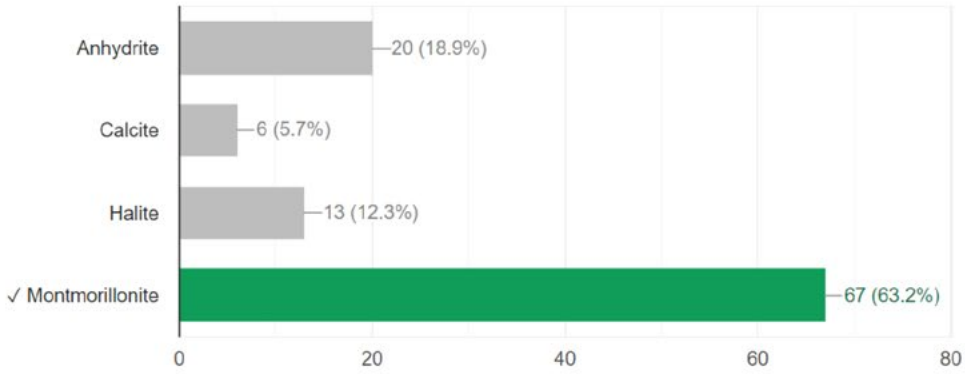
Which variable in Archie's Law is often referred to as the "tortuosity factor"?

69 / 106 correct responses



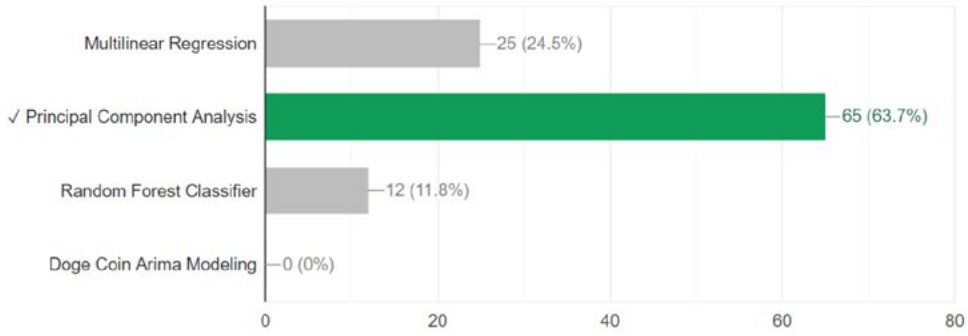
Which of the following minerals likely has the highest Neutron response?

67 / 106 correct responses



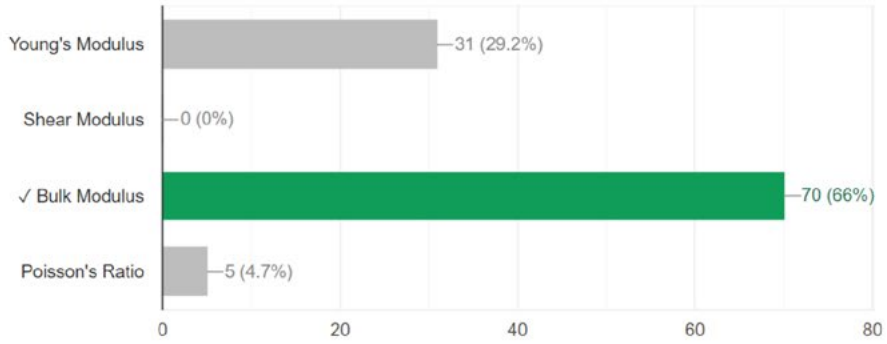
In Machine Learning, what type of unsupervised learning reduces dimensionality by using eigen vectors to create an orthogonal linear transformation that transforms the data to a new coordinate system such that the greatest variance by some scalar projection of the data comes to lie on the first coordinate , the second greatest variance on the second coordinate, and so on.

65 / 102 correct responses



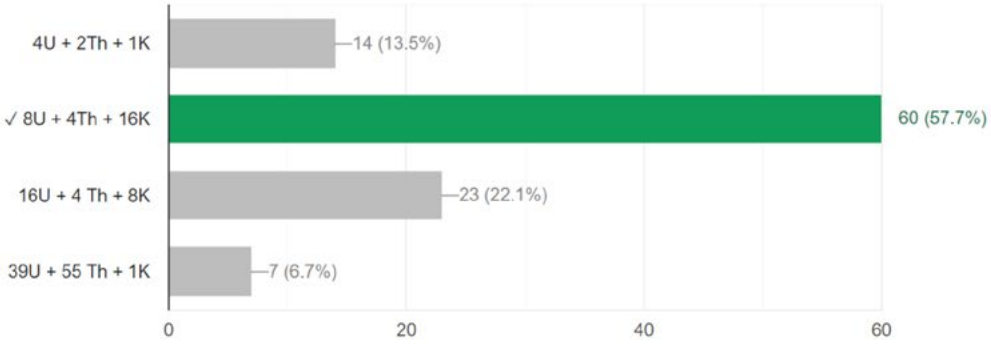
In Rock Mechanics, what property is sometimes referred to as "the Volumetric modulus of elasticisity"?

70 / 106 correct responses



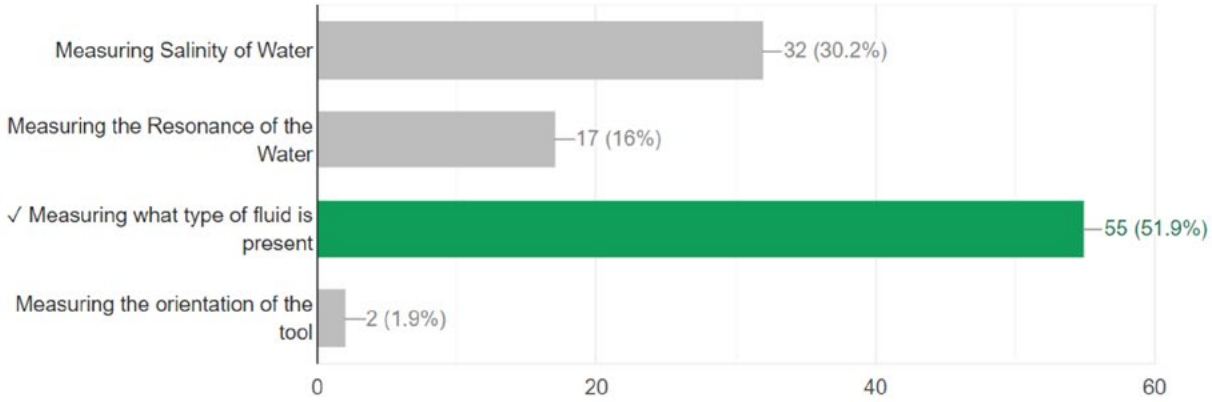
In order to calculate total gamma from its' constituent parts, what is the correct combination?

60 / 104 correct responses



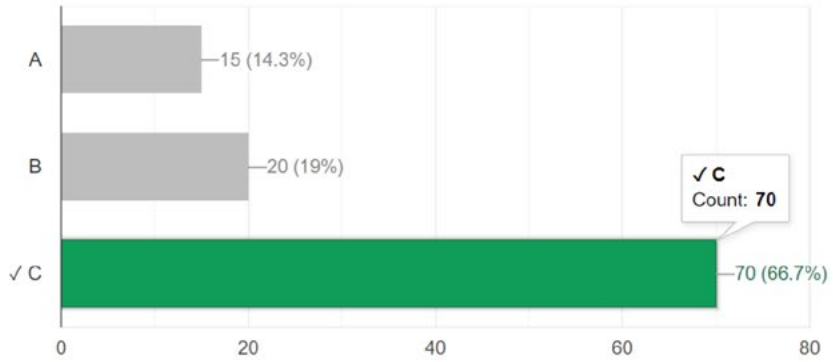
Fluid Capacitance Logging is used for what?

55 / 106 correct responses



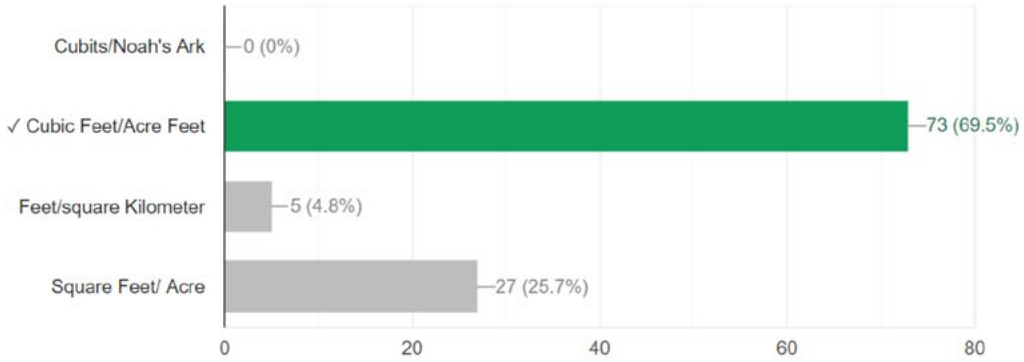
In the following schematic of a formation repeat pressure tester deliverable, which letter best approximates formation pressure

70 / 105 correct responses



In the original gas in place equation (for Imperial units) the constant 43,560 is used to convert what units?

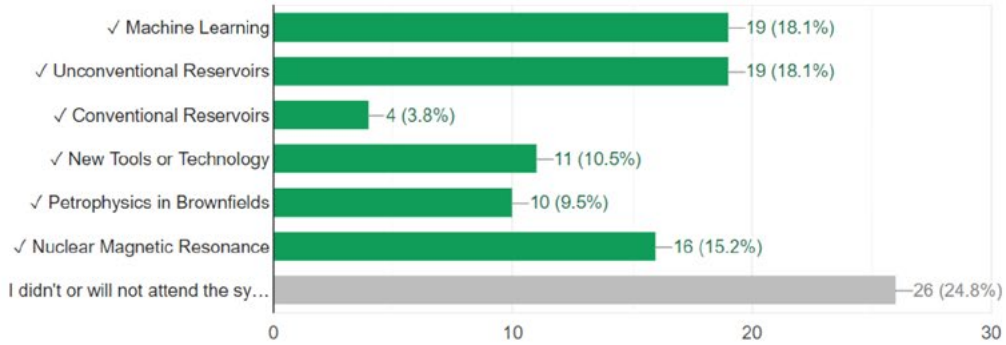
73 / 105 correct responses



The only wrong answer was not attending the symposium!

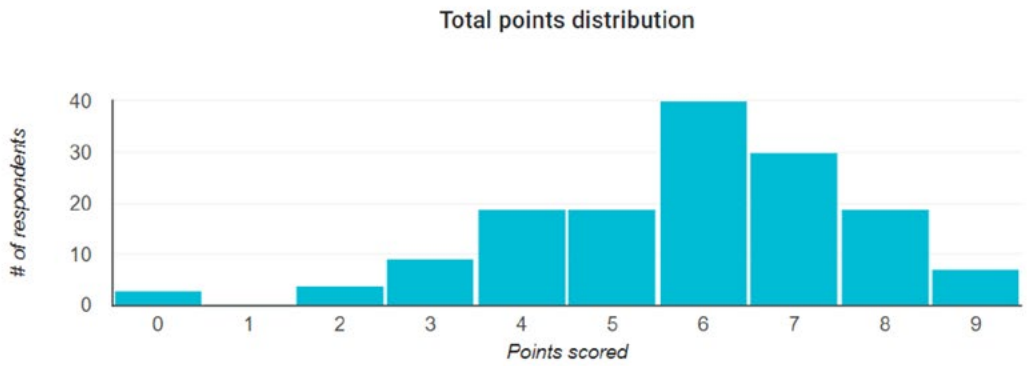
Which SPWLA Symposium Session are you most looking forward to, or did you like the most?

79 / 105 correct responses



June Quiz Answers:

Average	Median	Range
5.81 / 9 points	6 / 9 points	0 - 9 points

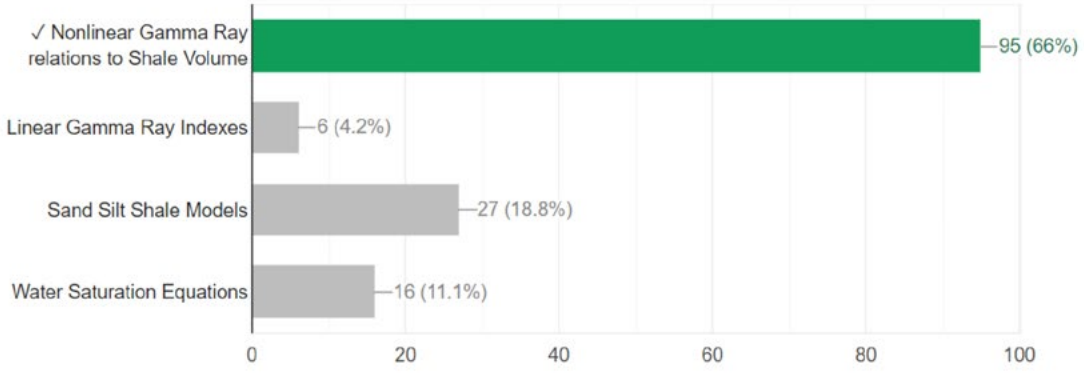


The image log question proved especially tricky.

Question	Correct responses
From Orban, N. et Al., SPWLA-2021-0050, The below image from Brazilian Carbonates is an example of what type of image log?	71 / 143

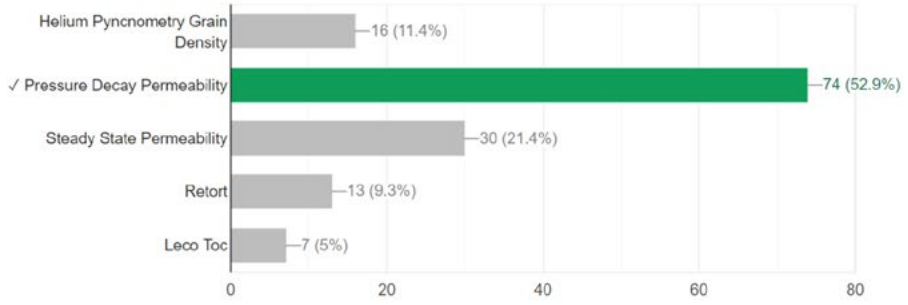
From Kennedy, D. SPWLA-2021-0073, Larinov, Steiber, Clavier are all types of what equation?

95 / 144 correct responses



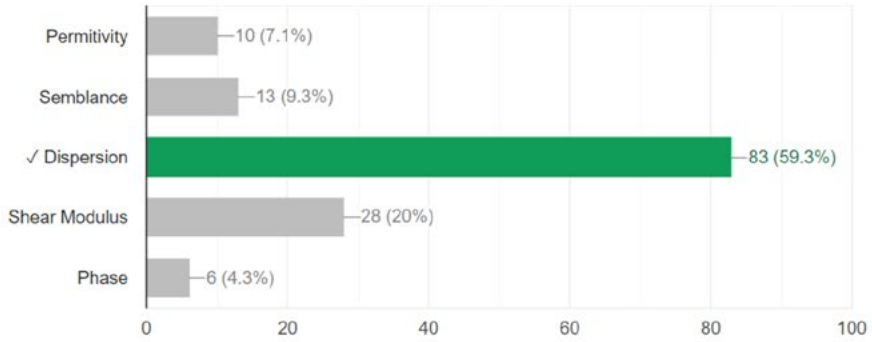
From Cheng, K. et Al. SPWLA-2021-0015, What core test does the plot below represent? Where FR is 'Fraction of residual gas in the void volume of reference and sample cells to the total gas'

74 / 140 correct responses



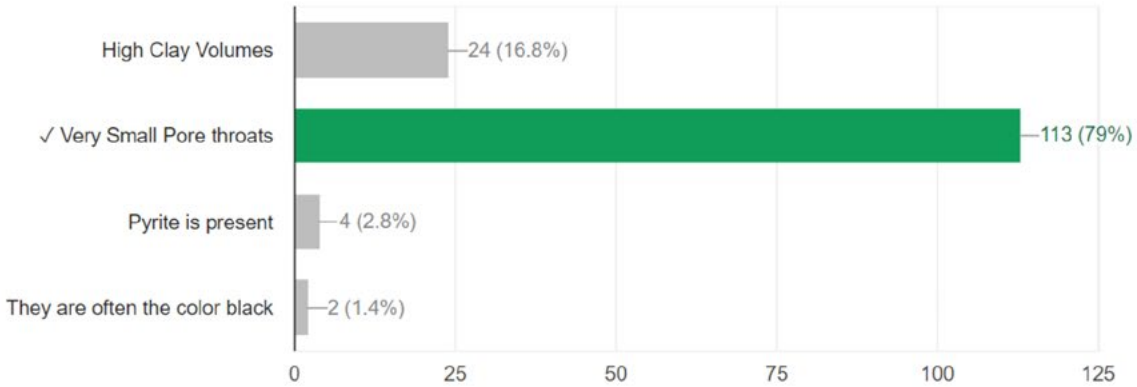
From Donald, A. et Al. SPWLA-2021-0022. The below plot represents what property that is found in dipole shear waves but not monopole shear waves?

83 / 140 correct responses



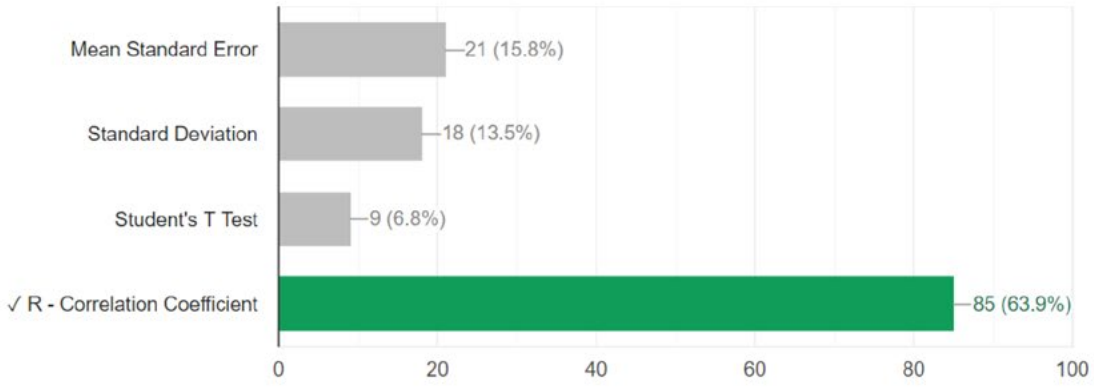
From Xie, H, SPWLA-2021-0094, This chart below of T2 distributions in organic shale porosity at various echo spacings illustrates what property of shales?

113 / 143 correct responses



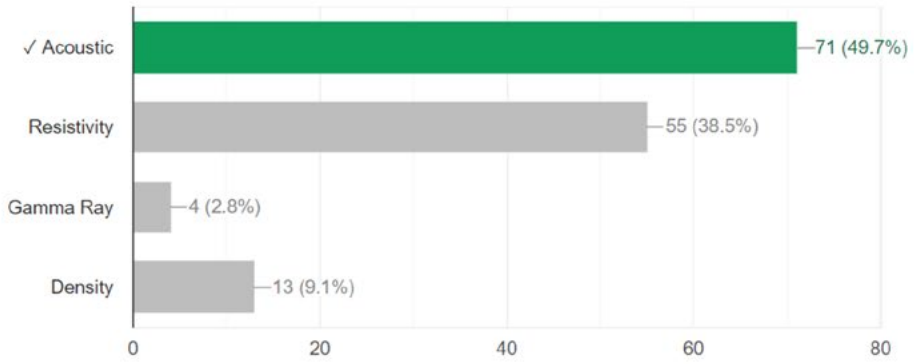
From McDonald, A. SPWLA-2021-0036, The result of Pearson's Correlation is more commonly referred to as what in modern regression?

85 / 133 correct responses



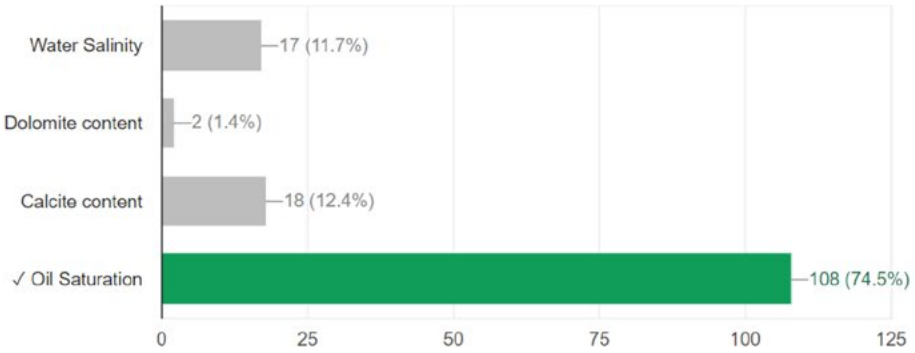
From Orban, N. et Al., SPWLA-2021-0050, The below image from Brazilian Carbonates is an example of what type of image log?

71 / 143 correct responses



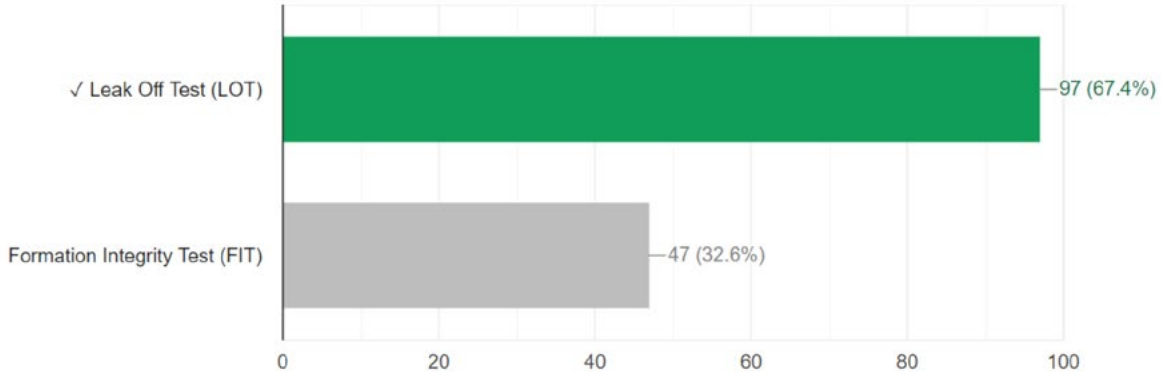
From Ma, M. et. Al., SPWLA-2021-0021, Carbon Oxygen logging is often used to determine what property?

108 / 145 correct responses



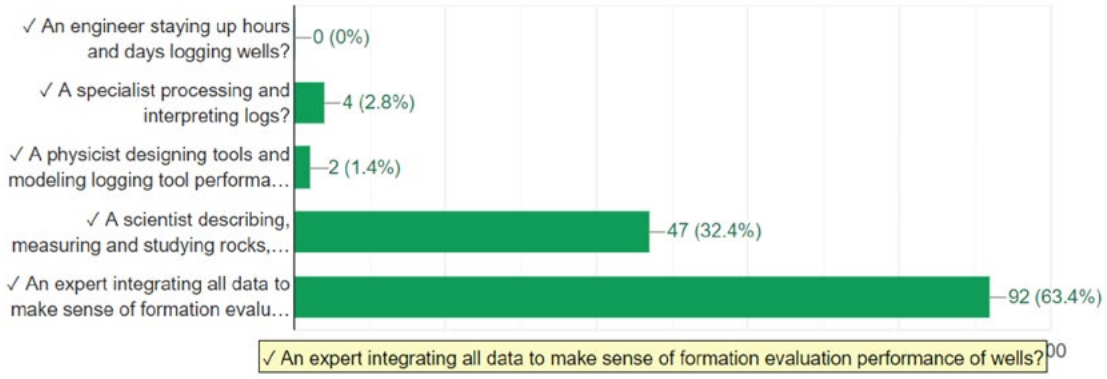
From Desroches, J. et Al., SPWLA-2021-0056, The below diagram is an example of what type of test used to determine minimum principle stress?

97 / 144 correct responses



From Liu, Z. and Ma, M. SPWLA-2021-0110, How does one become a petrophysicist?

145 / 145 correct responses



The last question of the quiz reiterated the question in Zach Liu and Mark Ma's great paper. How does one become a petrophysicist? The answer is any of the above, so all are correct. But, the majority definitely picked "an expert integrating all data to make sense of formation evaluation performance of wells."

Throwback Thursday

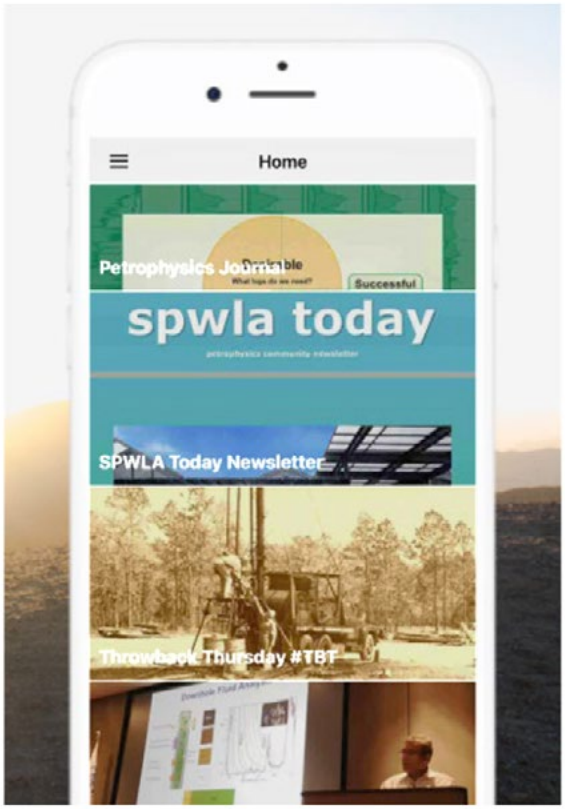
Sonia Marino

Back in April, the last Throwback Thursday #TBT post before editing the newsletter was about the Lucas gusher on Spindletop Hill that started the oil boom in North America. The following week, we looked at the discovery of oil in the Arabian desert at the Dammam Well No. 7, aka the Prosperity Well. We also shared pictures from your personal memories and searched through the SPWLA photo albums for vintage inspiration and humor. We celebrated Earth Day with the first photo taken of the Earth from space in October 1946. We hope that you laughed at the impact of oil price fluctuations on your facial expressions. Please continue reading to see some images that have been posted in Throwback Thursday during the last two months.

Also, Throwback Thursday is celebrating its 6 months of existence with 25 posts! Since January 2021, the SPWLA app has included a Throwback Thursday #TBT section, accessible from the homepage, as shown in the picture below. Keep checking it out and use the feedback section to send us your comments and suggestions. And, send some photos!

In June, we collected your best video conferencing screenshots. Stay tuned for our #TBT guest star in July.

Happy Thursdays, everyone!



April 22nd, 2021

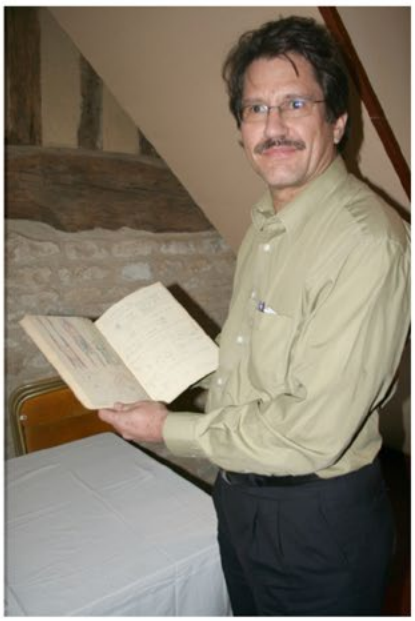
And what about the discovery of oil in the Arabian desert?
Oil production in the Kingdom of Saudi Arabia began in 1938 from Dammam Well No. 7 after 5 years of frustrating and unproductive drilling. The "Prosperity Well" was the origin of the modern Saudi oil-driven economy and led to the creation of Saudi Aramco.

From Riding the Wave of Interest in the New Saudi Arabia, Arab News, April 2018.

May 27th, 2021

Core Lab's first coffee bar at the 1949 American Institute of Mining Engineers (AIME) meeting, Hotel Adolphus, Dallas, Texas.

From the SPWLA Collection.



May 20th, 2021

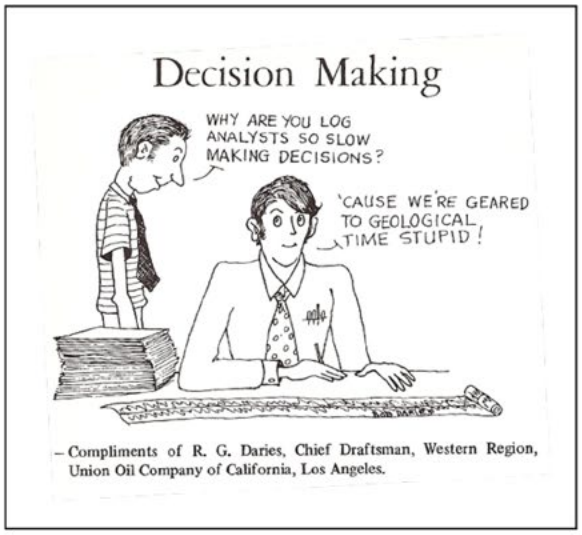
No mistake found in Conrad's calculations! Photo of Jim Hemingway, 2020-2021 SPWLA President, visiting Schlumberger Museum at the Crevecoeur Castle in Normandy, France.

From Jim Hemingway – Personal Collection.

May 6th, 2021

On the way to Brazil on board a CGG ship for a seismic survey in Foz do Amazonas basin, 2001. Stop in Las Palmas de Gran Canaria to reposition the satellite dome.

From Thierry Bertolino – Personal Collection.



June 3rd, 2021

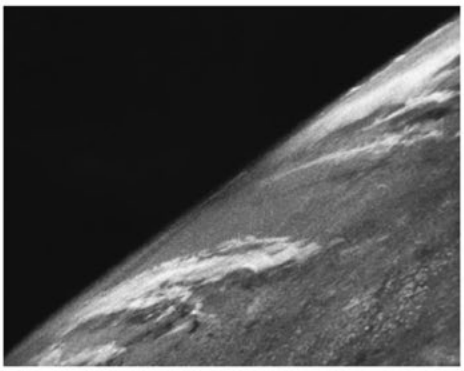
Everything is relative!

From the SPWLA Collection – 1975.

June 10th, 2021

Whatever the oil price fluctuations, don't forget to smile!

From the Houston Chronicle – 2016.



April 29th, 2021

A week ago, Earth Day was observed in 192 countries.
Here is the first photo taken of the Earth from space, at an altitude of 65 miles (105 km), on October 24th, 1946 by the US V-2 rocket (flight #13) launched from White Sands Missile Range in the New Mexico desert.
Happy belated Earth Day!

From Air & Space Magazine.

May 13th, 2021

Back to the pioneers!
Logging job in the Rantau field, Dutch East Indies (1930). Note the style of the logging crew... and the umbrella!

From Schlumberger – The First Years published by Schlumberger.

SPWLA Young Professionals Newsletter

the bridge

Future of Petrophysics - Part 1

by Siddharth Misra

JULY 2021

This article is a compilation of comments shared in the plenary panel discussion of the SPWLA 62nd Annual Symposium.

The panel included Michel Claverie, Robert Gales, Essi Kwabi, S. Mark Ma, and Jennifer Market. The panel was moderated by Siddharth Misra.

Current State of Petrophysics and Formation Evaluation

Petrophysics is a worldwide activity. Wireline (WL) activity is dominant in North America, Saudi Arabia, China, and Russia. Logging while drilling (LWD) is dominant in Russia, Saudi Arabia, and UAE. The use of petrophysical technologies should provide the bigger picture view of the reservoir through integration of data. Data analytics will be a critical tool to speed processes. Making the most from minimal info has become essential in the current cost-conscious environment. Balancing cost of data acquisition with data-quality preservation is also important.

Technology, like art, is an exercise of the human imagination. Technology is the engine of change. How are new emerging technologies influencing the world of petrophysics?

Today, most measurements are available on LWD or WL with nearly equivalent results. The more complex the perceived reservoir, the more data that is acquired. The higher the perceived risk, there is an increased use of LWD. For example, offshore, especially deep water, uses extensive measurements to reduce risk for potential development. Regardless of the data type, speed of delivery and use of the data are important across the board. All of this is balanced by the cost of oil. Data acquisition tends to be the first area to get cut in order to reduce costs. The North American unconventional market is a good example that is dominated by minimal data and operational efficiency.

There have been few new measurements that have been commercially introduced in the last decade. Technology has led to shorter, more reliable tools. Improved measurements and signal processing have resulted in better and "more" available information and improved interpretation. Azimuthal resistivity is a good example, where today we can read hundreds of feet around a wellbore and in front of the bit. Data analytics (readily available tools) coupled with speed of processing (cloud) have allowed us to work faster with large data sets.

Sensors conveyance has progressed dramatically in the last few years. These include wireline cables

and tool positioning, drillpipe sensors (LWD), tractors for OH and CH, through-the-bit sensors, coil tubing, and digital slickline. All these solutions have greatly improved acquisition efficiency and measurement quality in complex conditions.

The new technology has emerged mostly in the form of information technology for data transmission, storage, and processing for efficient formation evaluation; remote operation control to reduce personnel at the wellsite; and high-performance computing for modeling and multisensor inversion for improved static volumes' accuracy and precision, and improved contribution to the dynamic reservoir model.

The emerging technologies can be viewed as a double-edged sword that can dramatically improve efficiency, e.g., logging while tripping and robologger onsite XRF, but can also remove the human factor and human intelligence, e.g., less personnel needed for most activities, and several procedures involve pushing buttons on a black box as compared to understanding the rock and fluids in it.

The ever-increasing population and need for affordable energy will lead to continuously increasing demand for fossil fuels in the near future. Petrophysicists form an important group of professionals whose skills are critical to oil and gas field development and extraction. Unlike their counterparts, i.e., geologists, geophysicists, and engineers, petrophysics is not a standard degree program in most universities. As a result, there is a considerable uncertainty regarding the skill set required for students who want to become petrophysicists. The SPWLA Education SIG has developed skill set guidelines for budding petrophysicists, which is referred to as the Petrophysics Skill Set Guidelines (PSSG). The latest document is available on the SPWLA website (Link). The guidelines cover a wide array of topics with extensive discussion on basic and specialized skills. This document is versatile and can be used by students, universities, and companies to impart valuable skills to potential petrophysicists.

Traditionally, petrophysicists develop from experienced logging engineers, geologists, core analysts, tool physicists, and even petroleum engineers. Petrophysics is a multifaceted, multidisciplinary field requiring knowledge about science, technology, engineering, and math foundations, complemented with advanced computing and data science. Liu and Ma (2021) presented this topic at the 2021 SPWLA Symposium, giving their own examples on how they started their petrophysics journey and how continued education led to their career development.

Figure 1 shows a demonstration of the genuine industry concern, "The Great Crew Change." The cyclical nature of the oil and gas industry has historically often led to a migration of talent during low oil prices. The figure shows the majority of the professionals are in an older age group. Thus, the industry is likely to face a talent gap in the near future when senior professionals retire. To prepare for The Great Crew Change, initiatives, such as PSSG, are crucial to stop the skill gap from growing wider and to educate and mentor the aspiring younger generation of petrophysicists.

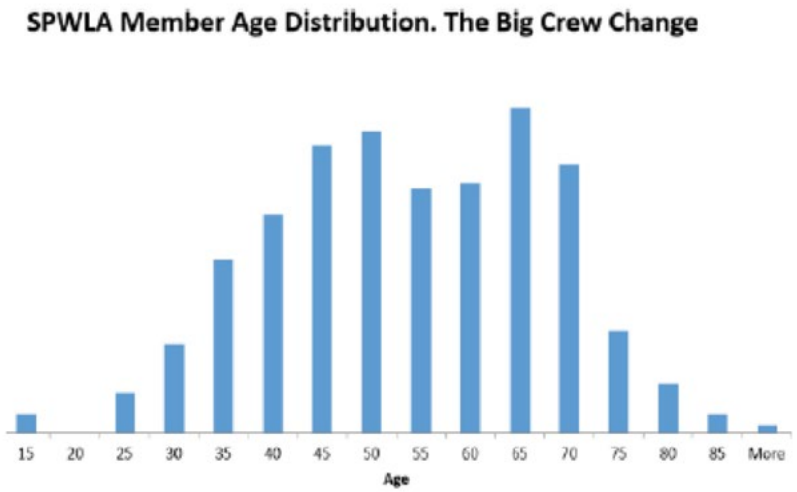


Fig. 1—SPWLA member age distribution for 2020 (Liu and Ma, 2021).

The SPWLA 62nd Annual Logging Symposium was held virtually between May 17–21 and comprised of 118 presentations on various topics related to petrophysics. These topics are an extension of the PSSG document and represent current academic research, field case studies, innovative new solutions, and automation efforts using machine learning/AI. The symposium covered a wide range of topics, including but not limited to production logging, conventional and unconventional petrophysics, borehole imaging, deepwater petrophysics, rock property analysis, well integrity, brown field and green field petrophysics, formation fluid analysis, core analysis, geochemistry, NMR and acoustic logging, and the people's favorite, machine-learning and AI applications. While the depth and breadth of petrophysics may seem overwhelming given it is an amalgamation of various branches of science, this field has far-reaching implications for successful oil and gas development. Moreover, with the recent global impetus on renewable energy, electrification of vehicles, and carbon sequestration, petrophysics is a coveted branch due to the direct skill transfer to related fields like geothermal, mining, carbon management, and water resource evaluation.

References:

Liu, Z.Z., and Ma, S.M., 2021, Petrophysics Skill Set Guidelines for Independent Petrophysical Contributors, Paper 110, *Transactions*, *SPWLA 62nd SPWLA Annual Logging Symposium*, held virtually, 17–20 May.

The 12th UPC International Symposium on New Well-Logging Techniques — Intelligent Logging & Processing and Applications of Well-Logging Data

Due to advances in the exploration and development, deep and unconventional oil and gas have become a vital replacement resource. It sets a higher bar for well-logging technology and promotes the development and application of artificial intelligence and big-data technology in the well-logging field. This symposium focuses on the intelligent logging and processing and *applications of well-logging data* and covers novel techniques in other logging methods.

The East China Chapter of SPWLA invites you to Qingdao on September 15–17, 2021, to present your case studies, new technologies, and innovations at the 12th UPC International Symposium on New Well-Logging Techniques. We are currently accepting papers relevant to the following categories:

1. Artificial intelligence and well logging
2. New generation software platform of logging information processing
3. The application of machine learning and data mining technology
4. The formation evaluation of deep and ultradeep and unconventional oil reservoirs
5. Data processing and application of LWD and high-angle and horizontal wells
6. Other logging technologies and applications

The information in your abstract will constitute the basis for the acceptance of your paper into the technical program. The full articles should not have been formally published in any journals and publications and are required to contain 300-400 English words with 3-5 keywords. The abstract should include a brief introduction of the corresponding author with personal information, including age, gender, educational background, professional title, affiliation, address, email, and mobile phone number.

Important deadlines:

June 30, 2021: Submit your abstract (PDF form) to chenxl@upc.edu.cn

July 31, 2021: Submit your final manuscript (PDF form) to chenxl@upc.edu.cn

If you have any further questions, please contact Feng Zhang by email zhfxy_cn@upc.edu.cn or Baohai Tan by email tanbaohai@upc.edu.cn.

We look forward to your submission. Best regards.

Organizer： The East China Chapter of SPWLA

Co-organizers：

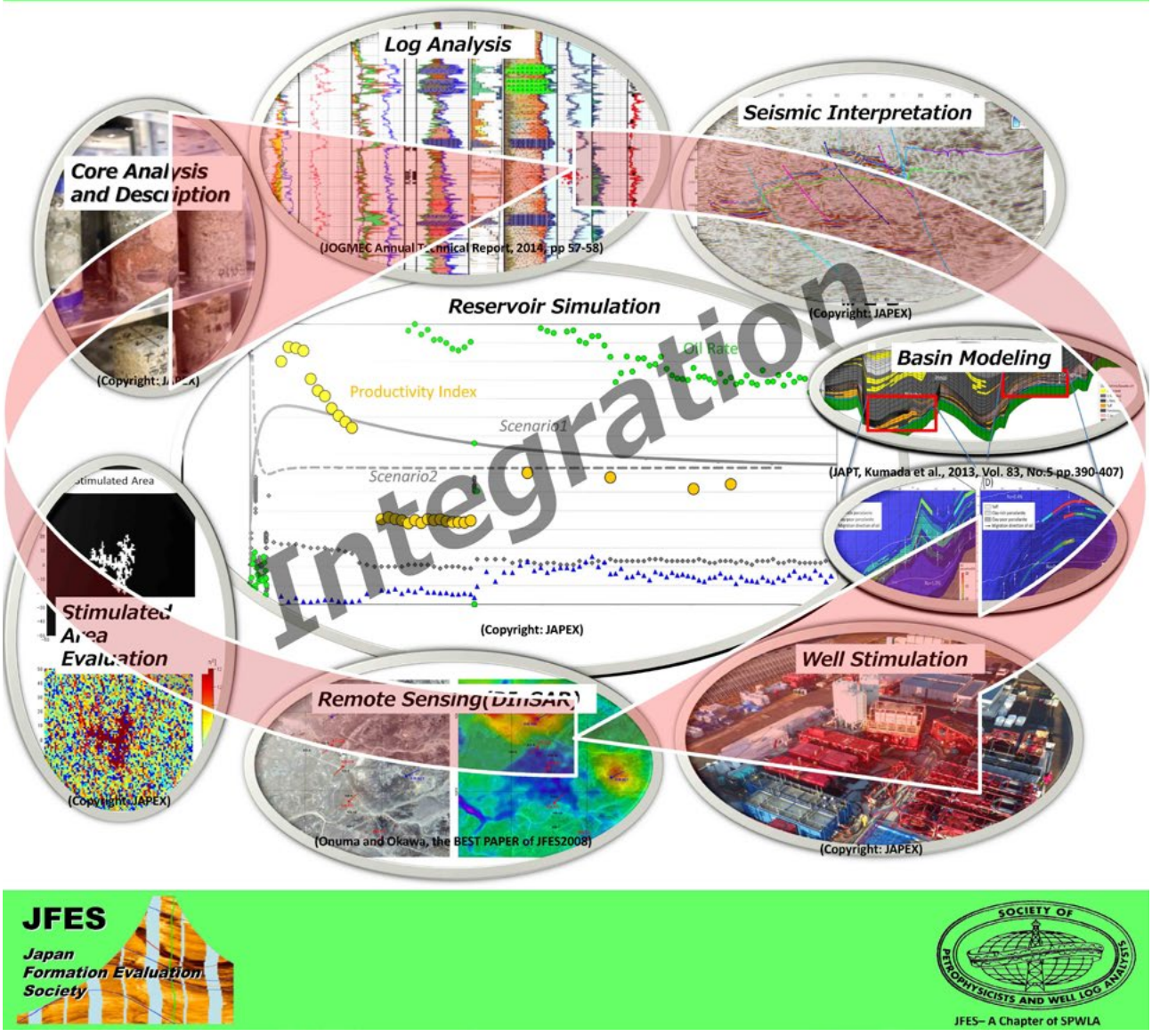
China University of Petroleum (East China)

Petroleum Well Logging Committee of Chinese Petroleum Society Borehole Geophysics Committee of Chinese Geophysical Society

The 26th Formation Evaluation Symposium of Japan
Virtual Meeting
30th September, 1st /7th /8th October
13:00-17:00 Japan Standard Time (GMT+9:00) Each Day
Pre-recorded video presentation and Live Q & A
Special Session: Integrated Evaluation

Keynote Speech: Ms. Katerina Yared (SPWLA President/SM Energy)
Invited Talk:

1. ***Dr. Machiko Tamaki (Japan Oil Engineering)***
   Core, log and seismic data integration for 3D modelling of a methane hydrate project
2. ***Mr. Ryuichi Uchimura (JX Nippon Oil & Gas Exploration)***
   Key elements in the full iteration process with multi-discipline team for the successful subsurface evaluation
3. ***TBA***



JFES
Japan Formation Evaluation Society

SOCIETY OF PETROPHYSICISTS AND WELL LOG ANALYSTS
JFES– A Chapter of SPWLA

Society of Petrophysicists and Well Log Analysts

Petrophysical Data Driven Analytics

SPWLA PDDA Machine Learning 2021 Contest – Call for Proposals

Petrophysical Data-Driven Analytics (PDDA), a special interest group under society of Petrophysicists and Well Log Analysts (SPWLA), invite proposals for the 2021 machine learning competition.

Following the success of the last year's competition (https://github.com/pddasig/Machine-Learning-Competition-2020), a second edition of the competition track will be held from August to October 2021. We now solicit competition proposals on any topics of interest to the petrophysics community. We especially encourage competition proposals from emerging new fields or new application domains related to petrophysical interpretation based on core data and well logs.

The contest will be open to all SPWLA members (including student members) who are interested in machine learning applications in petrophysics. Top winner teams will be awarded prizes and invited to present their work at the PDDA SIG annual meeting.

A competition program committee will be formed, consisting of experts on both machine learning and petrophysics. Each proposal will be reviewed by the members of the committee. The factors that will be considered when evaluating proposals include:

- **Data:** A set of publicly available data is required for non-commercial competition purposes.
- **Task chosen:** Impact, originality, relevance to the petrophysics community will all be considered.
- **Protocol of competition:** Feasibility of the task chosen, soundness of the evaluation criteria, and clarity and fairness of the competition rules will all be considered.
- **Logistics:** Schedule, plan for attracting competition participants, and experience and diversity of the organizers will all be considered.

The best proposal will be awarded and the one who submits it will be invited to join the competition committee.

Competition proposal submission deadline: **July 15, 2021**

Contact: Lei Fu (pdda_sig@spwla.org)

Sponsoring opportunities:
SPWLA PDDA SIG is accepting sponsorship for this event to award the top winning teams. Please contact Lei Fu for details.

SPWLA 2021 Fall Topical Conference

UNCONVENTIONAL PETROPHYSICS

Updated Schedule: Oct. 21-22, 2021
Tentative Location: Halliburton Main Campus, Houston, TX
Will be virtual if face-to-face meeting is not feasible

This conference will focus on the most recent advances in unconventional petrophysics from laboratory measurements to field applications. It will be a place to exchange and discover the best practices and latest progress in unconventional petrophysics.

The organizing committee would like to invite additional abstract submissions on all topics relevant to unconventional petrophysics, including:

- *Advances in laboratory measurement techniques: porosity, saturation, permeability, wettability, rock mechanics, minerology, organic chemistry, nano-confined fluid properties, etc.*
- *Applications and advances in well logging methods for unconventionals: quad-combo, NMR, borehole images, dielectric, acoustic, geochemistry, formation testing, etc.*
- *Integrated workflows for formation evaluation and completion planning, identification of 'sweet spots' and DHIs, estimation of SRV, etc.*
- *Influence of petrophysical parameters on geo and reservoir models*
- *Advances and new methods in petrophysical measurements in high angle and horizontal wells*
- *Advances in production diagnostics to "close the loop" from production logs, chemical tracers, and DTS/DAS to understand zonal contribution*
- *Advances and applications of machine learning and data analytics in unconventionals*
- *Limitations of current technologies and future new developments*

NEW ABSTRACT SUBMISSION DEADLINE: July 21st, 2021
SUBMIT TO: abstract@spwla.org

The conference will comprise oral presentations, panel discussions, and invited keynote presentations at lunch time.

Co-chairs: JinHong Chen (Aramco Americas) and Matthew Blyth (SLB)

Steering Committee: Alexei Bolshakov (Chevron), Ron Bonnie (ConocoPhillips), Robert Gales (HAL), Keli Sun (SLB), Kristoffer Walker (Chevron), Chicheng Xu (Aramco Americas)

SPWLA VP of Education: Fransiska Goenawan (HAL)

SPWLA 2021 Fall Topical Conference

Unconventional Petrophysics

This topical conference will be conducted as an “off-the-record” forum with no publication of any material presented. We encourage the presenters and participants to share their case studies, conceptual innovations, new methodologies and latest technologies. Video recording, photographing or quoting of speakers or their presentations will be expressly prohibited. Company logos should be limited to the title slide to indicate the affiliations of the author and co-authors. Commercialism during presentations is not permitted.

Conference attendance seating may be limited due to room capacity and social distancing requirements. Preference will be given to applicants who are willing to present at this topical conference. Presenters will be expected to register and pay the registration fee.

Conference registration fee
TBD

SPWLA Policy It is the policy of this organization to provide equal opportunities without regard to race, color, religion, national origin, gender, sexual preference, age, or disability

Thanks to our sponsors

aramco HALLIBURTON Chevron

Petrophysics NMR Special Issue Call for Papers

Dear NMR petrophysics enthusiasts,

With the help and support from Elizabeth Naggar (Managing Editor of Petrophysics Journal) and Songhua Chen (VP Publications for SPWLA), the SPWLA NMR-SIG is targeting the publication of the "NMR Special Issue for Petrophysics Journal" in **June 2022**.

We are announcing a call for papers on the following topics in NMR petrophysics and formation evaluation technologies:

1. History
2. Basic principles
3. Instrumentation
4. Data processing
5. Applications
6. Interpretation
7. Reviews
8. Tutorials
9. Reference databases

The following guidelines should help:

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

Please submit your articles to Editorial Manager® by the **October 1st deadline**, and please make sure to select "NMR Special Issue" for the "Article Type".

Also, please feel free to forward this message to all interested parties.

Best regards,
Philip Singer
(Guest Editor of Petrophysics Journal)

ABERDEEN CHAPTER
(Aberdeen Formation Evaluation Society)

Upcoming Events

14 July 2021—Technical Talk: Justin Greene (Corex), "Scaling Assessment: Inorganic & Organic." Scaling is a key in the reservoir, well, and as a flow assurance consideration, and precipitates can form due to compatibility issues as well as changes in conditions in both producer and injector wells. This session will focus on inorganic scales but will also discuss organic scale and its importance.

- How is scaling potential identified?
- Why is it so important to carry out simulations under the right conditions?
- How are candidate inhibitors screened?

July 2021—With the pandemic restrictions slowly being eased, AFES hopes to bring you the annual Field Trip/ Summer Social sometime in July or August.

September 2021—We are also making tentative plans for a Full-Day Seminar, held physically in September. Titles are still to be finalized, but we are considering a title based around wireline compared with LWD data. Please check our website (www.afes.org.uk) or contact Greg Blower @ President@afes.org.uk for details. We are also available on Facebook and LinkedIn.

Recent Events

21 April 2021—Seminar: AFES held a Half-Day Seminar with the theme of Porosity/Permeability. The web-based event was well attended, and AFES would like to thank the speakers: Alan Johnson, Keith Milne, Steve Cuddy, Craig Lindsay, and Ibrahim Milad, for enabling such an engaging afternoon of talks.

12 May 2021—Technical Talk: Dario Reolon (Eni S.p.A. and SPWLA Distinguished Speaker), "Unlocking Data Analytics for the Automatic Evaluation of Cement Bond." This was a very well-attended, web-based event, with much discussion after the main talk. Slides are available for this talk but through the SPWLA Knowledgette webpage.

7–9 June 2021—DEVEX 2021: DEVEX, a three-day conference focusing on UKCS exploration and production, produced jointly by SPE, PESGB, and AFES, was recently held. The event provided around two dozen technical talks and case studies, a Young Professionals section, Master Classes, and virtual networking sessions. The conference provides excellent opportunities for petroleum and reservoir engineers, geoscientists and geophysicists, and geologists to come together and share knowledge. The conference, for this year, remained a web-based event and was well attended. More details are available at www.devex-conference.org.

15 June 2021—Technical Talk: Remke Ellis (TGT), "Verifying Seal Integrity of a Formation Barrier Behind Pipe Spectral Acoustics." The presentation focused on the use of spectral acoustics in conjunction with pressure tests to rapidly verify the integrity of annular barriers (cement/formation) and identify the reason(s) of failure. The event was well attended, and the local speaker generated much discussion. Slides are available on the AFES website (www.afes.org.uk).

AFES SEMINAR 2021			
TIME (UK - BST)		PRESENTER	TITLE
13:00	13:30	Alan Johnson	Effective porosity from capillary data
13:30	14:00	Keith Milne	Incorporating directional permeability into geological modelling
14:00	14:30	Steve Cuddy	Should petrophysics calculate total or effective porosity?
14:30	15:00	Craig Lindsay	Relative porosity – does it exist and if so how can we measure it? Does it matter?
15:00	15:30	Ibrahim B. Milad	Permeability prediction in a complex carbonate reservoir in south Iraq, by combining FZI with NMR

Refer to the AFES website, where the slide packs for many of these talks are available for download. [www.afes.org.uk/full-day-seminar-porosity-permeability/]

Finally, AFES would like to extend thanks to our sustaining annual sponsors:

ARGENTINA CHAPTER

General News

This committee meets monthly; we have already held two meetings during this second quarter 2021, and the different activities to be carried out are being outlined.

Technology/Innovation Team: They are actively working, trying to cover the topics of greatest interest to satisfy our chapter community.

The regional delegates are contacting university officials to better understand the needs of recent graduates and students. Given that the topics of interest are fundamentally associated with finding a job, the idea is to generate a series of activities to support this segment of our chapter.

To normalize Argentina Chapter memberships, we strongly encouraged professionals interested in our activities to enroll in one of the membership categories SPWLA offers. The results were amazing, and today, we have 130 affiliated members of the Argentina Chapter.

One of our main objectives this year is to be present in the student agenda of the universities. We continue preparing activities and strategies to capture the interest of seniors in college and help them through the complex transition to work life.

The BOD SPWLA accepted the invitation and authorized the Institutional Sponsorship of the XI Hydrocarbon Exploration and Development Congress, to be held in November 2022 in Mendoza, Argentina. Additionally, a talk on SPWLA will be given during the event.

For further information, please go to: https://www.iapg.org.ar/conexplo/.

Due to the global pandemic, we are designing different formats for activities. We must be creative and take this situation as a great opportunity for professional and personal growth. To learn more about us, https://www.linkedin.com/in/spwla-cap%C3%ADtulo-argentina-1994211bb/ or email: spwlacapituloargentina@gmail.com.

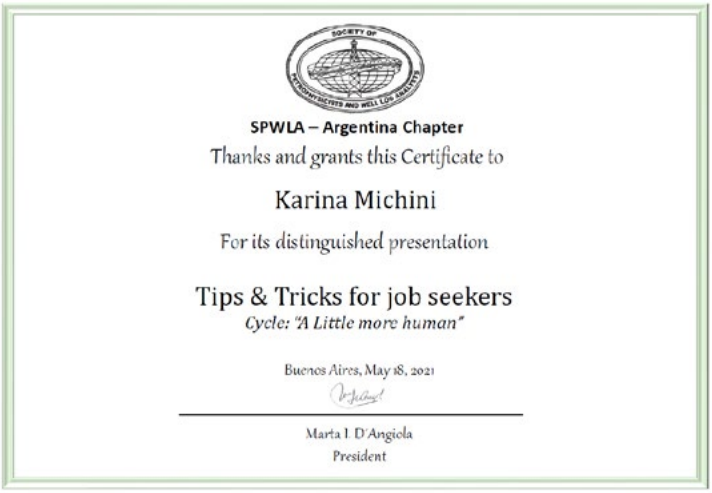
Recent Events

18 May 2021—New Cycle: A Little More Human–Introduction to the World of Work. How to Conduct Ourselves? Karina Michini, HR advisor, carried out this activity. The level of interest was high, especially for young professionals looking for their first job in these difficult pandemic times. The presentation showed tips and tricks for job seekers, which was very useful for this segment. As the moderator, we invited geologist Francisco Javier Torres, who works as coordinator of the Young Argentine Professionals (JPA), which brings together more than 4,000 professionals throughout the country.

Karina Michini and the first event of this cycle, A Little More Human.

The idea is to develop an interactive space where advanced students and young professionals can find and develop their soft skills. The videos are located on our local YT Channel.

PRESENTATION: https://youtu.be/APgHNCe1-PY
Q&A: https://youtu.be/SzIQroPpzk4


SPWLA – Argentina Chapter

Thanks and grants this Certificate to

Karina Michini

For its distinguished presentation

Tips & Tricks for job seekers

Cycle: "A Little more human"

Buenos Aires, May 18, 2021

Marta I. D'Angiola
President

Argentina Chapter thanked and granted this certificate to Karina Michini.

24 June 2021—Open Talk Cycle: "Comprehensive Studies at the Plug / Lateral Control Scale–The Right Tool to Solve the Complexity of Unconventional Oil Fields?" Speaker: Ezequiel Gonzalez Pellegri and Mariano Cipollone (petrophysicist, YPF-Tecnología) and Moderator: Paula Bedini (Y-CORE Platform's leader and senior petrophysicist at YPF TECNOLOGIA; VP Technology, Argentina Chapter).

Our next activity will be about unconventional oilfield studies.

Upcoming Events

5 July 2021 at 10 am—GDS Steve Cuddy will present "The Benefits and Dangers of Using Artificial Intelligence in Petrophysics." Moderator: Pablo Pateti (senior petrophysicst, Wintershall Dea, VP Technology, Argentina Chapter).

Proposed topics after July 2021:

Jorge Barboza, (Emerson) (Confirmed). Topic: "Methodology and Application of Synthetic Curves."

Josefina Vizcaino (Fulbright Student at Binghamton University) (Confirmed).

We are looking for new and more interactive formats, such as interviews as round tables.

Other activities related to soft skills acquisition:

We propose the organization of formative and informative activities for students in the last steps of their career, which may be of interest to the general audience.

Cycle: A Little More Human: SPWLA—"The World of Formation Evaluation." This event would cover petrophysics in the area of hydrocarbon exploration and development. We could build a map of activities/specialties within the organization, and the location of where different petrophysicists could work, describing the importance and possibility of professional growth and development.

What opportunities do oil companies and service companies offer?

Our team will find out what plans they have for internships or other opportunities from the main oil companies.

AUSTRALIA CHAPTER
(Formation Evaluation Society of Australia, FESAus)

General News

FESAus, the Australian chapter of SPWLA, combines the formation evaluation societies from around Australia, predominantly Western Australia, as well as FESQ, New South Wales, Victoria, and South Australia. With the great work done by Australians to date in managing the COVID-19 outbreak, we resumed in-person chapter meetings in July 2020 and are continuing the webinar series hosted by Halliburton for our out-of-state members. The new format has been received enthusiastically by our membership and offers the opportunity for some to polish their webinar-presenting skills further. Webcasts of the presentations are also available soon after for members to review as they wish. Our meetings are held on the second Tuesday of each month, and we welcome new members to visit www.fesaus.org for meeting information.

Our committee meetings are now back to normal and held in person, with our interstate members joining via Teams. Zeyn Safarkhanlou has become our new Monthly Meeting Coordinator, and we are still looking to fill the positions for Company Secretary and Sponsorship Coordinator.

Recent Events

May 2021—Our May gathering included an online presentation from Ray Hanna (Core Laboratories in Houston) on "Electrical Property Measurements and their Advances." It was well attended virtually, and we are very grateful Ray could join us during his late evening!

9 June 2021—Dr. Thomas Richard presented a fascinating technical talk on CoreDNA involving the interpretation of ultrahigh-resolution images with continuous direct measurements to identify rock types. Zooming in on one of these images at the end of his presentation wowed those of us in the room as to the detail presented and the resolution not just at the surface but seemingly in 3D.

Dr. Thomas Richard with President Wes Emery.

Ray Hanna

Upcoming Events

13 July 2021—Technical Presentation and Webinar: We are having our first sundowner of the year at our usual location, with Steve Cuddy from the UK presenting "The Benefits and Dangers of Using Artificial Intelligence in Petrophysics." It will be a great event and a real chance for us to mingle and relax after business hours.

August 2021—August Presentation will be presented by Jennifer Market, who will once again open our eyes and ears to the applications of petrophysics outside of the traditional oil and gas industry to the booming minerals exploration and mining industry.

2021 Committee members

President	Wesley Emery
Vice President	Martin Kennedy
Company Secretary	Vacant
Treasurer	Jean-Baptiste Peynaud
Monthly Meeting Coordinator	Zeyn Safarkhanlou
Assistant Treasurer	Vacant
Website Coordinator/Data Standards Focal Point	Diego Vasquez
Secretary/Social Coordinator/ Special Events and Awards	Vacant
Membership Coordinator	Siobhan Lemmey
New Technology Forum & Masterclass Coordinators	Dunstan D'Souza & Bronwyn Djefel
Education Group Leader	Vacant
Audio Visual Coordinator	Nigel Deeks
Sponsorship Coordinator	Vacant
Audio Visual Coordinator	Yang Xingwang
Newsletter Coordinator/ Inter-Society Liaison	Bronwyn Djefel
Queensland Representative	Sally Edwards
Victoria Representative	Ashish Datey
NSW Representative	Harris Khan
South Australian Representative	Matthew Pfahl

BAKERSFIELD CHAPTER (SJWLS)

General News

We had many great virtual speakers for the 2020–2021 year! The chapter will take a summer break for the July and August months with the hope of meeting again (in person) for our annual September BBQ.

We currently have several officer positions open.

Recent Events

May 2021—"Delineating the Geothermal Structure and Flow Properties in a Sub-Horizontal Well with the Use of Wireline and LWD Data in a Multiphysics Approach" presented by Erik Wielemaker.

June 2021—"Formation Chlorine Measurement from Spectroscopy Enables Water Salinity Interpretation: Theory, Modeling, and Applications" presented by Jeffrey Miles.

BANGKOK CHAPTER

General News

The COVID roller-coaster continues, and Thailand is returning to virtual meetings in the midst of a new wave of infections.

The SPWLA Bangkok Chapter would like to congratulate Mr. Ryan Lafferty for his election as the new Regional Director – Asia and Australia.

2021 Chapter Committee Members

President	Andrew Cox
Technical Coord	Numan Phettongkam
Treasurer	Sirinya Maykho
Web Coordinator	Alexander Beviss
Secretary	Ronald Ford
Sponsorship	Open Post
Student Liaison	Kruawun Jankaew
Member at Large	Greg Heath

Please visit https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx for meeting information. Email: bangkok.chapter@spwla.org

Recent Events

May 2021—Webinar: "The Reservoir Characterization of the Luconian Pinnacle Reefs, Malaysia" was presented by Melissa Johansson (director, Geode-Energy Ltd). COVID continues to restrict travel and gatherings in Thailand. Fortunately, Dr. Johansson was available to step in and provide an excellent presentation on the characterization of pinnacle reefs with examples from her work in Malaysia. The webinar had excellent participation, with questions even taking us beyond the scheduled time for the meeting. You can contact Dr. Johansson directly at her LinkedIn page for a link to see a recording of the webinar (linkedin.com/in/melissajohansson).

June 2021—TBD: Details of the June meeting are still unconfirmed at the time of writing. Restrictions on gatherings remain in effect, and the meeting will be a webinar.

Upcoming Events

July 2021—Venue TBD

Please check the local website for information on local events and activities for the Bangkok Chapter: https://www.spwla.org/SPWLA/Chapters_SIGs/Chapters/Asia/Bangkok/Bangkok.aspx

BOSTON CHAPTER

Recent Events

The SPWLA 62nd Annual Symposium was a great success, with the Boston Chapter playing host for the online event spanning May 17–20. A special thanks goes out to the whole organizing committee (below), which extended beyond the Boston Chapter to include dedicated members of the main SPWLA office and the Board of Directors. The agenda was filled with technical presentations, a stimulating panel discussion on the future of petrophysics, a thought-provoking keynote speech, plus a slate of topical workshops that ran the preceding week.

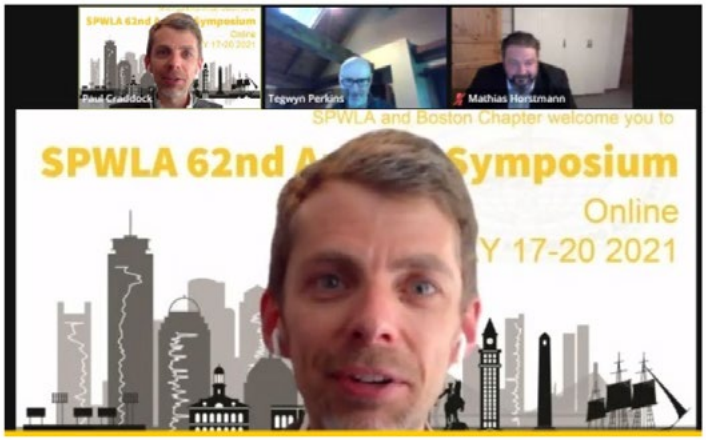
The online PheedLoop platform provided a venue for interaction during the presentations as well as direct networking and discussion between attendees. Registered attendees will have access to the presentation videos and other materials for the next several months.

Many Boston members also presented their work at the symposium. The full agenda is stored at https://www.spwlaworld.org/2021-online-technical-program/.

We express great thanks to the Organizing Committee for the SPWLA 62nd Annual Symposium, with Boston members highlighted in bold:

General Chair: **Paul Craddock** (Schlumberger)
Technical Sessions: **Lin Liang** (Schlumberger), Tegwyn Perkins (Lloyd's Register)
Plenary: Tegwyn Perkins (Lloyd's Register), Adam Haecker (Continental Resources)
Exhibits: **Shitong (Sherry) Zhu** (Aramco Americas), **Yi-Qiao Song** (Harvard University)
Supporting Activities: **Julie Kowan** (Baker Hughes), Kevin Krivonak (Baker Hughes)
International Student Paper Contest: **Martin Poitzsch** (Aramco Americas), Fransiska Goenawan (Halliburton)
Registration: Javier Miranda (DeGolyer and MacNaughton)
Website: Julie Rowlands (Noesii)
Virtual Event Technical Arrangements: **Lin Liang** (Schlumberger), Jeremiah Kinsey (Baker Hughes), **Jeffrey Miles** (Schlumberger), **Tancredi Botto** (T. Botto Consulting)
Symposium Advisors: Sharon Johnson (SPWLA), Stephanie Turner (SPWLA)
Virtual Event Liaison: **Paul Craddock** (Schlumberger)

We look forward to the SPWLA 63rd Annual Symposium, which will be hosted in Stavanger in June 2022, with details to be added at https://www.spwlaworld.org/ as the event approaches.



Boston Chapter President and intrepid leader Paul Craddock (Schlumberger) offered closing remarks at the end of a busy symposium week, on May 20, 2021, as the society looks ahead to the 2022 Symposium in Stavanger, Norway.

Several members of the Boston Chapter were honored with awards at the recent Symposium:

- Lalitha Venkataramanan received the Distinguished Technical Achievement Award.
- Julie Kowan received the Meritorious Technical Award.
- Paul Craddock received the Young Professional Technical Award.
- Jeffrey Miles received two citations for Outstanding Petrophysics Papers 2020.
- The Boston Chapter was voted the 2020–2021 Outstanding Professional Chapter.

We also recognize member Lin Liang who is finishing his term as VP Information Technology on the SPWLA Board of Directors 2019–2021.

Several members are near the conclusion of their Distinguished Speaker tours for the 2020–2021 season, with recent presentations by Paul Craddock, Julie Kowan, Nikita Seleznev, and Jeffrey Miles to various chapters across the international SPWLA community.

Upcoming Events

Boston Chapter Elections: The tenure for the current Officers of the Boston Chapter ends in July 2021. We are conducting elections to choose Officers for the next two-year period, and specific instructions have been sent to Chapter Members. Serving as an Officer is a fantastic way to engage with the SPWLA community and gain professional exposure!

General News

SPWLA general members and Boston-affiliate members are invited to browse our chapter website http://boston.spwla.org for up-to-date information on our mission and events, including event details and registration.

BRAZIL CHAPTER

General News

Since August 2020, our monthly meetings are being held online every third Tuesday of the month, at 4 pm (Brasilia Time). Anyone wishing to participate is welcomed. We also post chapter updates and meeting links on our LinkedIn page (SPWLA Brazil Chapter). Check us out. We decided to discontinue our Facebook page. For further information about the chapter, please contact our secretary, Jesus Salazar (Jesus.Salazar3@bakerhughes.com). 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 welcomed!

Recent Events

25 May 2021—To stimulate the engagement of university groups in our chapter's activities, it was decided that some of our monthly meetings in 2021 will be presented by invited Brazilian university researchers with a relevant contribution to petrophysics. We had researchers Jean Vicente Ferrari and Clayton de Carvalho Carneiro (Universidade de São Paulo (USP)) present the work "Influência da Heterogeneidade Mineralógica no Ângulo de Contato em Reservatórios Carbonáticos" (Influence of Mineralogical Heterogeneity on Contact Angles for Carbonate Reservoirs). The meeting was supposed to be held on May 18, but it was postponed due to the SPWLA 2021 Annual Meeting.

Invitation to May monthly meeting of SPWLA Brazil Chapter.

Invitation to the June monthly meeting of the SPWLA Brazil Chapter.

15 June 2021—Following the presentation from university groups, we had Dr. Éverton Lucas de Oliveira, (researcher from Instituto de Física de São Carlos – Universidade de São Paulo (IFSC/USP)) with a presentation entitled "Estimativa da Relaxatividade Superficial Magnética com Auxílio de Rochas Digitais e Difusão Restrita para Melhor Avaliação da Permeabilidade por RMN" (Estimate of Magnetic Surface Relaxativity by Digital Rocks and Restricted Diffusion for Improvements on NMR Permeability).

Upcoming Events

20 July 2021—We expect to host we had our colleague and SPWLA Brazil Chapter member, Ronaldo Herlinger Jr., who was nominated SPWLA Distinguished Speaker (2020–2021), presenting the work "Implicações Petrológicas e Petrofísicas das Argilas Magnesianas no Pré-Sal" (Petrological and Petrophysical Implications of Magnesian Clays in Brazilian Pre-Salt Deposits), based on the homonymous paper presented at the 2020 SPWLA Annual Symposium.

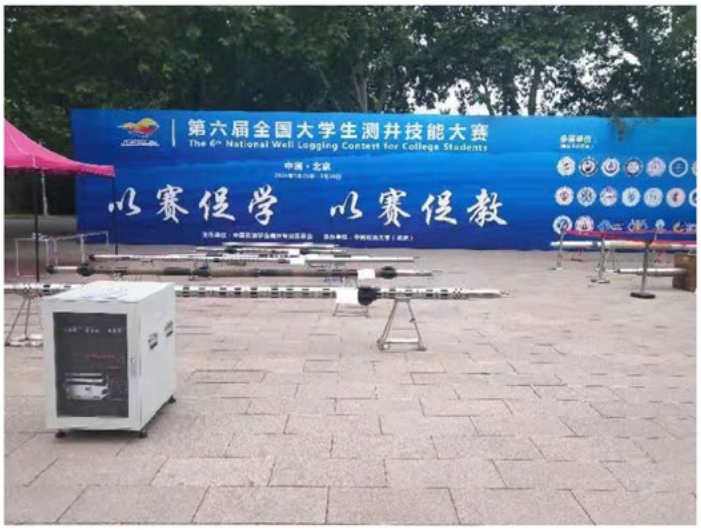
CHINA UNIVERSITY OF PETROLEUM – BEIJING

Recent Events

26–28 May 2021—The 6th National Logging Competition was held at China Petroleum University (Beijing), with 37 teams from 17 universities across the country participating. The purpose of this contest is to "promote learning by race, to promote education by race," which has fully promoted the development of logging disciplines, the training of logging talents, and provided a broad platform for the vast number of logging students and teachers.

The contest is divided into four major areas: the actual competition, the theory examination, the knowledge contest, and the report defense. In order to enable the participating teachers and students to truly understand the needs of the logging site, solve the practical difficulties of the logging site, and train professional logging personnel, all the competition questions are issued by field experts from the oil field, and invited senior technical experts from China Petroleum Group Co., Ltd., China Petrochemical Corporation, and China National Offshore Oil Corporation served as judges. The competition uses CIFLog logging integrated processing interpretation

software developed by Professor Li Ning, a member of the Chinese Academy of Engineering, for comprehensive data processing. During the contest, Li Ning, academician, sincerely sent a message to the vast number of young students to establish discipline, self-confidence, and the courage to innovate for the logging industry to make more contributions to the development of 欹 points. During the competition, the organizers also set up a logging instrument display. Domestic universities and related research institutes have developed a variety of new logging instruments, which were exhibited, attracting the attention of experts and participating students and teachers. The experts gave a high evaluation of the domestic instruments.



Domestic logging equipment display.

The contestants report the results of the explanation.

Graduate Group Special Award Ceremony.

China Petroleum University (Beijing) sent a graduate team and two undergraduate teams, who both achieved excellent results. The graduate team won the special prize, and the undergraduate team won the first prize. Among them were Zhang Xinyu and Wang Xiaozhuang of the graduate team, who are the heads of the SPWLA Student Chapter of China Petroleum University (Beijing). In the preparation and conducting of this contest, SPWLA Student Chapter was an important organizational force involved in the work. Student branch head Zhao Jian was mainly responsible for volunteer coordination and management, handling materials, reception of judges, and other work. Student chapter member Chen Mengling and students were responsible for the answer portion of the work. Zhang Sibo, head of the network department of the student branch, used the official WeChat public number platform of China Petroleum University

(Beijing) to report the contest throughout the competition. Dr. Cheng Lu, head of the academic department, was mainly responsible for scoring the answer portion. In addition, other members of the student chapter contributed to the success of the competition. Through this contest, all members have a deeper understanding of the logging discipline. Through communication with oilfield experts, it was recognized that the logging industry is currently encountering difficulties, but a future direction for research work was addressed.

DENVER WELL LOGGING SOCIETY

General News

We are wrapping up our 2020–2021 season. After our summer break, we'll be back in September with a new lineup of speakers, events, and a new look—the DWLS website is getting an update! Sign up for the newsletter by emailing VP_Membership@dwls.spwla.org so you don't miss anything. Your feedback is important—what topics or speakers would you like to hear more from next year? Please send your thoughts and suggestions to VP_Technology@dwls.spwla.org.

Upcoming Events

No new upcoming events. We will resume in September. Hope everyone has a wonderful summer!

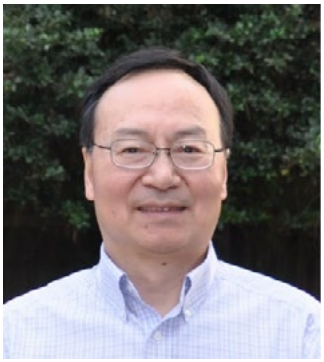
Recent Events

20 April 2021—April Talk: SPWLA Distinguished Speaker Luis Stinco (Olempetra) presented "Formation Evaluation Applying Deductive and Inductive Methodologies: Which One to Use When Characterizing Reservoirs." The talk was well received.

Luis Stinco (Olempetra)

29 April 2021—April Workshop: The DWLS Spring Workshop was held and used last year's topic, which was canceled due to the pandemic: "Horizontal Petrophysics: Applications and Interpretation Techniques in Reservoir Characterization." There were nine expert speakers with original research, including three SPWLA Distinguished Speakers. The virtual workshop was well received. Hopefully, the next workshop can be in person.

25 May 2021—May Talk: Harry Xie (Core Laboratories) presented "Characterization of Kerogen and Solid Organics of Unconventional Source Rocks Using Solid-Type 20-MHz NMR Techniques." The talk was well received.



Harry Xie (Core Laboratories)

22 April 2021—MiT Webinar: DWLS hosted the Rockies MiT (Members in Transition) webinar series. Dr. Amanda Kolker (National Renewable Energy Lab) spoke on "Geothermal 101: Resources, Utilization, and Project Development." Rockies MiT is a joint effort of AAPG, COGA, CU Global Energy Management, DERL, DIPS, DWLS, RMAG, SPE, WENCO, WGA, and WOGA in the Rocky Mountain region to help association members in the midst of a career transition.

DUBAI CHAPTER

General News

Dubai Chapter continues with online meetings, being held every two months. Our online technical events are usually held the first Wednesday of each month. Anyone interested is welcome to visit our profile on LinkedIn SPWLA Dubai Chapter or email (dubai@spwla.org) to join the online events and ask any questions regarding the regional chapter.

Our Membership VP Marvin Rourke participated in the Technical Committee and as a session chair in last month's SPWLA Symposium.

Recent Events

9 June 2021—Nelson Suarez delighted us with an interesting presentation: "Successful Geosteering for Development of Carbonate Reservoirs Offshore Dubai–Case Histories," a very organized presentation where the audience participated with multiple questions at the end.

Upcoming Events

August 2021—Our next presentation, which is yet to be confirmed, will be posted on the SPWLA Dubai Chapter LinkedIn Profile.

Dubai SPWLA Chapter would like to thank GOWell for the generous sponsorship.

SPWLA Dubai Chapter Sponsor

GOWELL

HOUSTON CHAPTER

General News

First, our SPWLA Houston Chapter board is pleased to share that we supported the SPWLA Annual Symposium 2021 Networking Happy Hour, which occurred on May 20. With vaccinations now fully available for everyone in Texas, we are once again promoting in-person events so that everyone can engage in fruitful interactions with fellow professionals in our industry, in addition to our online seminars.

We would like to invite you for a virtual seminar about the history of oil in the Middle East and the geology of the Arab basin, presented by Ken Henry on October 13. Furthermore, we would like to express our gratitude to Jeffrey Miles and Andrew McDonald for presenting their work and providing valuable insights on water salinity interpretation and machine-learning applications to petrophysics, respectively. We also thank Faye Liu, who shared her expertise about reservoir characterization using geochemical fingerprinting technology. The pandemic has brought us many challenges; however, it has also allowed us to reach members out of our chapter who have become regulars attending our webinars.

If you would like to receive notifications of upcoming events and chapter news, please register on the new SPWLA Houston Chapter website. Additionally, there are multiple interesting sponsorship opportunities and job postings announced there. Please reach out to us if you are interested or if you would like to receive additional information. As always, we are open to new speakers for our seminars, and we are looking forward to bringing other guests in addition to our SPWLA DS if the topic is of interest to the petrophysics audience. Contact any board members in case you have a presentation you would like to share.

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.

Recent Events

29 April 2021—SPWLA Houston Chapter recently organized a virtual seminar with SPWLA Distinguished Speaker (DS) Jeffrey Miles titled "Formation Chlorine Measurement from Spectroscopy Enables Water Salinity Interpretation." This seminar was well attended. We thank Jeffrey for presenting his work to our chapter members and others from overseas who were interested in the topic.

26 May 2021—SPWLA Houston Chapter recently organized a virtual seminar with Andrew McDonald, based in the UK, titled "Introduction to Machine Learning and its Applications to Petrophysics." We thank Andrew for sharing his expertise on a hot topic of growing interest to the petrophysics community. We had a very engaging Q&A session where Andrew provided additional insights on the topic.

16 June 2021—SPWLA Houston Chapter recently organized a virtual seminar with the founder and CEO of RevoChem LLC, Faye Liu, who shared her expertise on reservoir characterization using geochemical fingerprinting technology.

SPWLA Annual Symposium 2021 Networking Happy Hour

In Houston, members of the SPWLA community recently gathered during the closing of the Annual Symposium to celebrate and restart in-person social activities after a hiatus of one year and three months during the COVID-19 pandemic. This happy hour was the appropriate motivation for networking, meeting new colleagues, reconnecting with known ones, or talking in a relaxed atmosphere with members of the SPWLA Board or other SPWLA members after a challenging year. That was the main purpose during the most recent social event we had in a popular place in Houston, Texas. A significant group of members gathered to enjoy a beautiful evening with drinks and food onboard. This event was co-sponsored by TGT Oil and the SPWLA Houston Chapter. Members of all ages, backgrounds, and experience had the opportunity to socialize while talking about technical or anecdotic events related to petrophysics and the recently finalized symposium. It was a very informal event, but attendees enjoyed it a lot and recommended that we continue organizing this type of activity. Even past international board members joined us for a great gathering. Four former SPWLA Presidents were in attendance, and some speakers in the symposium also attended. Members of the Houston Chapter Board also attended this event.

Food and drinks were sponsored by **TGT Oil** and SPWLA Houston Chapter, represented by Julian Martin (business development manager) and Houston Chapter Board Members, respectively.

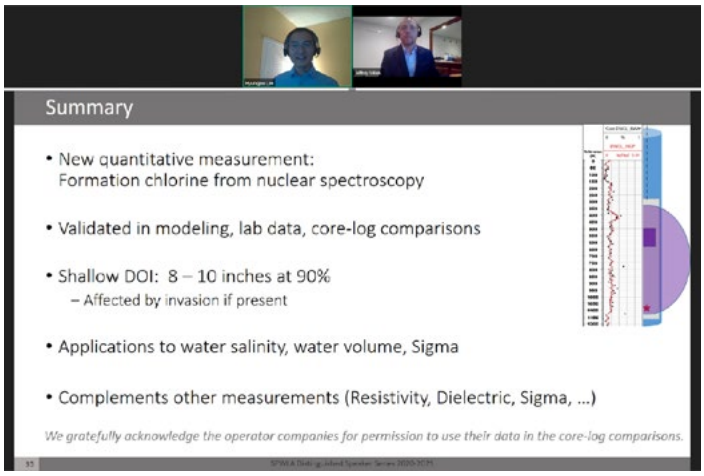
TGT HOUSTON CHAPTER
Society of Petrophysicists and Well Log Analysis

Upcoming Events

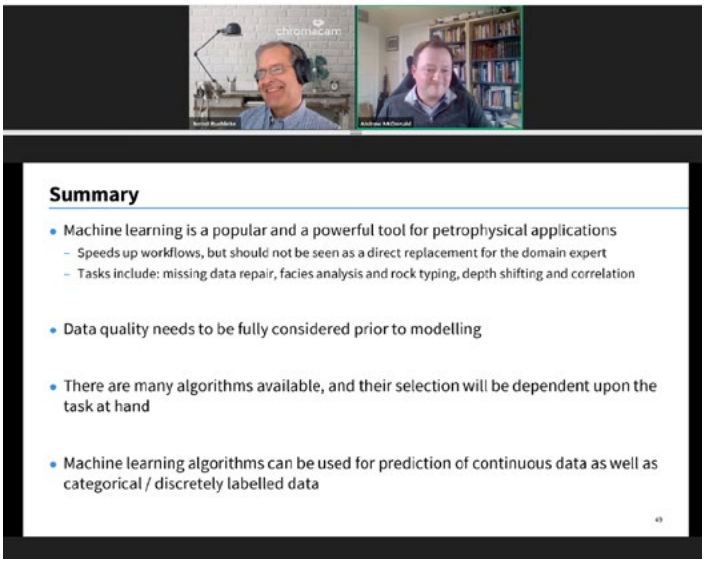
22 July 2021 from 6–9 pm—Join us for our next event during the summer season with our second 2021 SPWLA Networking Happy Hour at King's BierHaus. The entire SPWLA community is invited. No need to RSVP. Come at your own leisure. No payment is required. Come and mingle with fellow petrophysics enthusiasts! Please follow CDC recommendations regarding social events. This will be an outdoor activity, so be prepared for Houston's summer weather.

Everybody is welcome! When: 6–9 pm Thursday, July 22, 2021 Where: King's BierHaus, 2044 E T C Jester Blvd, Houston TX 77008	

13 October 2021—Virtual Webinar: "The History of Oil in the Middle East," by Ken Henry (independent consultant). More details soon available on the Houston Chapter's website: https://www.spwla-houston.org/



SPWLA DS Jeffrey Miles (right) and SPWLA Houston Chapter Vice-President Downtown Hyungjoo Lee (left) during our April webinar.



Andrew McDonald (right) and SPWLA Houston Chapter Vice-President West Side Bernd Ruehlicke (left) during our May webinar.

Attendees of SPWLA Houston Chapter's Happy Hour at McCormick & Schmick's. Among them were former SPWLA Presidents Jesus Salazar (2019–2020) and Zach Liu (2018–2019), May 2021.

SPWLA Houston Chapter networking event organized as part of annual symposium local activities. (From left to right) Julian Martin (business development manager, TGT Oil), Ivan Pinzon (senior petrophysicist, Ecopetrol America), Luis Quintero (SPWLA President 2016–2017 and chief advisor, Halliburton), and Pouya Mahbod (VP global business development, Core Laboratories), May 2021.

SPWLA's Houston Chapter's first Happy Hour in a while. (From left to right) Julian Martin (business development manager, TGT Oil), Gabriela Singer (SPWLA 2021 Symposium speaker, Halliburton), Gary Simpson (independent consultant), and Javier Miranda (senior petrophysicist, DeGolyer and MacNaughton and SPWLA Houston Chapter President), May 2021.

SPWLA's Happy Hour after the closing of the 2021 Annual Symposium.

SPWLA Houston Chapter networking event. (From left to right) Oswaldo Viloria (independent consultant), Randy Cooper (SPWLA President 2011–2012), and Zach Liu (SPWLA President 2018–2019), May 2021.

SPWLA members enjoyed a great networking event in a relaxed atmosphere with current and past international and local officers of the SPWLA board in attendance.

A significant group of members gathered to enjoy a beautiful evening with drinks and food onboard. This event was co-sponsored by TGT Oil and the SPWLA Houston Chapter.

SPWLA Houston Chapter Board for 2020–2021

Javier Miranda
PRESIDENT
president@spwla-houston.org

Jeff Crawford
VICE-PRESIDENT NORTH SIDE
vpnorthside@spwla-houston.org

Hyungjoo Lee
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Artur Posenato Garcia
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editor@spwla-houston.org

Tianmin Jiang
WEBMASTER
webmaster@spwla-houston.org

INDIA CHAPTER

Recent Events

2 February 2021—SPWLA India Chapter had an online technical session. The virtual technical session of the chapter was organized under the aegis of CEWELL, ONGC, Vadodara on the occasion of its 16th Foundation Day. The technical session evoked an overwhelming response, with Pan India participation from ONGC, Baker Hughes, Schlumberger, Weatherford, Halliburton, Expro, GE, RIL, and BowNishi.

The session started with a welcome speech by President, SPWLA–India Chapter, Mr. M. K. Tewari. Mr. Tewari is executive director and chief logging services at M/s ONGC

Ltd. He encouraged the young professionals to make the best use of the platform provided by the society and exhorted the members to actively participate and contribute to upcoming activities of the chapter.

The first presentation was delivered by Ms. Debarati Mishra (M/s ONGC) on "Carbonate Reservoir Characterization." A brief of her presentation follows:

Worldwide carbonate rocks are highly heterogeneous in terms of facies, porosity, and permeability. Both Folk and Dunhum's classifications of carbonate rocks indicate depositional and post-depositional effects on carbonate facies. These, in turn, affect the porosity and permeability of the carbonate reservoir. Porosity creation and destruction in the carbonate regime is a complex process. Understanding porosity systems in carbonate reservoirs requires a thorough study of the carbonate system's depositional processes. To characterize a carbonate reservoir system requires the collaboration of both core and log data comprehensively. In the Mumbai offshore basin, very thick carbonate formations are deposited since the late Paleocene. All these carbonate formations deposited in Mumbai offshore have undergone various post-depositional processes, which leads to complex facies and porosity systems. Diagenetic processes caused a range of reservoir typing and producibility challenges in Mumbai. There are examples of the importance of understanding heterogeneity of facies and porosity to resolve anomalous production behavior. In Miocene carbonates of the Mumbai offshore area, good hydrocarbon production from low-resistivity layers leads to comprehensive core and log study to characterize these reservoirs qualitatively and quantitatively. Collaboration of core (petrophysical, NMR, XRD, SEM, thin section, microfacies) and advance logs (NMR, resistivity image) study indicated that the presence of micritic facies caused a reduction of log resistivity. Thus, a play-specific approach of petrofacies-dependent variable cementation factor from core (porosity, permeability) and log data gave a representative saturation estimation in these low-resistivity reservoirs. The variable "*m*" approach calibrates well with the variable "*m*" from the resistivity image and dielectric scanner data in the study area, which gives more validity to the core-derived cementation relation with porosity.

On the other hand, Eocene carbonates from other part of the basin show very good hydrocarbon production from low-porosity carbonate reservoirs (porosity < 5%). Detailed study of NMR porosity and resistivity image data showed the presence of a varying degree of solution channels/low-angle fractures against low-porosity layers. These low-angle and fine features, which are mostly contributing to production, are beyond the resolution of conventional tools. Thus, they can only be identified in high-resolution resistivity image logs. These types of porosity systems (solution channel network) can become highly productive if activated properly during production. It was recommended to choose a different completion process so that conventional cementing may not choke up these channel networks.

These examples indicated a high degree of heterogeneity in porosity, permeability, and facies, making every carbonate system unique. Thus, evaluation of complex carbonate systems requires an understanding of depositional and post-depositional processes using all available resources (core and logs) in detail.

The second presentation was delivered by Michael O'Keefe (global reservoir domain champion, M/s Schlumberger) on "Ora – Deep Transient Testing, Defines your Reservoir." In his 30 years at Schlumberger, Michael O'Keefe has published 27 technical papers and journal articles (of which five are peer reviewed in the *SPE Journal*), authored 15 US patents, was nominated as an SPWLA Distinguished Lecturer in 2010–11, and was followed by SPE Distinguished Lecturer in 2013–14. He was the President of the London Petrophysical Society 2016–18 and then served on the International Board of Directors for the SPWLA as Vice President of Technology 2018–19. In 2020, he founded the new SPWLA Chapter in Bucharest. A brief of his presentation is as follows:

Ora is the first wireline 4.0-enabled platform, revolutionizing dynamic reservoir characterization by combining new digital hardware with cloud-native collaborative software for unprecedented performance and insights in all conditions. Rated to 392°F [200°C] and 35,000 psi [241 MPa] with dual-flowline architecture, laboratory-accuracy metrology, and smart downhole automation, the Ora* platform's hardware represents a new benchmark in wireline formation testing capability. Flow management options from 0.05 to 108 bbl/d in combination with focused radial probes and a dual-inlet dual-packer system perform focused sampling in virtually all conditions and bring deep-transient testing operations to wireline by providing a step-change in formation testing efficiency and reliability. The efficient, reliable, and flexible performance of the Ora platform not only improves on existing standards but also makes formation testing a reality where not previously possible, including HPHT conditions, tight or unconsolidated formations, and challenging fluids.

Ora-Contextual insights provide detailed 2D and 3D visualizations of the data acquired in reservoir context on a customized interactive dashboard for making real-time informed decisions. The reservoir module console is cloud-based and provides a 3D web component displayed together with a 2D plot along with surfaces and formation top, whereas the reservoir fluid geodynamics console provides information on well trajectories, connected flow units, multiwell pressures, optical density, GOR, density, viscosity,

compressibility, etc., with domain and customer collaboration. At the heart of the Ora platform is hardware built on 90 years of pacesetting technical expertise and innovation. The valves, gauges, and hundreds of other key system components of the Ora platform have smart controls that are AI ready and can intercommunicate, enabling downhole automation of complex workflows. This ensures that data can be reliably integrated into the reservoir context in real time for quick, informed decision making. The different versions and modules of the ORA platform are:

- *Ora Platform Focused Radial Probe* provides clean fluids in virtually any environment, fast station times from automation, and enhanced retraction capability.
- *Ora Platform Dual-Inlet Dual Packer* provides downhole separation of immiscible fluids, flexible spacing up to 15 m, and a 90% reduction in setting time.
- *Ora Platform Flow Manager* provides 0.05 to 108 bbl/d controlled rates, fast cleanup for quick stations, low rates enabling access to previously unreachable tight formations, and PVT analysis with constant composition expansión.
- *Ora Platform Fluid In-Situ Scanner* provides dual-flowline metrology, 24-channel spectrometer: composition and GOR, fluorescence, calibrated downhole resistivity, high-accuracy live density, and full-spectrum viscosity.
- *Ora Platform PVT Sample Manager* provides zero dead volume sampling, representative low H_2S, self-closing bottles, no lost volume at surface, 400-cc single-phase bottle, and 675-cc multiphase bottle.

Ora Deep-Transient testing offers a flexible solution for flow testing with no flaring where a DST is costly or environmentally prohibitive. It ensures enough pressure disturbance at the sandface, even in high permeability, for reservoir fluid to flow faster. It actively circulates fluid to surface, mitigating wellbore dynamics impacts to flow longer. It provides increased DOI compared to a typical wireline VIT job.

ORA delivers a 3D history-matched dynamic model placed in the geological perspective.

Case Study–Hydrocarbon in Place: Sampling and transient testing prove major land discovery in HPHT carbonate for Pemex. Challenges HC in place in extreme reservoir conditions (Temp: 182°C, Pressure: 20,000 psi, and Permeability: 0.03 md). The new platform helped to test, find gas condensate reserves, and collect samples for PVT analysis in Mexico's most important land discovery in the last 25 years. Tests were conducted in submillidarcy heterogeneous carbonate formation at reservoir temperature above 175°C and showed results similar to subsequent DST.

London Petrophysical Society (LPS)

General News

For the attention of all England- and Wales-based SPWLA Young Professionals. The "Dick Woodhouse Award" deadline has been extended until the second half of 2021. If you have less than 3 years of industry experience, this award is for you. It aims to encourage the pursuit of excellence in young professional petrophysicists and other geoscientists involved in formation evaluation. For more details: https://lps.org.uk/student-and-university-support/dick-woodhouse-award/

Recent Events

11 May 2021—The members enjoyed the May evening lecture on "Formation Chlorine Measurement from Spectroscopy" by Jeffrey Miles (Schlumberger). Jeffrey provided an enthusiastic and clearly presented talk on the direct quantitative measurement of formation chlorine from nuclear spectroscopy. This was well received with plenty of follow-up questions.

17 June 2021—The LPS held the second one-day seminar of the year themed around the Energy Transition. Because of the substantial number of quality abstracts received for the first seminar, this second one was held in addition. The second seminar, like the first, was very well attended and included both real-life examples and research from academia.

Upcoming Events

13 July 2021—The next evening meeting will feature Craig Lindsay (Core Specialist Services Limited) presenting technologies that are bringing about the transition of the discipline of core analysis. These will take it beyond hydrocarbon extraction to allow much wider applications and benefits.

NMR SIG

Upcoming Events

With the passing of a year, the SPWLA Nuclear Magnetic Resonance Special Interest Group conference is set to reconvene!

19–20 October 2021—The NMR SIG is organizing its third conference to be held at Halliburton, 3000 N. Sam Houston Parkway E., Houston, TX 77032. The NMR SIG will precede the SPWLA Topical Conference during the same week and will be hosted at the same venue. The Call for Papers will be announced soon.

Dear NMR petrophysics enthusiasts,

With the help and support from Elizabeth Naggar (managing editor of *Petrophysics* journal) and Songhua Chen (VP Publications for SPWLA), the SPWLA NMR-SIG is targeting the publication of the "NMR Special Issue for Petrophysics Journal" in **June 2022.**

We are announcing a call for papers on the following topics in NMR petrophysics and formation evaluation technologies:

1. History
2. Basic principles
3. Instrumentation
4. Data processing
5. Applications
6. Interpretation
7. Reviews
8. Tutorials
9. Reference databases

The following guidelines should help:

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

Please submit your articles to Editorial Manager® by the **October 1 deadline**, and please make sure to select "NMR Special Issue" for the "Article Type."

Also, please feel free to forward this message to all interested parties.

OKLAHOMA CITY CHAPTER

General News

The Oklahoma City Chapter looks forward to returning to in-person meetings on the second Tuesday of each month starting in September.

Recent Events

13 April 2021—Alberto Cesar Ortiz (NZC Solutions) presented "What Have We Learned From Petrophysical Evaluation Of The Vaca Muerta Formation During The Last 7 Years Of Unconventional Shale Play Exploration And Development?"

11 May 2021—Stephanie Perry (Geomark Research) presented "Linking Geology, Petrophysics, and Geochemistry in Subsurface Application Through an Innovative Rock and Fluid Integrated Workflow."

PDDA SIG

General News

The PDDA SIG welcomes Andy McDonald (Lloyd's Register), Aberdeen UK, and Lei Fu (Aramco), Houston USA, to the PDDA board. We also announce the following role changes: Yanxiang will serve as the Chairman, Andy will serve as the Vice-Chairman, Lei will serve as the Secretary and Chief Event Organizer, while Bin will remain in the same role as Secretary of Publications, and Michael Ashby and Chicheng Xu will be serving as the Advisor roles. Zheng Gan and Constantine have left the board. We will continuously post the event updates and technical information on our LinkedIn group: https://www.linkedin.com/groups/13605420/.

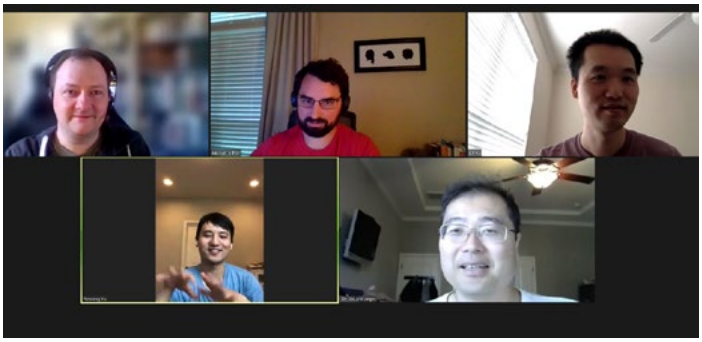
Recent Events

Our paper about last year's machine-learning competition summary has been accepted by the *Petrophysics* journal and will be published in the August issue.

28 May 2021—The PDDA SIG held a virtual board meeting. Participants included Yanxiang Yu, Andy McDonald, Michael Ashby, Lei Fu, and Bin Dai.

Upcoming Events

We will host the second machine-learning competition from August to October 2021 and are now calling for proposals. The deadline for submitting the proposals is **July 15, 2021**.



The virtual Zoom meeting on May 28, 2021. (Top row, from left to right) Andy McDonald, Michael Ashby, and Lei Fu. (Bottom row, from left to right) Yanxiang Yu and Bin Dai.

SPWLA UIS STUDENT CHAPTER (Colombia)

Board of Directors

President	Dana Marcela Ramirez N. presidencia.spwlauis@gmail.com
Vice President	Luis Alberto Chinomes G. vicepresidencia.spwlauis@gmail.com
Fiscal	Angela Stefany Tarazona R. fiscal.spwlauis@gmail.com
Secretary	Diego Alberto Rangel secretaria.spwlauis@gmail.com
Treasurer	Tanya Mercedes Garavito L. contador.spwlauis@gmail.com

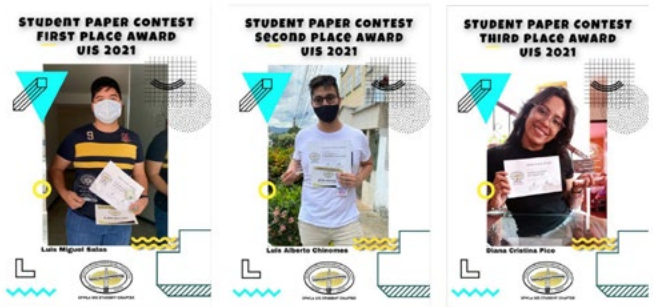
Recent Events

26 March 2021—Student Paper Contest Country Level Colombia: The Colombian Student Chapter SPWLA UIS announced a call for papers on the topics of petrophysics, well logging, or reservoir characterization for undergraduate students and graduate students with a graduation date of no more than one year. The event took place on March 26, 2021, using the Zoom platform. Then, on April 8, the awards were given for the people who participated in the Student Paper Contest UIS 2021:

1° place – "Experimental Evaluation of Different Synthetic Porous Medium for High-Temperature Steam Injection Processes" by Luis Miguel Salas.

2° place – "Evaluation of Salinity Change of a Rock Sample by Coreflooding Tests Applied to a Producing Well" by Luis Alberto Chinomes Gualdrón

3° place – "Years of Hydraulic Fracturing in The Middle Magdalena Valley. What Have We Learned?" by Diana Cristina Pico Benítez.

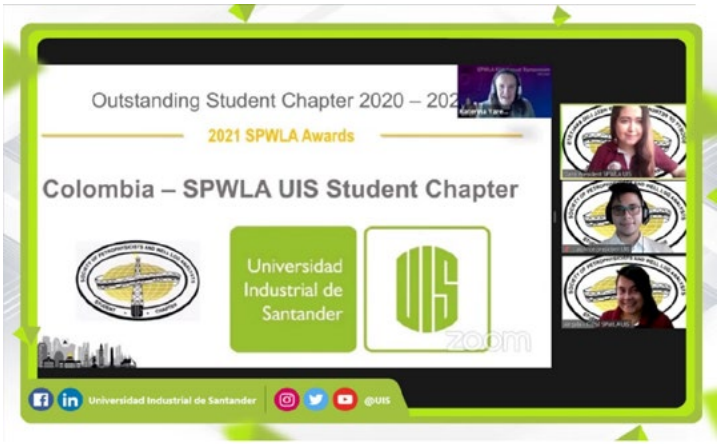


30 April 2021—SPWLA Talks: The Colombian Student Chapter SPWLA UIS hosted an online talk using the YouTube platform entitled: "How to Interpret the Cement Bond Log" by Raul Villamizar (professor, Universidad Industrial de Santander). In this talk, the purpose of a cement bond log was explained.

"SPWLA TALKS" live transmissions on the SPWLA UIS YouTube channel.
https://www.youtube.com/c/SPWLAUIS

16 May 2021—International Student Paper Contest: The judges chose two members of the SPWLA UIS team to participate with other international universities, where they were awarded the following positions:

19 May 2021—Outstanding Student Chapter Award: At the SPWLA annual awards ceremony, the SPWLA UIS Student Chapter won the highest recognition presented by Katerina Yared and the principal office in Houston.



May 2021—Python Programming: The SPWLA UIS team organized five internal Python training sessions with Jonathan Pabón, a systems technician and one of our members with advanced knowledge of the tool.

May 2021—Editing in COREL DRAW: The team was trained in editing tools to improve our publicity pieces by Carlos Medina, a graphic design technician and one of our members with advanced knowledge of the tool.

June 2021—New Board of Directors: The SPWLA UIS Student Chapter established a new Board of Directors for the 2021–2022 period as follows and met with the Latin America Regional Director (Bruno Menchio):

President	Luis Alberto Chinomes G. presidencia.spwlauis@gmail.com
Vice President	Carlos José Medina L. vicepresidencia.spwlauis@gmail.com
Fiscal	Karen Ivonne Triana P. fiscal.spwlauis@gmail.com
Secretary	Maria Andrea Herrera P. secretaria.spwlauis@gmail.com
Treasurer	Tanya Mercedes Garavito L. contador.spwlauis@gmail.com

Upcoming Events

July 2021—The team will be recruiting new members for SPWLA UIS.

July 2021—The team will do a Power BI course applied to the oil industry with Damian Martinez (data science manager, Halliburton).

SPWLA UIS/ Social Networks

LinkedIn:
https://www.linkedin.com/company/spwla-uis-student-chapter/
Instagram:
https://www.instagram.com/spwlauis/?hl=es-la
YouTube:
https://www.youtube.com/c/SPWLAUIS
Facebook:
https://es-la.facebook.com/SPWLAUIS/

TEXAS TECH STUDENT CHAPTER

General News

The TTU Student Chapter announces its new officers for 2021–2022.

President	Sunita Pathak
Vice President	Diego Lopez
Treasurer	Janett Lopez
Secretary	Ritwik Mukherjee
Membership Chair	Chanda Shrestha
SORC Advisor	Alejandro Gallegos

TULSA CHAPTER

General News

James Howard and Pat Ryan will remain as Chapter Officers for 2021–22. The chapter is planning on in-person meetings in the fall and looking into ways to livestream those meetings to interested viewers. The Tulsa petrophysics community has shrunk considerably over the past few years, and it was noted with interest that attendance for our online presentations in 2020–21 included a significant group from outside our chapter.

Recent Events

The officers and several members met for a combined social and planning event at a local outdoor beer garden during the Boston Annual Meeting to discuss plans for the upcoming year and to identify potential topics and speakers for the monthly seminars.

UFRJ SPWLA STUDENT CHAPTER

General News

UFRJ SPWLA Student Chapter has coordinators for our main active functions. We have changed this position between logistic members, from Vinicius to Sarah. The reason for this change is that we believe in the importance of giving everyone the opportunity to be a leader at some point. Still, it is completely optional if they want this charge or just prefer their current positions within the chapter. So, our chapter continues to have 13 active members as organized below:

Board members

President	Rodrigo Gentil Azambuja (rodrigo.gentil.azambuja@gmail.com)
Vice President	Amanda Mendes Bezerra (mendesamanda@ufrj.br)
Treasurer	Sofia D'Orsi (sgdorsi@gmail.com)
Secretary	Maria Eduarda Verbicario (duda.verbicario@gmail.com)

Treasury Assistants

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Teresa Mourão (teresamouraoo@gmail.com)

Marketing Members

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Shirlene Barros (shirlenebarros1@hotmail.com)
Iago da Costa (iago.cjaques@gmail.com)

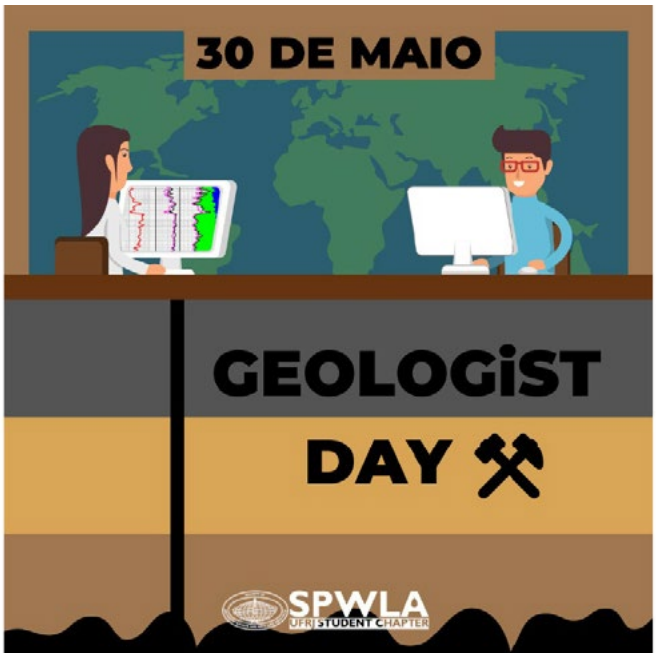
Logistic Members

Vinicius Jorge (vinicius.tj@gmail.com)
Sarah Aleixo (sarahaleiixo@gmail.com) (coordinator)
Isabelle Freitas (belleafreitas@gmail.com)

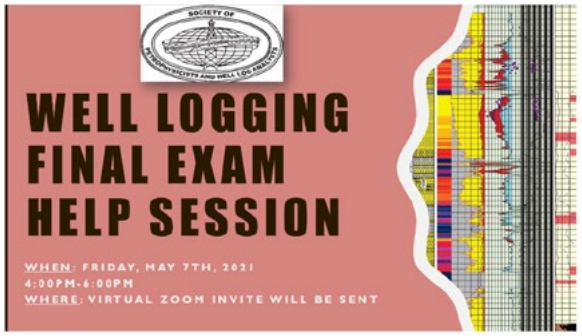
Recent news

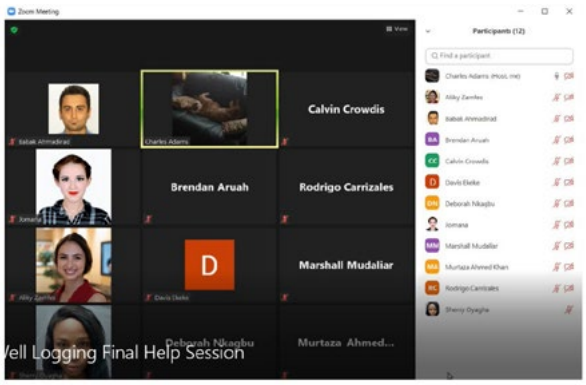
April and May 2021—Our chapter promoted a webinar named "Glacier Modeling: Climate in Relief Control" with Fabio Magrani (University of Bern (Switzerland)). It was a great success. We had more than 100 subscribers, and during the webinar, there was an average of 50 consecutive people watching. We are keeping in contact with the speaker to think about another event in the future, maybe with some software learning. As usual, our chapter got together for two meetings to keep the team updated and organize future events and ideas. We also had a meeting with SPWLA Brazil to support an event that they will promote about petrophysics in mature wells. In this period, the marketing team also created two informative posts. The first one was about glaciers melting (as part of the webinar promotion), and the second was about "sonic profile," which had a lot of compliments. Finally, we also celebrated Geologist Day on May 30 with a beautiful post for all social media.

Main post to promote the webinar "Glacier Modeling: Climate in Relief Control."



Post celebrating Geologist Day on Instagram, LinkedIn, and Facebook.





Upcoming Events

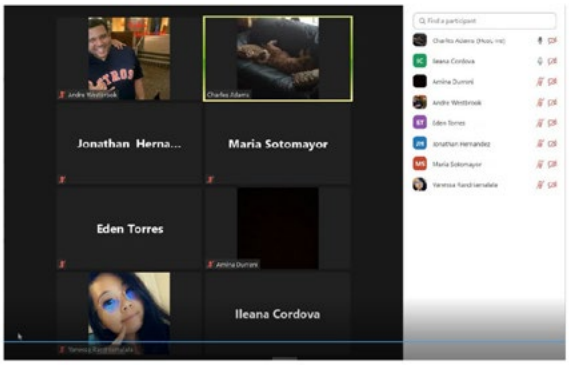
As mentioned before, our team has been trying to organize a course with some specialists to teach basic but important concepts in petrophysics and well logging so that both old and new members stay updated on these topics. So, we scheduled an introduction class about well logging and petrophysics with one of our most experienced members, Bruno Valle (petrophysicist, 3R Petroleum). Also, we are planning to share with the general public photos and current occupations of the active members of the UFRJ SPWLA Student Chapter. Finally, we will keep sharing interesting items and some concepts about well logging and petrophysics through our social media posts. We recognize the current importance of being active on social media nowadays.

UH STUDENT CHAPTER

Recent Events

7 May 2021—Help Session: A 120-minute final exam help session was conducted for Professor Mike Myers' Masters Well-Logging class. Topics included Pickett Plots, Pore Combination Modeling, Hingle Plots, and Crossplots.

10 May 2021—Help Session: A 120-minute final exam help session was conducted for Professor Mike Myers' Petrophysics class. Topics included Porosity, Permeability, Darcy, Archie, Gas Properties, Poiseuille's Law, and Surface Forces/Capillary Pressure.



Houston Food Bank Food Drive

As part of our community outreach, Houston Food Bank boxes were placed at the ERP and main campus to help Houston's most vulnerable and needy. As of now, approximately 30 lb of various food donations have been collected, which will be an ongoing, semester-to-semester collection. However, we hope that in-person volunteer work will also be considered next semester, the ultimate determinant being autumn's COVID situation.

New SPWLA Chapter Primary Officers

President	Ajibola Samo aosamo@uh.edu
Vice President	Ileana Cordova iccordovajimenez@uh.edu
Treasurer	Jade Poxon jepoxon@uh.edu

UNIVERSITY OF LOUISIANA AT LAFAYETTE STUDENT CHAPTER

General News

The University of Louisiana at Lafayette has elected officers for the 2021–2022 academic year.

Elected to office were:

- President: Cristina M. Ruse, PhD student in Systems Engineering with a concentration in Petroleum Engineering
- Vice President: Philip B. Wortman, PhD student in Systems Engineering with a concentration in Petroleum Engineering
- Secretary: Aderibigbe Adeyemo, MSc student in Petroleum Engineering
- Treasurer: Maksym Chuprin, PhD student in Systems Engineering with a concentration in Petroleum Engineering
- Social Media Chair: Darren A. Osei, MSc student in Petroleum Engineering
- Event Coordinator: Traelyn B. Brasseaux, Junior student in Computer Engineering

(From left to right) Maksym Chuprin, Aderibigbe Adeyemo, Darren A. Osei, Philip B. Wortman, Cristina M. Ruse, Dr. Mehdi Mokhtari (chapter advisor), and Traelyn B. Brasseaux

Recent Events

Three students from the University of Louisiana at Lafayette were finalists in this year's SPWLA International Student Paper Contest. Jamal Ahmadov and Asiman Saidzade competed in the MSc category, while Cristina M. Ruse participated in the PhD division of the contest. Asiman's "A Novel Method for Predicting the Amount of Imbibed Water Into the Shale Rock Using Machine Learning Models in Python for Tuscaloosa Marine Shale Located in Central Louisiana and Southern Mississippi" impressed the judges and won the second prize in the MSc category. The research presented by our chapter members at the 2021 SPWLA ISPC is part of the Tuscaloosa Marine Shale Laboratory at UL, where the three students work as research assistants and study how to best recover the oil in the TMS using innovative approaches.

The University of Louisiana at Lafayette Student Chapter finalists in this year's SPWLA International Student Paper Contest.

Upcoming Events

Everyone should stay cool and enjoy a safe summer. We will be back in the fall with new and exciting events!!

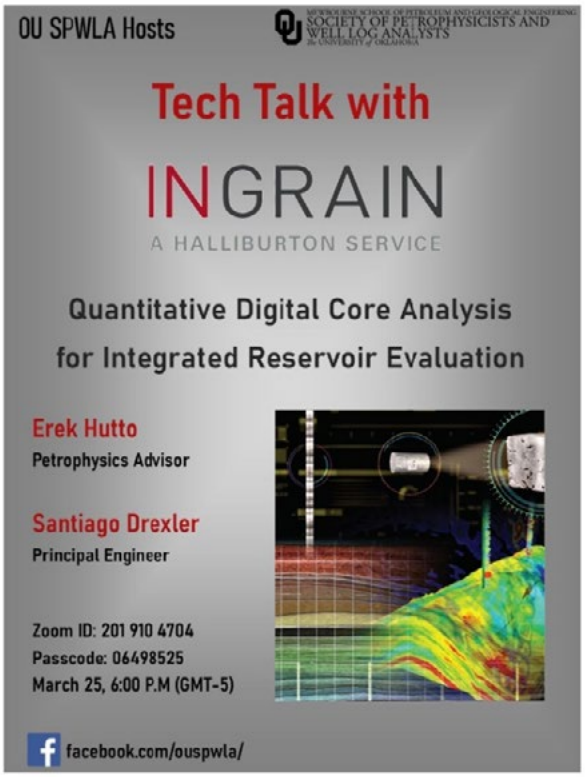
UNIVERSITY OF OKLAHOMA SPWLA STUDENT CHAPTER

General News

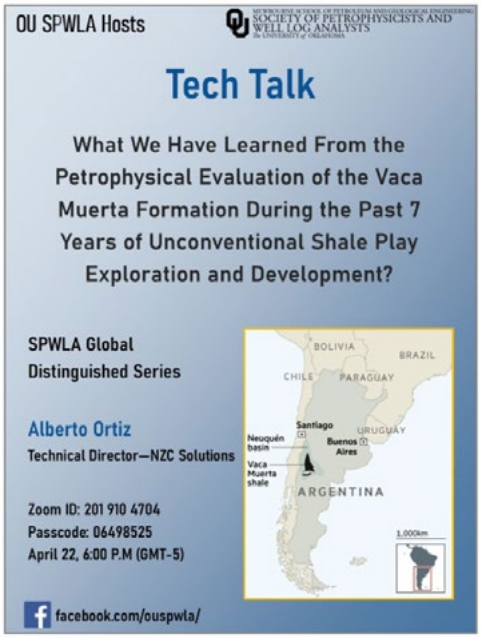
Return to In-Person Events: After more than a year of enduring the COVID-19 pandemic, the University of Oklahoma (OU) has lifted masking requirements and distancing protocols. It has also announced the return to in-person events during the fall semester as conditions now shift to normalcy. OU SPWLA will therefore take advantage of this opportunity to organize some in-person events. Events such as workshops and professional networking will be held in person. However, for reasons of convenience, events such as Tech Talks will be held virtually but in person where necessary.

Recent Events

25 March 2021—Tech Talk: INGRAIN's Erek Hutto, petrophysics advisor, and Santiago Drexler, principal engineer, presented "Quantitative Digital Core Analysis for Integrated Reservoir Evaluation." In this talk, the pros and cons of using quantitative digital core analysis in petrophysics were discussed. This event was well attended and foreshadowed the possibility of organizing more online learning events as well.



22 April 2021—Tech Talk: SPWLA Global Distinguished Speaker and the technical director of NZC Solutions Alberto Ortiz presented "What We Have Learned From the Petrophysical Evaluation of the Vaca Muerta Formation During the Past 7 Years of Unconventional Shale Play Exploration and Development." In this talk, various aspects about the learning curve (such as challenges, solutions, and strategies) in the petrophysical characterization of the Vaca Muerta formation in the South American continent were discussed.



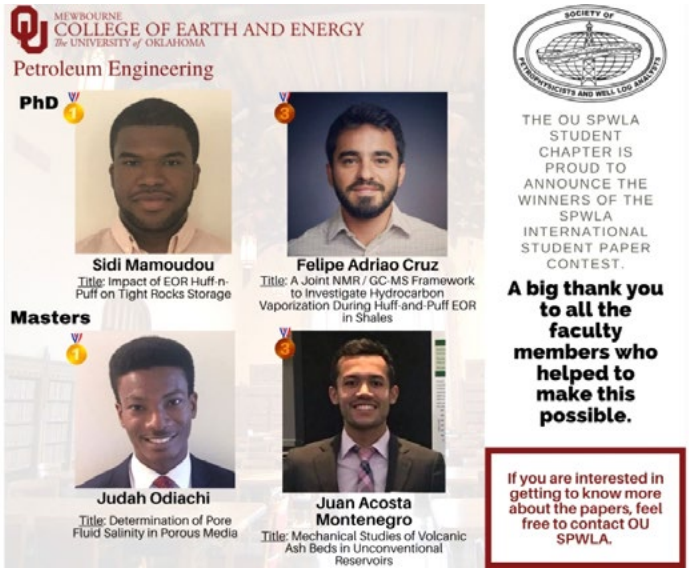
April 2021—New SPWLA Officers: Introducing the new executives (for 2021–2022 academic year) of the OU SPWLA Student Chapter: Blessed Amoah (President), Carlos Arengas (Vice President), Laura Osorio (Secretary), and Rishabh Pandey (Treasurer). We are very excited and honored to be a part of and add value to the chapter. We are very grateful to the former executives and congratulate them for their efforts despite the challenges brought by the COVID-19 pandemic. This new administration is looking forward to doing our best to add more value to SPWLA and to increasing student engagement.

New Officers (2021–2022)

(Top row, from left to right): Blessed Amoah (President), Carlos Arengas (Vice President), and (bottom row, from left to right) Laura Osorio (Secretary), and Rishabh Pandey (Treasurer).

May 2021—SPWLA International Student Paper Contest: During the spring semester, OU SPWLA participated in the SPWLA International Student Paper Contest that was organized. We are happy and proud to announce that the first and third place positions at the PhD and master's levels were awarded to OU Petroleum Engineering students. This win is not only a cause to celebrate, but also it is an opportunity to encourage students to engage in research and strengthen the collaboration between industry and academia. A big congratulation goes to these students for their excellent performance during the SPWLA International Student Paper Contest.

Winners of the SPWLA International Student Paper Contest



(Top row, from left to right) Sidi Mamoudou, Felipe Adriao Cruz, and (bottom row, from left to right) Judah Odiachi, and Juan Acosta Montenegro.

UNIVERSITY OF TEXAS AT AUSTIN STUDENT CHAPTER

General News

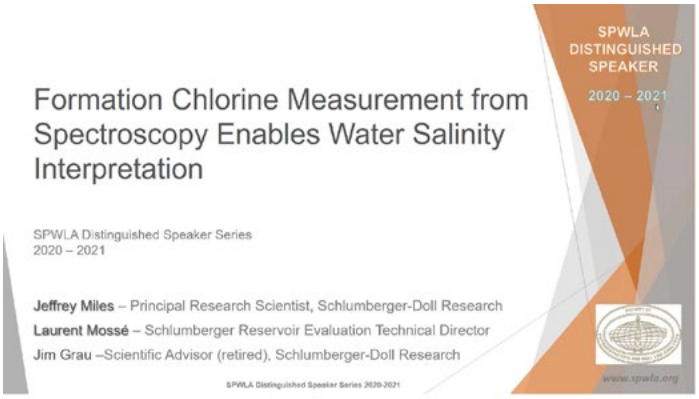
The Student Chapter of SPWLA at UT Austin hopes everyone in our community stays safe and healthy during these challenging times. The spring semester is now over, and we hosted a total of six technical seminars during the 2020–2021 academic year as well as the local SPWLA Student Paper Contest (Eduardo Maldonado placed 2nd (PhD Category) in the International Student Paper Contest held during the SPWLA 62nd Annual Symposium). Due to the pandemic, all our seminars were conducted in an online format. We implemented after-seminar polls and meal raffles to engage with the attendees and increase attendance.

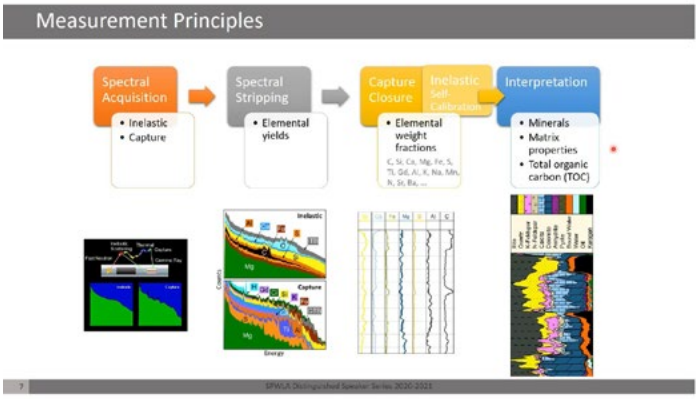
Recent Events

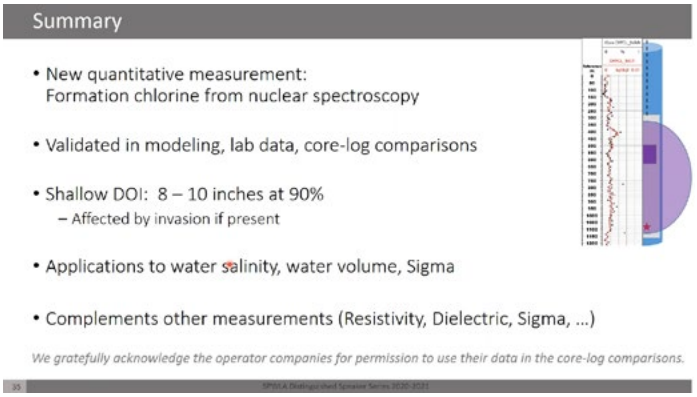
15 April 2021—We hosted our sixth technical seminar of the 2020–2021 academic year by Dr. Jeffrey Miles (2020–2021 SPWLA Distinguished Speaker) entitled "Formation Chlorine Measurement From Spectroscopy Enables Salinity Interpretation." We would like to thank Dr. Miles and Schlumberger-Doll Research for his presentation.

Upcoming events

We will meet after the start of the 2021–2022 academic year to elect new members and define the roles of the chapter officers, as well as plan for the technical seminars and non-academic events of the upcoming year.







UNI STUDENT CHAPTER

General News

The National University of Engineering (UNI) Student Chapter of Peru is composed mainly of students from the faculty of the Petroleum and Natural Gas Engineering School. They have initiated a new student chapter and have begun to develop their ideas and programming. The new board consists of:

President	Joel Cahuas
Vice President	Enrique Meza
General Secretary	Gean Diaz
Fiscal	Marco Quiroz
Director of Cultural Development	Yimmy Mallma
Treasurer	Irenka Vidal

Progress Report

Our team has been focusing on our mission and what we want to achieve as a group.

Lines of Investigation

We have three areas of research that we are focusing on: Petrophysics and Well Logs, Geothermal, and Data Analytics and Data Science.

Looking at the Future

We expect to do more research, as well as to generate conferences and presentations, all supporting these areas of importance to our chapter.

SPWLA UNI SC has made great strides, including developing our three research areas, selecting board members, and obtaining a personal mail address for the chapter, as well as distributing information to our members.

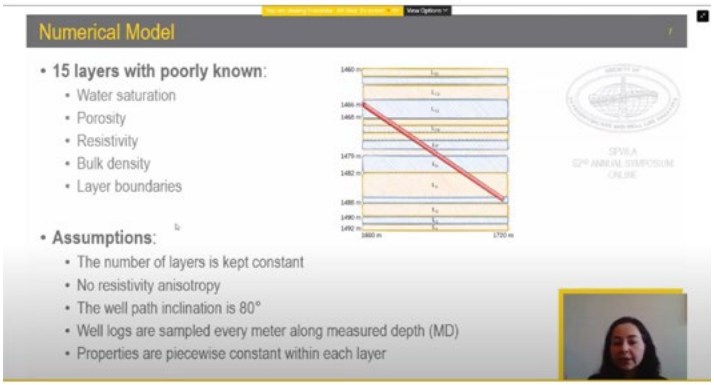
SPWLA UNI SC OBJECTIVES

Lines of Investigation

STRATEGIC ALLIANCES

Participation in the SPWLA 62nd Annual Symposium

General News



Recent Events

We are opting for larger activities like proposing and conducting webinars, talks, etc. To expand and disseminate information to the entire scope of SPWLA UNI SC, conferences are being held in conjunction with the SEG UNSA Student Chapter of Arequipa.

We appreciate the opportunity to be able to carry out this work!

Welcome New Members: April 20, 2021 – June 15, 2021

Abousrafa, Emhemed, Qatar Petroleum, Doha, Qatar
Acosta Montenegro, Juan Camilo, University of Oklahoma, Norman, OK, United States
Adam, Awadelgied, Aramco, Dhahran, Saudi Arabia
Adeyemo, Aderibigbe, University of Louisiana, Lafayette, Lafayette, LA, United States
Afolabi, Matluck, University of Louisiana at Lafayette, Lafayette, LA, United States
Ahmed, Musa, University of Houston, Houston, TX, United States
Ahmed, Tauqeer, Sval Energi, Stavanger, Rogaland, Norway
Al Buraiki, Mohamed, Stratum Reservoir, Muscat, Bowshar, Oman
Alfaro Trejo, Cristhian, Universidad Nacional De Ingeneria, Lima, Peru
Alkhalifah, Rehab, Halliburton, Dammam, Eastern Prov., Saudi Arabia
Alzate Mún, Alejandro, Universidad Industrial De Santander, Dosquebradas, Risaralda, Colombia
Amoah, Blessed, University of Oklahoma, Norman, OK, United States
Antonov, Yuriy, Baker Hughes, Novosibirsk, Russia
Araujo, Joy, Schlumberger, Sugar Land, TX, United States
Askoul, Yamal, Baker Hughes, Chessington, Surrey, United Kingdom
Bamigboye, Ebenezer, Halliburton, Lagos, Nigeria
Bravo Estrada, Juan, Pemex, Villahermosa, Tabasco, Mexico
Butarbutar, Elrey, University of Indonesia, Prabumulih, South Sumatera, Indonesia
Butt, Parvez, VPPS, Islamabad, Fedral Area, Pakistan
Cardoso, Gustavo, Petrobras - Petróleo Brasileiro S.A., Rio De Janeiro, Brazil
Chakraborty, Diptaroop, Halliburton, Tananger, Rogaland, Norway
Chalaturnyk, Richard, University of Alberta, Edmonton, AB, Canada
Chandran, Rohin, Halliburton, Houston, TX, United States
Cheng, Kai, GeoMark Research LTD, Houston, TX, United States
Chuprin, Maksym, University of Louisiana at Lafayette, Lafayette, LA, United States
Collamore, Adam, Maxella Geoscience, Spring, TX, United States
Cox, Adam, Berry, Bakersfield, CA, United States
Cui, Yingzhi, The University of New South Wales, Sydney, NSW, Australia
Dutra, Valerio, Petrobras - Petróleo Brasileiro S.A., Rio De Janeiro, Brazil
Evans, Kaitlin, Cabot Oil and Gas, Pittsburgh, PA, United States
Ferreira, Gustavo, Petrobras - Petróleo Brasileiro S.A., Rio De Janeiro, Brazil
Fouda, Mohamed, Halliburton, Giza, Egypt
Ge, Yao, Halliburton, Singapore
Ishola, Olubukola, Oklahoma State University, Stillwater, OK, United States
Jimenez Soto, Grisel, Seacarl, Seri Iskander, Perak, Malaysia
Kelly, Shaina, AquaNRG Consulting, Houston, TX, United States
Korniienko, Artem, Kyiv, Ukraine
Kotlar, Nicolas, Kappa Engineering, Al Hamala, Bahrain
Krishnapillai, Anish Thaliyil, Pandit Deendayal Energy University, Mumbai, India
Kundu, Deboshree, Shell, Bhubaneswar, India
Lhomme, Tanguy, Epslog, L'Ile Saint Denis, Seine Saint Denis, France
Li, Yulian, University of Electronic Science and Technology of China, Chengdu, China
Liang, Qixuan, China University of Petroleum (East China), Qingdao, China
Lira, Jose, Petrobras - Petróleo Brasileiro S.A., Rio De Janeiro, Brazil
Long, Teng, University of Houston, Houston, TX, United States
Mamoudou, Sidi, University of Oklahoma, Norman, OK, United States
Mancini, Annemarie, Lone Star College, Houston, TX, United States
Mcghie, Laurie, Total E&P Americas, Houston, TX, United States
Montagut Rueda, Carmen, Ecopetrol, San Gil, Santander, Colombia
Odiachi, Judah, University of Oklahoma, Norman, OK, United States
Ortiz Orduz, Luz Adriana, UIS, Bucaramanga, Colombia
Otani, Takeaki, Japex Research Center, Chiba, Japan
Portela, Jefferson, Petrobras - Petróleo Brasileiro S.A., Rio De Janeiro, Brazil
Pulido Perez, Victor, Industrial University of Santander, Barranquilla, Atlantico, Colombia
Reis, Alvaro, Petrobras - Petróleo Brasileiro S.A., Rio De Janeiro, Brazil,
Rosado, Thiago, Petrobras - Petróleo Brasileiro S.A., Vitória, Espírito Santo, Brazil
Salih, Yousra, University of Bucharest, Bucharest, Romania
Santoso, Gagok, Schlumberger, Dammam, Eastern Prov, Saudi Arabia
Silveira De Araujo, Isa, The University of Texas at Austin, Austin, TX, United States
Simoes, Vanessa, Schlumberger, Campos Do Jordão, Brazil

Welcome New Members: April 20, 2021 – June 15, 2021

Singer, Gabriela, Halliburton, Richmond, TX, United States
Sinha, Supriya, Halliburton, Stavanger, Rogaland, Norway
Sviridov, Mikhail, ROGII, Houston, TX, United States
Tillero, Edwin, Universidad Central Del Ecuador, Quito, Pichincha, Ecuador
Wylie, Albert, Cabot Oil and Gas, Pittsburgh, PA, United States
Yokoyama, Christopher, Pioneer Natural Resources, Irving, TX, United States
Zaki, Muhammad, Eni, Karachi, Pakistan