

spwla today

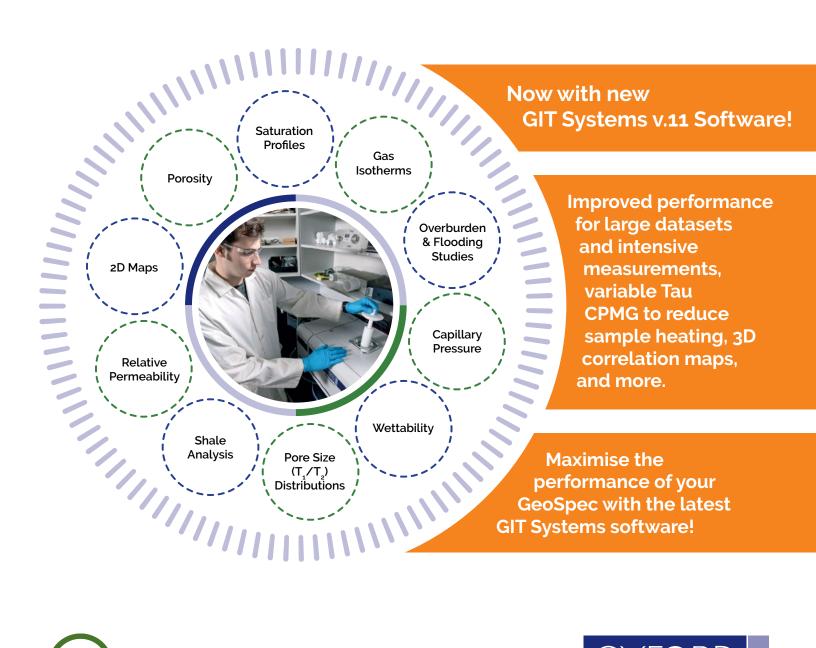


NEWSLETTER

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CALENDAR OF EVENTS

March 23-24, 2022

SPWLA Spring Topical Conference Topic - Petrophysical Machine Learning Houston, TX 77032 www.spwla.org

June 10-15, 2022

SPWLA 63rd Annual Symposium Stavanger, Norway www.spwla.org



(From left to right) Two past SPWLA Presidents and one current SPWLA President joined forces at a Denver Well Logging Society Luncheon in November: Dick Merkel, Katerina Yared, and Jim Hemingway.

About the Cover

Winter in the oil field.

From the President



Katerina Yared 2021-2022 SPWLA President

Happy New Year, dear fellow petrophysics friends and colleagues!

I hope the year started off well for you all and you are staying safe.

I wish you all the most prosperous of years, where hard work and dedication bring the rewards to you and your loved ones that you hoped for, but I wish you most of all health and happiness! May 2022 be an excellent year for us all!

We have a great lineup of knowledge-sharing opportunities again for you starting here in 2022 with classes, Spring Topical Conferences, and many opportunities for you to build on expanding or deepening your petrophysics skills and beyond.

With our last board meeting in November, we had the pleasure to welcome five new chapters and special interest groups to our extended family, reaching out to members around the world. For me, that is a sign that our skills are needed and necessary for the future of energy, and it shows how important of a role we will play. I wish all the new chapters, especially the student chapters, great success! I thank everyone involved in making these chapters a reality!

We welcome:

The Argentina SPWLA Student Chapter
The University of North Dakota (UND) SPWLA Student Chapter
The Batangas State University SPWLA Student Chapter (SPWLA-BatStateU SC) Philippines
The Borehole Imaging SIG
The Alternative Subsurface / Energy Transition SIG

I had the pleasure to represent our society at the 2nd International Geomechanics Symposium that took place virtually. Alongside ARMA, AAPG, SEG, and DGS, we were an affiliated society supporting the efforts, and I enjoyed participating as a panelist and session chair during the event.

We continue to collaborate with ARMA, as they are a smaller society like us but similar in goals, for the benefit of our members. No, no merger , just like-minded people working together for the benefit of many.



From the President

I want to thank the many volunteers we have in our great society for making strides and bringing us together! My dream team of board of directors is no exception. They are all amazingly hard workers, and I am proud of all the achievements we were able to accomplish in the conditions we still live in. Change is inevitable, but our team is here making things happen as if the sky is the limit. THANK YOU!

Do you think having an open invitation coffee hour would help you "touch base" with me and the board? Do you see a benefit in having one? I mean, if I could, I would love to meet you all! Let me know what you think. I enjoy hearing from you. Email me at President@spwla.org.

Please keep staying safe and get vaccinated so that we can see each other again in Stavanger for our 63rd Annual Logging Symposium!

Respectfully Yours,

SPWLA President 2021-2022

(+1) 720-431-7482

President@spwla.org

From the Editor



Songhua Chen 2021–2022 Vice President Publications

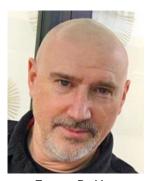
Happy New Year!

Greetings and welcome to the January 2022 issue of *SPWLA Today*. I hope everyone had a wonderful holiday season and is ready for an exciting new year. The year 2021 was quite challenging dealing with waves of COVID, which forced the SPWLA to switch the annual symposium and several other meetings and activities to online. We have learned that we must be creative, adaptive, and flexible in planning professional society activities. The good news is we are getting better at that. Looking back, fewer events were canceled in 2021 than in 2020. One positive outcome is that several local events, such as the SAC Data-Driven Petrophysics Workshop, were able to draw large numbers of participants globally, as the online live meeting software is commonplace nowadays. The globalization of local chapter events has helped petrophysicists around the world communicate and collaborate and allows the technology to spread beyond local communities more efficiently. We would expect such a trend to continue even after the pandemic is behind us.

Despite the difficult time in the petroleum industry due to the pandemic, the members of the SPWLA are working hard to keep our professional society moving forward and prospering. I would

like to mention three things that demonstrated the health of SPWLA. First, the projected number of papers to be published this fiscal year is significantly higher than the past fiscal year, and the number of manuscripts submitted to the journal has also ticked up. Second and more importantly, we have many new student chapters that have started to operate during 2021. At the last Board of Directors meeting, three student chapters were approved to join the SPWLA family. They are the Argentina SPWLA Student Chapter, University of North Dakota SPWLA Student Chapter, and Batangas State University SPWLA Student Chapter (SPWLA-BatStateU SC), Philippines. We are very pleased that this industry and the SPWLA society can attract so many enthusiastic and talented next generation of petrophysicists. This demonstrates the vitality of our profession. Third, two more special interest groups (SIGs)—Borehole Imaging SIG and Alternative Subsurface / Energy Transition SIG—have been approved by the BOD. They represent two new important sections of formation evaluation technology. All these achievements are the collective and collaborative efforts by members who have volunteered a great amount of time to make them happen. We all deserve applause for these efforts! Let's keep up this momentum and make SPWLA more successful in 2022.

Cheers! Vice President Publications VP-Publications@spwla.org



Tegwyn Perkins 2021-2022 President Elect

Hello and welcome to my fourth column as President Elect for the *SPWLA Today* newsletter. I returned to Wales earlier this week to discover that Storm Arwen had paid us a visit. We'd lost a number of slates from the roof, the electricity was off, and the recycling bins were at the end of the field. The only good news was that the fallen leaves that once covered the driveway were now neatly collected in front of my workshop.

It's good to see several of my "backroom" projects come to fruition. I've spent a lot of time engaging with the special interest groups (SIGs) over the past months. All have been recovering from the pandemic at their own pace, and I'm glad to write that many have held their first events since 2020 in October. Congratulations to the **Resistivity** and **Formation Testing** SIGs for holding recent successful online events.

I am very pleased to announce that we have formed two brand new SIGs. They are **Borehole Imaging SIG (BHI)** and **Alternative Subsurface / Energy Transition SIG (ASET)**. They will shortly have a presence on our website and will be soliciting for committee members. The BHI SIG will begin by focusing on defining the minimum requirements for dip data delivery, while the ASET SIG will be looking at multiple disciplines.

Please look out for a forthcoming announcement about the **Hydrocarbon Reserves SIG**. The SIG board has been working tirelessly to bring this SIG to life, and it's almost ready to go live.

The Petrophysical Data-Driven Analytics (PDDA) SIG has been especially active. The PDDA SIG is hosting the 2022 Spring Topical Conference on Petrophysical Machine Learning. The event will be held on March 23/24, 2022, in Houston, and the Call for Abstracts was announced in December on the usual websites and social media channels. The closing date for abstract submission is January 31, 2022.

The **2021 SPWLA PDDA Machine-Learning Contest** is currently in progress. The goal of this contest is to develop data-driven models to estimate reservoir properties, including shale volume, porosity, and fluid saturation based on a common set of well logs, including gamma ray, bulk density, neutron porosity, resistivity, and sonic. **The competition closes on February 1, 2022**, and the award ceremony will take place during the SPWLA Spring Topical Conference. Good luck to everyone involved!

If you are interested in getting involved with any of the SIGs, please email me at the address below or contact the SIGs directly at the email addresses on the spwla.org website.



Congratulations must go to VP Technology, Carlos Torres-Verdin, and the Technical Program Co-Chair, Iulian Hulea, who received over 330 abstracts from the Call for Abstracts for the SPWLA 2022 Symposium. The program they have designed really extends the petrophysical influence, and I'm happy to see so many of you accept the challenge. By the time this article is posted, the Technology Committee will have completed their review of those abstracts, and acceptance emails will have been sent.

Please check out the symposium website (https://www.spwlaworld.org/) as we have recently updated the Exhibition and Sponsorship pages. Booth space is going fast, so please reserve yours ASAP.

Finally, fingers crossed for an in-person symposium!! After two years of online symposia, I know that most of us want a return to in-person events.

Also, if you would like to be involved in maintaining and developing the SPWLA World website, please email me. It's all volunteer work. I'm afraid there will be no remuneration, just the heartfelt thanks of your fellow SPWLA members and an entry for your resume or CV. WordPress skills would be preferred!

Up Next

Calling all SPWLA Chapters!! Please continue sending me your solicitations for the SPWLA 2023 Symposium proposals. We have held several exploratory meetings, but a decision won't be made until early 2022. Traditionally, odd years are held in the US; however, we are not living in traditional times, so I am interested in all proposals.

"Fy iaith, fy ngwlad, fy nghenedl Cymru" – I wrote these words at the end of my last article for SPWLA Today. Keen observers will know that they are carved on an inscription halfway up the steps of the Washington Monument in the US capital. The reason for including it? In November 2021, I became a US citizen!

Blwyddyn Newydd Dda Pawb! Happy New Year, Everyone!

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: All Aboard?

The 2021–2022 SPWLA's Technology Committee (TC) has been busy reading, studying, and grading abstracts submitted for presentation at the 2022 Annual Symposium in Stavanger. There are 37 TC members currently performing this time-consuming but relevant task, using their vast array of technical, editorial, and experiential resources to make sure that all abstracts are given the same level of scrutiny and that the ranking process is fair and transparent. Each abstract is being independently scrutinized by at least 12 members of the TC to guarantee impartiality and to mitigate potential biases. Furthermore, the names and affiliations of the authors are not being released to abstract reviewers, thereby enforcing a completely blind review process.

As indicated before, we anticipate two simultaneous oral sessions starting on Monday afternoon and continuing on Tuesday and Wednesday. The plan is to work with all stakeholders to decide how many abstracts to accept, considering the special organized sessions and possible

attrition. Currently, we believe that the Annual Symposium will include approximately 110 papers between oral and poster presentations, and we plan to accept at least 20 additional papers because of expected attrition. By the time this newsletter publishes, we will have released acceptance/rejection letters in late December.

In the interim, let me convey some abstract-submission figures to you:

- a. Total No. of abstracts submitted = 337 (this is an excellent number!)
- b. Total No. of abstracts requesting oral presentation = 283
- c. Total No. of abstracts requesting poster presentation = 53
- d. Submitted abstracts by geographical location:
 - 78 Asia and Australasia
 - 90 Europe
 - 51 Middle East and Africa
 - 80 North America
 - 20 Other
 - 17 South America
- e. Submitted abstracts by General Theme:
 - 27 Formation Evaluation of Conventional Reservoirs
 - 52 Formation Evaluation of Unconventional Reservoirs
 - 30 Automated Methods of Formation Evaluation
 - 63 Specialized Measurement Techniques and Interpretation Methods
 - 11 Core and Well-Log Integration
 - 45 Case Studies
- f. Submitted abstract by Special Organized Session
 - 10 Nuclear Magnetic Resonance of Cuttings: Measurements and Interpretation
 - 11 Distributed Fiber Optics for Formation Evaluation
 - 14 A Decade with UDAR Technology: Status of Look-Around and Look-Ahead Applications and Future Potential
 - 11 Surface Logging Technology in the Era of Digitalization and New Energies
 - 17 Deep Learning With High-Dimensional Petrophysical Data
 - 5 The Role of Long-Term Petrophysics in Carbon Capture Utilization and Storage
 - 4 Advances in the Integration of Well Logs and Surface Electromagnetic Measurements for Reservoir Monitoring
 - 18 Recent Advances in Borehole Image Technology and Interpretation
 - 3 Automation in Borehole Geology
 - 14 Digitalization in Petrophysics: A Revolution in Formation Evaluation?

Additionally, we are currently working on developing proposals for symposium technical workshops. Please let us know if you have ideas about technical workshops covering relevant and contemporary subjects of interest; expect an open call for proposals, too!



Stavanger and environs are replete with exciting hiking adventures. You may want to buffer your 2022 Annual Symposium with plenty of time to shake your old boots and enjoy the landscape and camaraderie of the homegrown brethren (photograph by the author).

I want to take this opportunity to heartily thank all TC members for their arduous work, time, and acumen with the abstract review process. Kudos to them for being such great SPWLA volunteers!! We could not do this herculean task without them. Our gratitude also runs deep for Tegwyn Perkins and Stephanie Turner for their behind-the-scenes technical support and advice. It is during moments and events like this one when we truly appreciate the great and peerless volunteering fabric of the SPWLA!

As always, don't hesitate to contact me with suggestions for improvement. All ideas are appreciated and will be given the utmost consideration. We are striving to celebrate an inclusive Annual Symposium where all SPWLA members feel welcomed and valued, regardless of gender, age, race, nationality, or technical specialty—ONE SPWLA Annual Symposium for all!

Enjoy the end of the year, and let's all have a healthy, happy, and extraordinary 2022!

Carlos Torres-Verdín, PhD, Professor
Brian James Jennings Memorial Endowed Chair in Petroleum and Geosystems Engineering
Hildebrand Department of Petroleum and Geosystems Engineering
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Learning Opportunities



Fransiska Goenawan 2020-2022 Vice President Education

Hello SPWLA Colleagues,

Happy new year, 2022! May this new year bring blessings, joy, and peace to each one of you. Thank you for staying with us throughout 2021. Thank you for faithfully attending SPWLA monthly webinars, SPWLA special webinars, SPWLA short-course training, SPWLA Topical Conferences, and all SPWLA programs.

At this moment, I would like to show my appreciation to all Distinguished Speakers and Global Distinguished Speakers for all your support and commitment to sharing your expertise through SPWLA monthly webinars and SPWLA local chapter meetings. I also would like to thank all SPWLA short-course instructors who spent lots of time and energy preparing and giving the classes. We have received a lot of good and sweet feedback from the attendees. We hope to continue to provide great classes to all SPWLA members (and non-members, too). Special thanks to Katerina Yared, our Madam President, who graciously stepped in to help with the SPWLA "The More You Know" Series and SPWLA Training.

I also must recognize all the help and support from the SPWLA BoD, Sharon and Stephanie, VP Social Media and Team, VP Education Team (Haryanto Adiguna, Tianmin Jiang, and Maira Lima), and anyone who I didn't mention one by one here. Thank YOU!

I want to highlight the success of the SPWLA Fall Topical Conference: Unconventional Petrophysics. The committees have been preparing for this event since 1.5 half years ago, but just as with other events, it also got hit by the ups and downs of the COVID situation before finally being conducted virtually at the end of October 2021. Kudos to the co-chairs and steering committee (Jinhong Chen, Matthew Blyth, Alexei Bolshakov, Ron Bonnie, Robert Gales, Keli Sun, Kristoffer Walker, and Chicheng Xu) who worked super hard to make this event possible.



Thank you to all the wonderful speakers and panelists who participated in SPWLA Fall Topical Conference.

Learning Opportunities

Lastly, on December 1, we launched our new program: SPWLA Lecturer Series. In this program, you will learn the basic principles on one subject from individuals who are highly recognized in the industry. Our first topic is on NMR in a Nutshell by Songhua Chen. This is an on-demand program that you can access at your convenience. If you have any ideas for what topic should be next, please kindly send an email to vp-education@spwla.org.

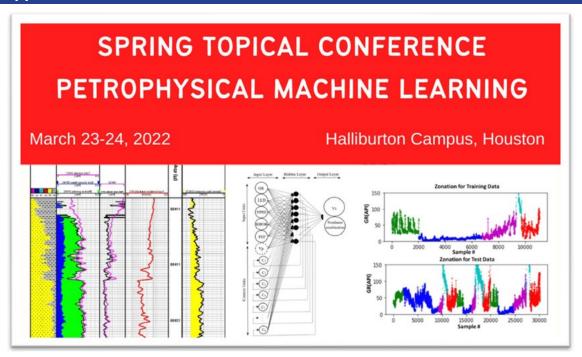


Beautiful flyer of NMR Logging in a Nutshell by SPWLA VP Social Media.

We welcome 2022 with lots of great learning activities. Please mark your calendar for upcoming SPWLA webinars:

- 1. January: Data Quality Considerations for Petrophysical Machine-Learning Models by Andy Mcdonald (Lloyd's Register)
- 2. February: An Integrated Petrophysical Characterization of a Siliciclastic Tight Gas Reservoirs in Neuquén Basin, Western Argentina by Nicolas Carrizo and Emiliano Santiago, Ypf S.A. and Universidad Nacional Del Comahue; Pablo Saldungaray, Schlumberger
- **3. March**: The Impact of Overbalanced Drilling From Exploration/Appraisal Wells to Field Development Plan by Matthew Guy Reppert (Neptune Energy Norway)
- **4. April**: Enhanced Assessment of Fluid Saturation in the Wolfcamp Formation of the Permian Basin by Sabyasachi Dash (The University of Texas at Austin)
- 5. May: Nanotags for Improved Cutting Depth Correlation by Martin Poitzsch (Aramco American)
- 6. SPWLA Spring Topical Conference is coming soon! The SPWLA 2022 Spring Topical Conference, organized by PDDA SIG, will focus on Petrophysical Machine Learning. The committee encourages the SPWLA community to share both theories and applications of emerging machine-learning methods as applicable to petrophysical research. We are seeking submissions on machine-learning-related research in the following subjects:
 - A. Multivariate regression: such as properties prediction or synthetic logs.
 - B. Supervised classification and unsupervised classification: such as rock and fluid typing, zonation, outlier identification, or depth alignment.
 - C. Deep learning with high-dimensional data: such as CNN or RNN methods on sensor arrays, waveforms, images, or volumes.
 - D. Frontier topics: such as energy transition applications in geothermal and carbon capture and storage, novel model design or training, denoise, or other new research topics related to petrophysics.

Abstract submission deadline: 11:59 pm CST Monday, January 31, 2022.



SPWLA student chapters and SPWLA student members—Here is great news for you! The 2022 International Student Paper Contest is coming your way. The **ISPC** will be held online on **Sunday, June 12, 2022,** preceding the SPWLA 63rd Annual Symposium. Students at an accredited university or having graduated from one within 12 months preceding the **ISPC** are qualified and invited to submit their paper at their relevant degree category: Undergraduate (BSc), Masters (MSc), or Doctorate (PhD).

Students affiliated with a local SPWLA student chapter must first submit their paper abstract and deliver their presentation to their student chapter as part of the SPWLA Internal Student Chapter Paper Contest (Internal SCPC). Internal SCPCs are run independently by the local student chapter (refer to guide online). The local student chapter will rank and nominate *up to three* students in each degree category from their chapter to participate in the ISPC. The Internal SCPC must be completed, and nominated students should submit their paper abstract to ISPC online by Thursday, March 31, 2022.

Students without a local SPWLA student chapter are invited to submit their paper abstract at their relevant degree category directly to **ISPC** online by **Thursday, March 31, 2022**.

Students selected to present at the **ISPC** are expected to receive notification by **mid-April 2022**. Please read all the detailed information at spwlaworld.org or email me at vp-education@spwla.org for more information.

Thank you for being a loyal member of SPWLA, and I wish you all the best for 2022!

Respectfully yours,

Fransiska Goenawan VP-Education@spwla.org

Informative Technology



Harry Xie 2021-2023 Vice President Information Technology

Dear Colleagues,

Welcome to my column for the SPWLA Today newsletter.

Many of us may feel like the year 2021 went by too quickly. And, feeling that time has been distorted is hardly a unique thought—particularly over the course of almost two years that was marked in large part by COVID-19 lockdowns, the lifting of restrictions, and concerns that we'll continue repeating the process with variants. It could also mean that we all have been keeping ourselves busy in front of our computers from one day to the next without noticing any differences due to the inability to afford to take a break at all when we work from home. The immediate consequence of such a working style is high productivity. Let's congratulate ourselves on achieving our goals.

We may feel like that, in the past two years, we have had more opportunities to meet each other, of course, virtually most of the time. This is not our tradition, and we all want to go back to our normal life. The new year is bringing us new hope. The SPWLA family will have more in-person

meetings in 2022, including the annual symposium in Stavanger. Let us get ourselves ready mentally and physically to attend this long-awaited gathering.

I understand that some of us may not be able to travel internationally due to regulations or limitations by local governments or companies. I would therefore very much like to hear suggestions from you on how we can make the symposium available to everyone.

Happy New Year to you all.

Harry Xie VP Information Technology vp-infotech@spwla.org

THE FEED



Mathilde Luycx 2021-2023 VP Social Media

As we come to the end of 2021, a lot of #spwla events remain virtual. Nonetheless, some local chapters and special interest groups are resuming in-person meetings and have been sharing photos with live(!) attendees. We are hopeful that 2022 will bring more!

The last two months have been busy; there is a lot of energy coming from SPWLA members, to say the least. The Fall Topical Conference on Unconventional Petrophysics elicited strong participation both from presenters and attendees. There is a lot of momentum to participate in additional special interest groups and create new chapters, especially amongst student members!



Fall Topical Conference: Unconventional Petrophysics

The Fall Topical Conference on Unconventional Petrophysics was held online on October 21–22, 2021. The conference ran without a hitch, and Fransiska Goenawan, our VP Education, captured screenshots of the presenters for all sessions.

We are taking this opportunity to thank all presenters, moderators, session chairs, the conference committee, and conference sponsors, who made this event a success with over 100 attendees.

The plan is to return to in-person events starting with the Spring Topical Conference next year (more information to be released soon).





Student and Local Chapter News

Last month, the SPWLA welcomed three new student chapters and two new special interest groups.

So far, you can follow the **SPWLA Argentine Student Chapter** on <u>Linkedin</u> and Instagram at <u>spwlaarg</u>—not to be confused with spwla_arg, the professional Argentinian SPWLA chapter, SPWLA Capitulo Argentina.







Local and student SPWLA chapters like the SPWLA University of Houston Student Chapter are resuming inperson events and giving us the chance to share some "live" photos of their events.

#beapartofit

This column would not be complete without encouraging all SPWLA members to renew their membership for 2022.

We are also using this opportunity to highlight a membership benefit that you might not be aware of: SPWLA members have access to on-demand video recordings of monthly Distinguished Speakers webinars with our partner Knowledgette!



I wish you a very happy and healthy 2022 and look forward to continue engaging you in all things social media this year.

Mathilde Luycx Vice President Social Media (+1) 512-775-0815 VP-SocialMedia@spwla.org









Regional Understandings-North America 1



Robin Slocombe 2020-2022 North America 1 Regional Director

Twelve months ago, there wasn't much North American SPWLA activity to write about, so I chose to reflect on what we had achieved individually in such a challenging year. One year on, I am happy to say there is plenty to report and even more to reflect on.

In recent weeks, Omicron has become a reminder that the COVID chapter is not behind us. As the fortunate take their third vaccine, many in the world are yet to be vaccinated, and breeding grounds for mutations exist on a scale that poses a threat to us returning to normal life. With the pace of change ever accelerating, a return to normal will not be a return to the past. There is growing momentum through individual action and wider agreements, such as COP26, to change the way we live to prevent more serious consequences of climate change. Our industry is adapting, and while the return from working from home heralds some restabilization, we are hearing much more on geothermal, CCUS, and GHG reduction initiatives. Unfortunately, an \$80 oil price is not driving the investment and stock price recovery in the companies we work for that we have seen in the past. We are faced with new ways of living to cope with the virus, new ways to use our skills in a new industry context, and new expectations of our businesses to operate in tighter financial restraints.

So how are we responding? Firstly, I would say, with optimism. I see our society, our colleagues, and our future pipeline enthusiastically addressing these challenges and preparing for the new frontiers. In 2021, the student chapters in North America have led a return to normality and are starting to embrace the new concepts our industry is addressing. Texas Tech, the University of Houston, and the University of Louisiana at Lafayette all have very engaged chapters with growing memberships and plenty of activities. I have seen several new student chapters appearing around the world, and there are encouraging indications of enthusiasm for our industry and young people keen to understand how they can influence the world from the subsurface, upwards!

I have several reports that it is tougher for the city chapters. There is a feeling that many share following a return to the office and a reluctance to engage outside of the office when information is just a zoom call away. The society continues to offer platforms to support remote engagement, webinars, etc., but it is clear that it will take time before people feel comfortable connecting in this way again. Worryingly, some chapters have faded. I will use this opportunity to ask anyone with links to the Dallas Chapter to let me know.

I am very much looking forward to 2022. Our in-person symposium in Stavanger, Norway, is gaining considerable momentum. We have mountains of abstracts, lots of industry interest, and high predicted attendance. I know there are North American chapters already preparing for a 2023 event, so the future looks strong. We have come a long way in 12 months, and the recent changes are only the beginning. We are fortunate with a strong pipeline of future petrophysicists and plenty of enthusiasm within the society to grow and move forward. Happy New Year!

Robin Slocombe North America 1 Director (+1) 281-690-0837 Director-NA1@spwla.org

Regional Understandings-North America 2



Matt Blyth 2021-2023 North America 2 Regional Director

As we wind up the year, several of our North America regional chapters have begun to return to in-person events. Attendance results have been mixed, with levels lower than seen before the pandemic, but slowly increasing as more in-person events are held. Many held holiday events in December where people got together for the first time in almost two years! Obviously, our industry is still in a state of flux, with indications that 2022 will be a year of growth for oil and gas, tempered with concerns over new COVID strains, potential lockdown repeats, and of course, the increasing momentum around pivoting our energy use towards renewables as quickly as possible. We all hope that 2022 is better than the last two years have been for our industry! We are definitely seeing the effects with the smaller chapters within the US, who are struggling to attract attendance at events and find people willing to volunteer to run the chapter. If you are in the area of chapters like Tulsa, Bakersfield, Appalachia, or indeed any chapter within the US, big or small, then please get out and support your chapter events in 2022 and beyond! The chapters are the life blood of our society and represent the connection between the international society and our membership. One major highlight of 2021 has been the activity of our student chapters. I would particularly like to mention the University of Oklahoma Student Chapter, who have been extremely active in organizing chapter

events, from invited speakers, lab tours, and other events. I am also delighted to announce that we have just inaugurated a new student chapter at the University of North Dakota!! This activity at the student level is highly encouraging for the future of the science of petrophysics!

I wish all of you a happy holiday season, Merry Christmas to those who celebrate it, and happy new year to all! I look forward to seeing many of you in Stavanger next June!

Matt Blyth North America 2 Director (+1) 832-444-4206 Director-NA2@spwla.org

Regional Understandings-Latin America



Bruno Menchio Faria 2020-2022 Latin America Regional Director

Hello, Petrophysical Community,

Let's welcome the new SPWLA student chapter from Argentina! It is always an honor to have a group passionate about petrophysics. With a different proposal, this new chapter houses several universities in Argentina. Congratulations on those who came up with such an idea!

The last few years have not been easy: COVID has caused many social and economic impacts, and we still have many uncertainties regarding the future. We saw a recovery in the price of barrels of oil in the year 2021, which obviously has a big impact on our profession. Despite the great difficulty in making predictions about the oil market, we are going to stay optimistic about a better future, with more petrophysical jobs around the world.

I would like to take this opportunity to wish a happy new year to all SPWLA members. This time of year is the right moment to help people who are going through difficulties. I feel very happy to see donation campaigns led by some SPWLA chapters in Latin America.

Yours sincerely,

Bruno Menchio Faria LA Regional Director https://www.linkedin.com/in/bruno-menchio/ Director-LA@SPWLA.org

Regional Understandings-Europe



Eva Gerick 2021-2023 Europe Regional Director

Dear SPWLA Community,

I hope you had a festive and peaceful time around Christmas, and I wish you and your loved ones health, happiness, and success for the New Year 2022!

In general, things tend to slow down towards year-end. However, December was still a busy month for the European chapters with more Distinguished Speaker talks, a One-Day Seminar on the role of Petrophysics in Geomodeling, a very future-oriented session on our role in Nuclear Waste Storage—and all this paired with festive chapter get-togethers where possible. It just shows how important community is, be it virtual or in-person, and I'd like to take the opportunity to thank all the European chapter committees and members for their tireless engagement and commitment to quality during 2021—I have been genuinely impressed by you.

And even if winter is, as expected, not helping with COVID in Europe as a whole, Norway has significantly eased international travel restrictions since November 26, which is encouraging news for our Symposium 2022 in Stavanger!

Keep well and healthy!

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

Regional Understandings-Middle East/Africa



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

Dear Petrophysicists and Colleagues,

We have made it through another year. Happy New Year \ Feliz Año \ Buon Anno! Whether you traveled or stayed at home, I sincerely hope that you had a nice holiday and enjoyed the school vacation with family time.

Most of the chapters in the Middle East were pretty active doing online events. Chapters like Dubai and Qatar took the lead early in the year on that. We also had in Saudi Arabia the virtual 10th Topical Workshop on Data-Driven Petrophysics that was very well attended. We recently had in December a virtual Topical Conference in Abu Dhabi. Also, some of you were lucky enough to go back to a physical event at ADIPEC 2021 where we had ADNOC's CEO making powerful opening statements like, "The oil and gas industry will have to invest over ~\$600 billion per year until 2030 just to keep up with the expected demand," in what he calls a "supply crunch we are living in today."

As you can see, multibillion-dollar projects are happening. Do you want a few examples? Keep reading...

MIDDLE EAST in 2021: How Are We Doing?

In UAE, we have the Upper Zakum – Production Capacity Enhancement project, which is the second-largest offshore oil field in the world with a cost of ~\$22 billion. Zadco is looking to increase production from 750 MBOPD to ~1 MMBOPD by 2024. In 2018, ADNOC announced their plans to expand the existing UAE's Ruwais Refinery Complex from 900 MBOPD to 1.5 MMBOPD, making it the largest refinery in the world by 2025 with a cost of ~\$20 billion. Also, in Abu Dhabi, the offshore North West Development – Hail and Ghasha Sour Gas intends to produce up to 1.5 billion cfpd of sour gas plus additional condensate, making this project important for the nation as it might increase domestic gas production by 18% for a cost of ~\$15 billion.

In Iraq, one of the largest oil fields in the world, the Zubair Oil Field – Rehabilitation Phase and Enhanced Re-Development, ENI has been undergoing expansion works and a redevelopment phase that aims to increase production from Zubair to a plateau of 700 MBOPD with a cost of ~\$18 billion. Also, Basra Gas Gathering Project is a master plan that will rapidly increase the development of Iraq's associated gas, most of which are being burned off and now will help provide gas to the domestic power industry as well as LNG via a floating liquefaction facility off Basra. This latest project has been on hold for a long time and is expected to be completed in 2025 for a total cost of ~\$17 billion. Additionally, the giant South Rumaila Oil Field, which is the largest oil field found in Iraq, has estimated reserves of around 20 MMMbbl, and the plan is to increase production from 1.4 to 2.1 MMBOPD with new drills. To cope with this increase in production, crude oil processing plants are being installed to raise capacity by 300 MBOPD. Once completed, firms like NES FirCroft state that "Rumaila will become the world's second-largest oil field and will contribute to around 10%, 7%, and 3% of Middle East production, OPEC production, and global production, respectively." More on Iraq is expected as it is hoped to reach the production target by 2027.

In Qatar, Qatargas NFE – Ras Laffan refinery on the coast produces approximately 10 MM ton/yr of LNG coming from Qatar's North Field gas. It is expected to have six new LNG trains by 2025 to produce an additional 37.2 MMtpa of LNG, increasing Qatar's total production capacity from 77 to 126 MMtpa, all of this not mentioning the new helium plant to produce 16 tons per day also to be constructed with a total cost of ~\$28 billion.

In Kuwait, NES Fircroft is behind Al Zour, one of the world's largest refineries, where 100 MBPD of low-sulfur fuel oil will be used as feedstock by the Ministry of Electricity and Water for power generation. It will use more than 1.5 MMBOPD and 300 MMSCPD of gas feedstock for a total cost of ~\$16 billion. It is expected to come online anytime now after delays since 1999.

In Saudi Arabia, one of the oldest fields, the Marjan Oil field (discovered in the 60s), was estimated to have 2.3 MMMbbl of crude. Current production is ~270 MBOPD, and the plan is to ramp it up to 475 MBOPD, 813 MBLPD, and up to 750 MMSCFPD of gas for a cost of ~\$15 billion, which means there are many tenders on the pipeline.

AFRICA in 2021- How Are We Doing?

In Africa, we have some good news regarding oil discoveries in 2021.

In Namibia, the Canadian company "Reconnaissance Africa" announced preliminary results of its exploratory wells in the

Regional Understandings-Middle East/Africa

Kavango Basin, uncovering 120 MMMbbl of oil. Actually, some capital firms are comparing this finding to the Permian Basin in Texas. Will this be an oil boom?

In Cote d'Ivoire, the Italian "ENI" announced a major deepwater oil discovery off the coast of the country with reserves ~1.5 to 2.1 MMMbbl of oil.

In offshore Ghana, also "ENI" announced an oil discovery on the Eban Exploration prospect with reserves around 500 to 700 MMbbl of oil equivalent.

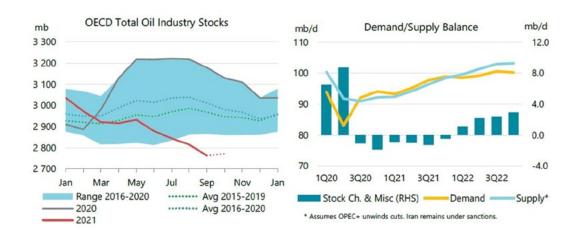
In Angola, also "ENI" revealed 200 to 250 MMbbl of oil reserves in a deep offshore Block 15/06 Cuica exploration prospect. Also, ExxonMobil has awarded the offshore drilling contractor Valaris a two-year deal for a drillship starting in 2022. Meanwhile, TotalEnergies signed an extension contract with Maersk Drilling to drill in 2022 a NEW WORLD RECORD in ultradeepwater (11,900 ft) Ondjaba-1 exploration well Block 48. The current ultradeep world record was set in Uruguay at 11,155 ft.

In Gabon, O&G exploration company "BW Energy" announced an oil discovery in the Hibiscus North exploration well in Dussafu Block. The results of the openhole wireline logs are yet to be released, and I am eager to see that.

In Gambia, FAR has started an offshore drilling campaign, so we should see more on this next year.

OIL DEMAND in 2021/22-How Are We Doing?

To my fellow geoscientists, the uncertainty of the pandemic remains, and we were forced to learn to live with that. However, the need for global oil demand is still there, as noted by the "International Energy Agency, IEA's November 2021 Oil Market Report" (see figure below). So, we have a job on our hands to do.



The challenge we are facing, not only this year but for decades to come, is to be able to be part of the "energy transition" while at the same time maintaining the companies' and countries' development by providing the safest and more reliable source of energy human beings have to date, which is, oil and gas. We will reach net zero, but we are not there yet. I encourage you to read "The Bridge" column in this newsletter where more on this subject is discussed.

This new year 2022, face it with renewed energy and all the best!

Finally, I encourage you to write us, and we will publish your thoughts in the next *SPWLA Today* newsletter. Do you know of any project update? Write to us and update your community with your knowledge.

Yours sincerely,
Nelson "NSA" Suarez Arcano
Middle East and Africa Regional Director
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Director-ME@SPWLA.org SPWLAYP@SPWLA.org





Acknowledgement to our Outgoing Senior Editor: Siddharth Misra

January 2022

2022 Steering Committee

Editors Ishank Gupta Kanay Jerath Javier Miranda

Senior Editor
Nelson Suarez Arcano

SPWLAYP@SPWLA.ORG

In this edition:

Outgoing Senior Editor Farewell and Editorial Committee Introduction

An Interview With Sandor Ricketts: Past SPWLA Scholarship Recipient

Haiku



Siddarth Misra

The Bridge editorial team wants to recognize Dr. Siddharth Misra, our outgoing senior editor. Dr. Misra is an associate professor in the Harold Vance Department of Petroleum Engineering with a joint appointment in the Department of Geology and Geophysics, Texas A&M University. Dr. Misra is involved in several ongoing research projects related to machine learning, artificial intelligence, and subsurface engineering and Characterization, among others.

We acknowledge the excellent work Sid did during his time with our group. His contributions were very important and key to the society. Sid never limited himself be a senior editor only and permanently prepared several articles himself. His connections and network with academia and industry were also a key factor to reach new volunteers while also bringing innovative topics to the section. We wish Dr. Siddharth Misra the best, and we hope he can contribute to our section again in the near future.

We also want to welcome our incoming senior editor, Mr. Nelson Suarez, who in addition to his role as SPWLA Regional Director for Middle East / Africa, is now part of our team. We look forward to Nelson's contribution to the section and the *SPWLA Today* Newsletter.

Introducing the Current Bridge Editorial Committee

To learn a little bit more about the Bridge editorial team, please find the following short bios as an introduction. Anyone interested in joining our team or providing content for our readers should contact us at spwlayp@spwla.org.



Nelson Suarez Arcano

Nelson "NSA" Suarez Arcano is currently the geoscience manager for Roccia Energy, an independent consulting firm. He is a petroleum engineer with extensive international experience in petrophysics, production, geology and geomodeling, reservoir engineering with a focus on business needs and priorities in onshore and offshore, surface/subsurface, consolidated carbonates and unconsolidated sandstones, and deep HPHT and shallow, conventional, and unconventional plays in the oil and gas industry.

He started his career in Sincor, where he worked in operations, data acquisition, and studies for 3 years in the biggest oil reserves of the world (Faja del Orinoco heavy oil). Then, he moved to the Middle East, where he worked for 13 years in diverse projects and companies as a lead petrophysicist.

Nelson earned a BSc degree from the Universidad de Oriente and an MSc degree from Heriot-Watt University, both in petroleum engineering. He is currently studying business and finance at Harvard University. In academia, he served as an adjunct professor and lecturer for well logs.

SPWLA TODAY January 2022



Nelson is an active member of SPWLA and SPE. He is the current SPWLA Regional Director Middle East/Africa. Also, he serves as the senior editor for the SPWLA Today newsletter for "The Bridge" section, a column dedicated to young professionals. Additionally, Nelson is a past SPWLA and SPE officer and Technical Committee member for past symposiums. He was the President/Founder of the SPWLA Dubai Chapter.



Ishank Gupta

Ishank Gupta has over 10 years of petroleum engineering experience and is currently working as a senior reservoir engineer for Pioneer Natural Resources. He received his PhD in petroleum engineering from the University of Oklahoma. Ishank has authored over 30 peer-reviewed journal and conference papers. Currently, he is an editor of "The Bridge" section, dedicated to young professionals in the *SPWLA Today* newsletter.



Kanay Jerath

Kanay Jerath is a senior petrophysicist at Occidental with a focus on developing petrophysical interpretations and workflows for the Permian Resources group. He received a master's degree in petroleum engineering from the University of Texas at Austin (2011) and has since worked with Anadarko Petroleum and Occidental in Gulf of Mexico, with international deepwater and onshore assignments. He serves on the Editorial Board of SPWLA Young Professionals Newsletter (The Bridge) and is a technical reviewer for formation evaluation publications for SPE and URTeC. An interesting problem he is currently working on is the use of cloud-based software to automate interpretation of very large petrophysical data sets. Kanay is also pursuing an MBA from McCombs School of Business (batch of 2023).



Ishank Gupta

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 23 years of industry experience as a petrophysicist. He started his career in PDVSA where he worked in operations, data acquisition, and reservoir studies for 13 years. Then, Javier moved to BP America Inc. where he worked for 5 years in Gulf of Mexico projects as a reservoir description and operations petrophysicist.

Javier earned a BSc degree from the 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. In academia, he served as an adjunct professor and lecturer as a formation evaluation and graduate research assistant.

Javier is an active member of SPWLA, SPE, AAPG, SEG, and HGS. He is the current President for the SPWLA Houston Chapter. Javier is also VP of the SPWLA Hydrocarbon Reserves SIG and part of the technical committee for SPWLA Symposium 2022. He is co-founder of the SPWLA YP global group where he serves as editor for the Bridge section of the SPWLA Today newsletter. Javier received the SPWLA Meritorious Service Award in 2021. In addition, he is a past SPWLA and SPE officer in other chapters in the USA and Venezuela, as well as a committee member for past symposiums.





Sandor Ricketts

My scholastic introduction to geology was obtained at the University of the West Indies with a BSc degree in geology. I then did a three-year stint as a mining inspector in Jamaica for the government. From there, I moved to Belize, where I continued as a consultant in the mining industry until I transitioned to the petroleum industry in 2005 as an independent consultant. During this time, I worked for multiple companies with different job positions in well logging, consultancy, and geology for different companies, including Horizon Well Logging (mudlogging on petroleum and geothermal wells), Belize Natural Energy (assisting in geologic surveys and the collection and analysis of geologic data relevant to petroleum exploration), and GIS consultant (involved in the digitizing of the hydrological system of Belize as part of a larger project), among others.

After the start of the worldwide downturn in the petroleum exploration industry in 2014, I thought it good to advance my education. I was able to use my network connection from my time in the industry in the form of Dr. David King. I was able to apply for and got awarded a master's student position at Auburn University, Alabama, to work on a pet project for Dr. King, which has brought me to where I am now—a proud winner of a scholarship from SPWLA and a recent graduate from the university eager to rejoin the workforce exploring for hydrocarbon.

When did you receive your SPWLA scholarship, how did you learn about it, how was the process applying for it, and how did that help you or influence your career?

The SPWLA scholarship was received in August 2019. I was initially informed about the scholarship from an alumnus of Auburn University and my supervisor at the same university, Dr. David King, Jr. The application process for the scholarship, though detailed, was not prohibitive. In terms of career choice, I have a background in the petroleum industry, which guided my choice in applying for this scholarship.

What do you think was the main reason SPWLA approved your scholarship?

I believe that my previous experience in the petroleum and geothermal exploration industry, along with the objectives of my master's program, contributed to my selection for the scholarship.

Did the SPWLA scholarship have some influence on the path you took during your professional life and being a member?

Being accepted by the SPWLA for their scholarship program enhanced and encouraged me during the achievement of my master's degree. The scholarship also helped alleviate the stress of finding funding to accomplish my research goals, allowing me to focus more on my research.

What do you remember from those times as a student and SPWLA scholarship recipient?

Feeling of pride for being a recipient, along with the drive I felt to succeed.

Was there an SPWLA professional or student chapter in your school? Were you a regular at SPWLA events, if any?

There was no student or professional chapter of the SPWLA at Auburn University.

What was your biggest challenge during graduate school, and how did you overcome it?

To be honest, the most difficult part of graduate school was formulating my thoughts and putting them on paper (thesis). Knowing that SPWLA saw the potential in my project, I did not want to disappoint. This drove me to push through the difficult times.



Is there a mistake you made in school that you want to share with others to avoid?

The biggest mistake was not starting the writing process earlier in my first year of the master's program.

Who was your role model at school, and when you started your career? You can name more than one.

Though it may sound cliché, my main role model was my mother, who obtained her choice to do her master's degree at a relatively late age, making me realize you can achieve anything once you set goals. I hope that I will be an inspiration for my kids and others. My advisor was also a driving force in my master's program.

How did you start your career in petrophysics and formation evaluation?

My work in the industry started as a mudlogger in the petroleum and geothermal industry. This opened the door for other opportunities in the industry.

How do you convey the importance of petrophysics/formation evaluation to your colleagues from other disciplines when collaborating on a project?

I assisted my petroleum geology lecturer on multiple occasions by giving the other students real-world examples and answering their questions about the industry.



Where do you see yourself in five years?

This question has become very uncertain based on current events; however, I see myself helping to advance technologies and techniques used in exploration.

Any personal activities or background you want to share?

After more than 13 years in the petroleum and geothermal industry, I have interacted with a wide variety of personalities from various countries. Always keep your goals in focus while maintaining a level head and try not to be negatively influenced.

What do you recommend to current students in petroleum engineering and geosciences, especially with work/research in the field of petrophysics/formation evaluation?

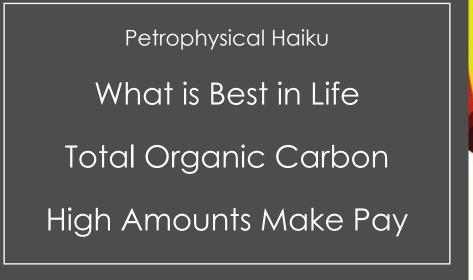
Getting a work internship within the industry while still a student would be a great way to help students determine what sector of the industry is more appealing to their abilities.

How do you see the future of SPWLA, and what do you think we need to do to keep our society current?

To spark a greater interest, SPWLA, where possible, should take a more hands-on approach in nontraditional petroleum universities, possibly by doing guest lectures or presentations. This can help to expose students to job possibilities in the industry.

Anything else you want to add?

At my age, returning to school was a nerve-wracking thought. However, with all the obstacles and fears aside, I was able to accomplish my goals. Always keep your head up and work hard for what you want. It is in reach!



Contact us: SPWLAYP@SPWLA.ORG

We encourage you to contact us with any suggestions for improving our group and/or if interested in participating in our activities.



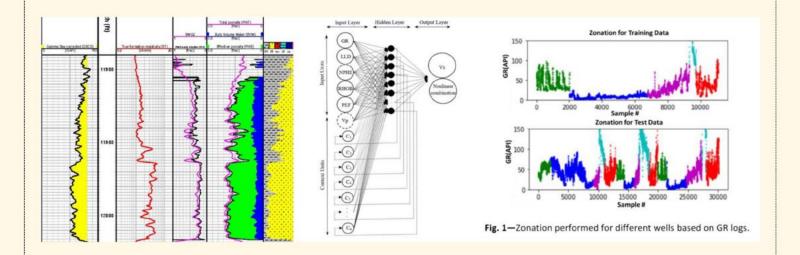


Send us your articles, stories, fun moments, photos, etc. to be published in The Bridge.



SPWLA 2022 Spring Topical Conference

Petrophysical Machine Learning







March 23-24, 2022
Halliburton North Belt Campus - Auditorium
(3000 N Sam Houston Pkwy E, Houston, TX 77032)

Call for Abstracts

The SPWLA 2022 Spring Topical Conference will focus on the Petrophysical Machine Learning. The committee encourages the SPWLA community to share both theories and applications of the emerging machine learning methods as applicable to the petrophysical research. We are seeking submissions on machine learning related research in the following subjects:

- Multivariate regression: such as properties prediction or synthetic logs.
- Supervised classification and unsupervised classification: such as rock and fluid typing, zonation, outlier identification, or depth alignment.
- Deep learning with high-dimensional data: such as CNN or RNN methods on sensor arrays, waveforms, images, or volumes.
- Frontier topics: such as energy transition applications in geothermal and carbon capture & storage, novel model design or training, denoise, or other new research topics related to petrophysics.

Keywords: Machine Learning, Deep Learning, Artificial Intelligence, Petrophysical Interpretation

Abstract submission deadline: 11:59pm CST Monday, January 31st, 2022

Abstract Submit Link: https://www.spwlaworld.org/spwla-2022-spring-topical-conference/

Conference attendance seating limited to 150 due to room capacity. 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.

Proceedings are "off the record" to encourage sharing of the latest techniques and information. Presentations will typically be 30 minutes (including 10 minutes Q&A). Quoting and (or) recording speakers or their presentations is prohibited.

Commercialism in speaker presentations will not be permitted. Company logos should be limited to the title slide only and used only to indicate the affiliation of the author and co-authors of the presentation.

For any question, please email to: pdda sig@spwla.org

CHAIR: Yanxiang Yu (Shell)

CO-CHAIR: Fransiska Goenawan (Halliburton)

STEERING COMMITTEE:

Chicheng Xu (Aramco Service Company), Lei Fu (Aramco Service Company), Tegwyn Perkins (Lloyd's Register), Andy McDonald (Lloyd's Register), Boqin Sun (Chevron), Wenjun Guo (Halliburton), Bin Dai (Halliburton), Siddharth Misra (Texas A&M University), Keli Sun (Schlumberger).

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.

REGISTRATION FEES: Member \$375, Non-Member \$475, Member in Transition \$100, Student \$75.

A Brief History of Schlumberger, Part 5

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 fifth installment of a six-part series.

THE OILFIELD SERVICES COMPANY

Euan Baird was a Scottish geophysicist and the first non-Frenchman to run the company. Baird had studied geophysics at the University of Cambridge and joined Schlumberger as a field engineer in 1960 (Fig. 13).⁵⁷

One important change Euan Baird brought about was the internationalization of recruiting. Baird had the original idea already on a trip to the Middle East in 1980 when he was head of the company's worldwide wireline operations as he recalled in interview with Schlumberger's Alumni magazine in 2010: "An executive from one of our biggest clients complained to me that his country wasn't represented among Schlumberger's workforce. "All your people are French, British or American," he said. He was right, of course, so I determined to change the situation, using a speech at the World Petroleum Conference in London that year to announce our intention to begin hiring much more eclectically. Nobody believed we would actually manage it, but we proved them wrong. We started by initiating closer relations with selected universities around the world, where we focused on hiring and developing the best graduates. About 10 years went by before it finally became clear that we were on the right track." The transformation of recruiting from only a few countries to covering universities worldwide has proved to be a decisive element in the growth of Schlumberger. As Baird said in his 2010 interview, "Schlumberger is a strange and powerful mix of excellent technology and some of the best people the world has to offer. I think it is this mix that holds the company together through good times and bad." ⁵⁸

Euan Baird was also the first leader of Schlumberger to address gender balance within the company's workforce. He realized that women had been neglected in the recruiting strategies and that more had to be done to attract and retain top performers from the full depth of the global talent pool. In 1974, the first female rig operator had been hired in Colorado, and in 1978, the first woman field engineer had joined Schlumberger in Texas. But still in 1993, only 6% of the employees in management and engineering were women. In 1994, Baird set the ambitious target of having women comprise 15% of the company's workforce at all levels of the organization by 2015. That target would already be reached in 2011, and in early 2016, the female share of the workforce stood at 19%.⁵⁹



Fig. 13—Euan Baird (born 1937), Schlumberger's CEO from 1986 to 2003 (courtesy of Schlumberger).

Euan Baird was the first leader of Schlumberger to formulate and communicate the three key values people, technology, and profits when he in February 1989 sent an open letter to all Schlumberger employees: "The strategy for Schlumberger's future follows closely our basic values. We intend to engage in businesses where we can have a significant market presence by: Providing services and systems worldwide through an international network of well-trained and highly motivated people; Building a strong competitive advantage through a commitment to technology and quality; and where, as a result, we can produce superior profits and return on investment." 60

Baird's recipe for success was common sense, hard work, and perseverance. "It's tempting to renounce and quit when faced with a difficult challenge, but rewards never come from giving up—only from persevering," Baird said in his 2010 interview. "I saw this happen more than once in my career. When we began trying to develop LWD [logging-while-drilling] in 1983, for example, we assembled some of our best people and worked for years without conclusive results. A lot of people thought we should give up on the project, but I insisted we keep going. Today, LWD is more than half the size of our Wireline logging business, and it continues to grow." ⁶¹

A Brief History of Schlumberger, Part 5

In the aftermath of the 1986 oil price collapse, Baird began refocusing the company on oilfield services—although several electronics subsidiaries stayed. Crucially, in September 1987, Fairchild's semiconductor business was sold to National Semiconductor, ending an eight-year-old attempt to diversify into the semiconductor business. But the sale didn't include Fairchild's Test Division, which designed and produced automated test equipment (ATE) for the semiconductor manufacturing industry.⁶²

Soon after, Baird grew the company's seismic business. In 1988, the remaining 50% of GECO were bought. In 1991, Schlumberger acquired 51% of Prakla Seismos, a leader in onshore seismic operations, from the German government. In 1992, Seismograph Service Limited was purchased from Raytheon Company. The following year, Schlumberger purchased the remaining 49% of Prakla Seismos. All of the company's seismic operations were then combined within a GECO-Prakla division. The seismic area proved to be highly competitive and not immediately profitable, but by 1995, Schlumberger's focus on improvements to seismic technology began to pay off (Fig. 14).⁶³



Fig. 14—GECO Angler, a seismic vessel, here pictured in 1998 during its maiden journey in Aalesund, Norway. At the stern, it could tow seismic streamers; at the bow, one can clearly see the helicopter landing deck (courtesy of Schlumberger).

Unlike Schlumberger's competition that cut R&D as oil companies' exploration budgets were slashed in the 1980s, Baird invested heavily in research and development to keep the company at the technological forefront. From 1987 into the early 1990s, research and development spending was 37% higher than before Baird took over. The result was successful innovations, such as the MDT Modular Formation Dynamics Tester in 1991 that provided improved methods of measuring reservoir pressure and collecting fluid samples. The MDT technology belonged to a suite of tools developed for the Maxis 500 system for testing and measuring wells that had been introduced two years earlier as a redevelopment of the Cyber Service Unit of the late 1970s.⁶⁴

Following a brief period of recovery, the industry faced lower demand from 1993 to 1994. There was a limit to the premium oil companies with tightened exploration budgets could pay, so Euan Baird coined a new mantra, low-cost innovation, making products smaller, cheaper, and better. Frequently that meant not wasting its best technology on a simple job. For example, in wireline services, where Schlumberger held 60% of the worldwide market, the company developed the Maxis Express unit, a smaller stripped down and 50% cheaper version of the standard Maxis 500 system (Fig. 15). The Maxis Express unit included the new Platform Express wireline service that introduced a much faster and more cost-effective way of rigging-up, logging, calibrating, and processing. This was enabled by manufacturing outsourcing, a trend that started during the 1990s. For the Platform Express, Schlumberger bought and adapted off-the-shelf electronics instead of producing them in-house, a first clear rejection of the policy of securing competitive advantage through owning component production, which had prevailed since the late 1950s. However, the idea of hedging the oilfield business by diversifying into other, similar industries was still alive when Schlumberger in late 1994 formed a joint venture with Cable & Wireless plc to provide communications and information technology systems for oil, gas, and other companies with operations in remote areas.⁶⁵



Fig. 15—A Maxis Express logging truck. At center, the large cable drum with one end of the cable leading into a well (courtesy of Schlumberger).

By the mid-1990s, it was increasingly clear that Baird had successfully turned Schlumberger around from that bleak year of 1986. But when a global merger and acquisitions wave reached the oil industry in the late 1990s, Schlumberger was faced with a competitive threat not seen before. Until then, Schlumberger used to be the only place that offered a full range of services to the oil patch, from renting out rigs to drilling to monitoring the flow of oil to processing the data. Now, others were catching up. Baker Hughes bought Western Atlas for US\$ 4.8 billion, allowing it to add bulk and a variety of seismic and wireline services, and Halliburton acquired Dresser Industries, an energy and construction conglomerate, expanding its ability to offer services directional drilling and drilling fluids. With US\$ 17 billion in sales, Halliburton became the largest oilfield services company in the world, easily eclipsing Schlumberger that had a total operating revenue of US\$ 10 billion.⁶⁶

Schlumberger's response was the acquisition of Camco International, a leading US supplier of subsurface well completion equipment. The Houston-based company had been founded in 1946 by Paul Mills and oilfield veteran Bill Carlisle as the Carlisle and Mills Company (later shortened to Camco), designing and selling gas lift valves. Over the next half century, technology pioneered by Camco established industry standards for gas lift equipment, subsurface safety equipment, packers, and slickline power and reel units, and during the 1990s, it went into the development of drill bits and rotary steerable systems. In 1997, Camco had revenues of US\$ 913 million and filled a void in Schlumberger's well completions and drilling businesses.⁶⁷

By the late 1990s, Schlumberger had developed into a large oilfield services company with a number of different businesses. However, the end of the Cold War had brought about a new, globalized world. Baird recognized the need to adapt the company structure to this trend. In 1998, a new matrix organization structure was introduced. The company was now not only organized by product lines but also by geography. The Schlumberger product lines were reorganized into geographical-based business groups later named GeoMarkets.⁶⁸

In another industry trend during this period, oilfield services firms were forming a variety of joint ventures (JV), in an attempt to pool resources and cut costs. When Schlumberger created a JV, it followed the rule that it would only seek control of it if the business belonged to the company's core activities, which explains the varying stakes in the new JVs established at the turn of the century. In 1999, Schlumberger merged its non-U.S. drilling fluid operations with the M-I unit of Smith International,

A Brief History of Schlumberger, Part 5

a Houston-based drill bits and drilling services company, forming a new M-I joint venture, 40% owned by Schlumberger and 60% owned by its new partner. In 2000, Schlumberger and Baker Hughes combined their seismic businesses, Geco-Prakla and Western Atlas, respectively—the two largest seismic firms in the world—into a joint venture called WesternGeco. Schlumberger paid Baker Hughes US\$ 500 million as part of the transaction, which resulted in Schlumberger taking a 70% stake and the latter a 30% stake.⁶⁹

With WesternGeco, Baird created a product line that would become one of Schlumberger's strongest. Baird understood how to build successful product lines—none of Schlumberger's competitors can do this as well or as often. In 2001, Baird established two other key product lines. The first was Drilling & Measurements (D&M) that included directional drilling, measurement-while-drilling, and logging-while-drilling. A major product here was the PowerDrive Xceed fully rotational steerable system, launched in 2003 (Fig. 16). D&M also led to the creation of the Drilling Group in 2013, the largest contributor to company revenue. The second was Schlumberger Information Solutions (SIS), today called Software Integrated Solutions. SIS was created to support real-time reservoir management and E&P business optimization processes. It provided information management capabilities, advanced software systems, and IT infrastructure. One result was the extension of the company's global "teleport" network of satellite communications bases with the opening of new facilities in Brazil and Singapore and a second teleport in Aberdeen, Scotland, from 2001 to 2003.⁷⁰



Fig. 16—A PowerDrive rotary steerable system featuring an actuation pad system for trajectory control (courtesy of Schlumberger).

At the same time, the world was gripped by an IT-boom never seen before. Baird saw this as a great opportunity for Schlumberger because, as he expressed himself in an interview with the Petroleum Economist in 2002: "The oil industry is the biggest single data consumer in the world. It has more super-computers than any other sector. It's extremely data-intensive, and we are in the data-acquiring, data-delivery business." In April 2001, Schlumberger undertook an ambitious foray into information technology, spending US\$ 5.2 billion to acquire Sema plc, an Anglo-French IT consultancy that specialized in software, outsourcing, and systems integration.⁷¹

The takeover of Sema was seen as a way to expand Schlumberger's oilfield services, wireless telecommunications, and utilities businesses, and to broaden the company's push into "smart" cards, a business that was generating \$1 billion a year for the company. Sema's operations were integrated with several of Schlumberger's information technology units to form SchlumbergerSema. In an interview with The Wall Street Journal in 2001, Baird said Sema would give Schlumberger the critical mass to move more swiftly toward providing totally integrated systems. Baird believed Schlumberger's future lied in linking computer systems as much as in finding oil. The acquisition of Sema should position the company better to compete in an emerging Internet economy and enhance Schlumberger's oilfield services strength by enabling it to manage the entire process of gathering information, from sensors in wells to database storage to analyzing the information and delivering it to customers' desktops.⁷²

A Brief History of Schlumberger, Part 5

But the Sema acquisition hadn't been well-timed. In 2001, the global IT-boom abated. By 2002, the Sema acquisition was already being viewed internally as a disappointment and as a huge mistake by many analysts. The collapse of the technology and telecommunications sectors sharply reduced the value of SchlumbergerSema, and in 2002, Schlumberger posted a record loss of US\$ 2.3 billion. From early 2001 through January 2003, Schlumberger's share prices would tumble by 52%, more than the Philadelphia Oilfield Services Index during the span (38%).⁷³

Faced with the loss, the board of Schlumberger had to take a more radical decision to get the company back on track again. In October 2002, as it announced the statutory resignation of Euan Baird who was few months before reaching the mandatory retirement age of 65, the board said there would be major changes at the corporation in the direction of bringing it back to an oilfield services company.⁷⁴

~To be continued~

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CALL FOR ABSTRACTS – SCA Symposium 2022

The 35th International Symposium of the Society of Core Analysts The Lakeway Resort and Spa, Austin, TX USA September 19-22, 2022

Symposium Theme:

Augment Core Analysis to Embrace Energy Transition

The conference will start with a Short Course "Core Analysis in Carbon Geosequestration, Geothermal, and Hydrogen Storage" on the morning of September 19th, followed by 3½ days of technical sessions including oral and poster presentations. The SCA Technical Committee invites abstract submissions for oral presentations and posters for the following theme-related topics:

- 1. Core Analysis Embracing Energy Transition
- 2. Whole Core Scanning
- 3. Laboratory Core Analysis
- 4. Improved SCAL Techniques and Interpretation
- 5. Pore Scale Imaging and Modelling
- 6. Wettability
- 7. Displacement Mechanisms/EOR/IOR
- 8. Coring Operations
- 9. Unconventionals and Source Rocks
- 10. GeoMechanics
- 11. Other (If your paper does not fit directly into any of the above then please suggest an alternative topic/theme)

Abstracts are due on February 7th, 2022. Only abstracts submitted electronically at www.scaweb.org will be considered for this conference.

Authors will be notified of acceptance by March 14th, 2022. If you require any further information regarding the proposed technical topics/themes contact JinHong Chen (SCA VP of Technology) at scaweb.org

Call for Abstracts Submission Form

The form must be fully completed for each abstract submitted for consideration. The Technical Committee will review all abstracts. For abstracts accepted as Oral or Alternate Oral and Poster with Accompanying Paper a complete manuscript (12 pg limit based on the SCA template) will be required by **May 17**th, **2022.** The manuscripts will then be reviewed by the Technical Committee.

Authors should note that acceptance of the abstract does not automatically guarantee acceptance of the final manuscript, this will only be confirmed after the completed manuscript has been reviewed by the Technical Committee.

Are you entering in for the Young Professional Award? A Young Professional is anyone under the age of 36.

SPWLA THIRD BOARD OF DIRECTORS MEETING REMOTE NOVEMBER 17, 2021

President Katerina Yared called the meeting to order at 8:08 am. In attendance, President-Elect, Tegwyn Perkins, Vice President Technology, Carlos Torres-Verdin, Vice President Education, Fransiska Goenawan, Vice President Finance, Secretary and Admin, Adam Haecker, Vice President Publications, Songhua Chen, Vice President Information Technology, Harry Xie, Vice President, Mathilde Luycx, Regional Director N. America 1, Robin Slocombe, Regional Director Europe, Eva Gerrick, Regional Director Middle East/ Africa, Nelson Suarez, Regional Director Asia Pacific/Australia, Ryan Lafferty, Director Latin America, Bruno Menchio Faria, and Executive Director, Sharon Johnson. Absent: Regional Director N. America 2, Matthew Blyth.

A motion was made by Regional Director Bruno Menchio to accept the Argentina SPWLA Student Chapter, which was seconded by Regional Director Robin Slocombe, passed by majority vote.

Action Item: Regional Director Bruno Menchio to notify the **Argentina SPWLA Student Chapter** of the Board's decision.

A motion was made by President-Elect Tegwyn Perkins to accept the Borehole Imaging SIG, seconded by Regional Director, Nelson Suarez, passed by majority vote.

Action Item: President-Elect Tegwyn Perkins to notify the **Borehole Imaging SIG** of the Board's decision.

A motion was made by President-Elect Tegwyn Perkins to accept the Alternative Subsurface / Energy Transition SIG, seconded by VP Information Technology Harry Xie, passed by majority vote.

Action Item: President-Elect Tegwyn Perkins to notify the **Alternative Subsurface / Energy Transition SIG** of the Board's decision.

A motion was made by Regional Director Robin Slocombe to accept the University of North Dakota (UND) SPWLA Student Chapter, seconded by President-Elect Tegwyn Perkins, passed by majority vote.

Action Item: Regional Director Matt Blyth to notify the University of North Dakota (UND) SPWLA Student Chapter of the Board's decision.

A motion was made by VP Education Fransiska Goenawan to accept the Batangas State University SPWLA Student Chapter (SPWLA-BatStateU SC) Philippines, seconded by VP Social Media Mathilde Luycx, passed by majority vote.

Action Item: Regional Director Ryan Lafferty to notify the University of North Dakota (UND) SPWLA Student Chapter of the Board's decision.

A motion was made by VP Education Fransiska Goenawan for the approval of a travel budget of \$20,000 for all finalists of the 2022 International Student Paper Contest, seconded by VP Finance, Secretary & Admin Adam Haecker. The funds are to be allocated at the discretion of the VP of Education and the Chairman (chairperson) of the ISPC.

Action Item: Sharon to reach out to SPE concerning open access.

Action Item: Sharon to send the Professional and Student Chapters a memo requesting a financial and use report. The purpose of this action item is so that the SPWLA Board of Directors can make an assessment of the health of the organization's subordinates.

Meeting adjourned 12:35 pm.

Respectively Submitted by Sharon Johnson Executive Director

BOD meeting schedule:

Wednesdays at 8 am CST – 11:00 am CST January 19, 2022 March 9, 2022 May 11, 2022

Meetings will be held in person at the SPWLA Business Office Houston or Remote via GoToMeeting.



Society of Petrophysicists and Well Log Analysts

8866 Gulf Frwy., Suite 320 ♦ Houston, Texas 77017 USA ♦ 713-947-8727 ♦ www.spwla.org

2022 SPWLA International Student Paper Contest

The SPWLA Board of Directors, VP-Education, and 2022 Symposium Organizing Committee invite Student Members of SPWLA to participate in the *2022 SPWLA International Student Paper Contest (ISPC)*. The ISPC will be held online on **Sunday**, **June 12**, **2022**, preceding the SPWLA 63rd Annual Symposium, June 13-15, 2022.

Students at an accredited university or having graduated from within 12 months preceding the **ISPC** are qualified and invited to submit their paper at their relevant degree category: Undergraduate (B.Sc.), Masters (M.Sc.), or Doctorate (Ph.D.).

Students affiliated with a local SPWLA Student Chapter must first submit their paper abstract and deliver their presentation to their Student Chapter as part of the SPWLA Internal Student Chapter Paper Contest. Internal (ISCPC). ISCPC are run independently by the local Student Chapter (refer to guide online). The local Student Chapter will rank and nominate *up to three* Students at each degree category from their Chapter to participate in the *ISPC*. The ISCPC must be completed and have nominated students to submit their paper abstract to *ISPC* (link will follow) in the period from **Thursday, Feb 17th**, **2022**, **to Thursday, March 31st**, **2022**.

Students without a local SPWLA Student Chapter are invited to submit their paper abstract at their relevant degree category directly to *ISPC* (link will follow) in the period from Thursday, Feb 17th, 2022, to Thursday, March 31st, 2022. Thursday, March 31st, 2022.

All submissions to the *ISPC* are allowed multiple Student author(s)/presenter(s) and Faculty author(s). Awards conferred at the *ISPC* are shared equally among Student presenter(s). Faculty author(s) must have mentored or contributed directly to the study and are not allowed to present.

To be eligible for presentation at the *ISPC*, the paper must be authored and presented by a Qualifying Student(s) and must not have been submitted (even with no decision), accepted, presented, or published to any other venue, conference, or publication, including those of the SPWLA itself.

Students selected to present at the *ISPC* will be notified at end April 2022. For information or questions about the *Internal Student Paper Contest*, please see the guideline or please contact *vp-education@spwla.org*.

Kindly regards,

Prof. Raoof // Chair of 2022 SPWLA International Student Paper Contest Fransiska Goenawan // SPWLA VP-Education, 2020-2022



International Student Paper Contest - Abstract Information

Please make sure the abstract includes the following:

- 1. **Problem Statement** : describe the problem that motivates the paper proposal.
- 2. **Methodology** : describe approach to the problem solution with particular emphasis on innovative procedures that differentiate the methods.
- 3. **Result and Conclusions**: describe significant results and major technical contributions, lesson learned from the study, application of the findings, and opportunities to further deploy methods.

Abstract should between 250-450 words and fit in one page.

Please submit your abstract by Thursday, Mar 31, 2022, at the latest to papercompetition@spwla.org

ARGENTINE CHAPTER

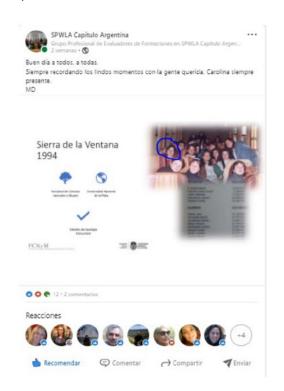
General News

This committee meets almost monthly; we have already held eight meetings during 2021, and the different activities to be carried out are being outlined. We achieved many goals during the second half of 2021, summarized in the following figure.



A Little More Human Moment

Two Novembers ago, we said farewell to one of our members. We will always remember Carolina Budic as an excellent professional and a better person. This is our way of remembering her, and we hope our affection reaches her family.



SPWLA Argentine Student Chapter was officially created since global approval last November 17. We thank Net Zero Carbon Solutions, Tecpetrol, Baker Hughes, Emerson, and Geopark Argentina, who selflessly collaborated in taking charge of 10 student memberships for the 2022 period.

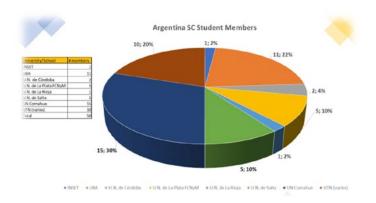
Geopark sponsored 10 female students to confirm their commitment to gender inclusion, social accountability, and governance. Eight of them are chemical engineer students from Universidad Tecnológica Nacional, Plaza Huincul, Neuquén Province; the other two are geology students from University of La Plata (Buenos Aires Province) and University of Comahue, Neuquén city, respectively.





The main goal was to create a student chapter representative from different universities and scholar centers from all over the country, based on three principles: federal participation of the entire Argentina territory, equity in participation opportunities, and finally inclusive and diverse in the broadest aspect.

The graph accounts for all the universities and schools represented in this young chapter.



To normalize Argentine Chapter memberships, we strongly encouraged professionals who were interested in our activities to enroll in one of the membership categories SPWLA offers. The results were amazing, and today we have almost 200 Argentine Chapter members YTD.

Due to the global pandemic, we have designed different formats of activities. We had to 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-capitulo-argentina/

email: spwlacapituloargentina@gmail.com

IG: spwla_arg

Event videos are available on our YouTube channel @

https://youtu.be/1FqkDoeCbJU https://youtu.be/NxYilW10xQw https://youtu.be/C_h4V26E9h4 https://youtu.be/1FqkDoeCbJU https://youtu.be/IFpVr7C0wWY

Recent Events Open Talks Cycle

1 December 2021—Topic: Analysis of Petrophysical Properties in Organic Mudstones Applying Digital Rock Physics: A Case in the Middle Magdalena Valley, Colombia.



Summary: The Magdalena Middle Valley Basin (VMM) is one of the main sedimentary basins in Colombia, being recognized for the significant hydrocarbon reserves and resources present in its oil system. Its stratigraphic column includes rocks from the Jurassic to the Pleistocene, where important intervals of generating rocks of Cretaceous age are recognized, responsible for the accumulations of hydrocarbons in the tertiary intervals. This paper summarizes some characteristics of these rocks as reservoirs and their potential as source rock as part of an integrated project to define objectives for the pilots and prospective areas.

María Florencia Segovia is a geologist from Tucumán, Argentina, with a master's degree in petrophysics and 14 years of experience in the oil and gas industry. She began her career at Schlumberger in 2007 in Neuquén (Argentina) and worked at YPF as a petrophysicist and then at Gaffney Cline (Baker Hughes) as a senior consultant for unconventional development before becoming the vice president of unconventional reservoirs of Ecopetrol (Colombia) in 2019. She has participated in exploration projects, optimization of mature fields, secondary recovery, characterization of deep aquifers, risk analysis (GCoS), certification of reserves, and unconventional reservoirs.

A Little More Human Moment

In a special and emotional moment during this event, we wanted to honor one of the SPWLA Argentine Chapter's past presidents. In this case, Eduardo Breda was the moderator of this talk, and we offered him a kind surprise.

Eduardo Breda is an electronic engineer who graduated from the National University of Córdoba, Argentina. He joined YPF in 1983 in Plaza Huincul, where he worked until 1988. In the period (1989 to 1992), Eduardo worked at Schlumberger as a profile analyst. From 1994 to 2006, he returned to YPF as

a petrophysical advisor (ABB) LAM. In 2006, Eduardo joined Schlumberger as domain champion wireline until 2009. During the period (2009 to 2013), he was the head of discipline, DDR for Pan American Energy. Finally, from 2014 to 2019, Eduardo was a petrophysicist advisor at YPF and profiles quality control for Argentina. He is currently an independent consultant.



He has been a member of the SPWLA since 1986 and was president of our chapter from 2006 to 2008. He is a kind of rock

star, the drummer of a rock band from the "eighties" called "HOT-OIL." But his most important virtue is the high quality of person he is. In the picture above, he sits between Marta D'Angiola on the left (president of our chapter) and María Florencia Segovia on the right, presenter of the mentioned event. The rest of the members standing behind are (from left to right): Rafael Zambrano, Claudio Nides, Javier Peano, Mario Outon, Pablo Saldungaray, Angel López, Andre Jose Paschier, Alberto Ortiz, and Pablo Uzzo.

ARGENTINE STUDENT CHAPTER

General News

of Directors approved the creation of our student chapter. We are the first student chapter of Argentina representing the Argentine Chapter of the SPWLA in Latin America. Our chapter has more than 50 active members sponsored by student memberships until 2022. Students and young professionals from the oil and gas industry bring together universities and study centers with similar careers throughout Argentina and generate a neutral network of student members with the same purpose. Our mission as a student chapter is to foster camaraderie and the academic, technical, and social development of our student members and young professionals to disseminate and exchange technical knowledge concerning the study and evaluation of hydrocarbon resources.

Argentine Student Chapter Board of Directors



President De Los Rios Jorge

- Advanced Petroleum Engineering Student
- Universidad Nacional del Comahue – Facultad de Ingeniería
- · Neuquén, Argentina

jorgeadriandlr@gmail.com



Vice President Huiza Gianna

- Advanced Geology and Geochemistry Bachelor Student
- Universidad Nacional de La Plata – Facultad de Ciencias Naturales y Museo.
- · Buenos Aires, Argentina

gianna.huiza.95@gmail.com



Treasurer Elvira Paloma

- · Advanced Geology Student
- Universidad Nacional de Córdoba – Facultad de Ciencias Exactas, Físicas y Naturales.
- · Córdoba, Argentina

palomaelvira13@gmail.com



Secretary Peral Fernando

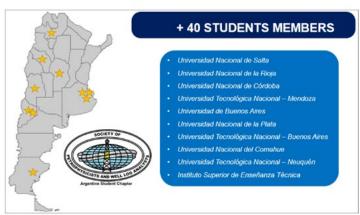
- · Advanced Geology Student
- Universidad Nacional de Salta – Facultad de Ciencias Exactas y Naturales.
- · Salta, Argentina

ferperal15@gmail.com

Recent Events

20 November 2021—We held the first informational online meeting as a chapter for our associate members. We welcomed them to the Argentine Student Chapter, talked to them about the benefits of being a part of SPWLA, and introduced the Board of Directors.





Upcoming Events

We have planned our calendar of activities for 2022, where we included a course on LWD and geosteering and human resources workshops. In addition, we have an innovative proposal for newly received young professionals, which will be a presentation of graduate theses for both bachelor's and engineering degrees. Therefore, we have a lot of work ahead that we are convinced will be successful.

For more information

Mail: spwla.arg.sc@gmail.com

LinkedIn: www.linkedin.com/in/spwla-argentine-student-

chapter

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

BATANGAS STATE UNIVERSITY STUDENT CHAPTER

General News

"The way to get started is to quit talking and begin doing" ~Walt Disney

On August 13, 2021, the SPWLA Batangas State University Student Chapter (SPWLA BatStateU SC) was established. It started as a small study group last 2020 spearheaded by Julie Ann S. Gregorio, an incoming third-year petroleum engineering student, who shared knowledge in petrophysics and formation evaluation for the incoming second-year students. Along with the support of Gabriel Malasique and Engr. Bruno Menchio, who first suggested establishing an organization, the first meeting was held on January 3, 2021, for the finalization and enlistment of the group. On July 13, 2021, the members had their first election. Julie Ann S. Gregorio secured the position of the organization's president. It was then followed by Gabriel M. Malasique and Andrea Lorraine D. Manalo as the vice president for internal and external affairs, respectively. Alpha Joy A. Diasanta and Ciara Iana Mae C. Maguinto were elected for the external and internal secretarial positions, the appointed treasurer for external affairs was Kristelle Angela B. Pesquesa partnered with Jasmine Anne De Torres for the central division, Sheila D. Mandigma as the auditor of accounts, Matin Mohammad as the membership chairperson, Joshua Laureta for communications, and Rome Erwin Festin as the events chairperson. Under the supervision of Engr. Julie Pearl Marasigan, the newly founded organization was considered a pioneering group in the Philippines that focuses on petrophysical studies. The SPWLA BatStateU SC has organized three official events: the General Assembly, Career Orientation, and Environmental Awareness events that all happened through Google Meet with official meetings in between.

On August 25, 2021, the first meeting as an official organization was held, wherein the recruitment for new members and preparation for the General Assembly was made. The General Assembly occurred on September 7 in recognition of the group and was attended by the Vice President Education for SPWLA International, Ms. Fransiska Goenawan, and Mr. Muhammad Tamoor Malik, an exploration geologist for Pakistan Oilfields Limited. On September 20, 2021, the second official meeting was handled by both secretaries and vice presidents to plan the next event, the Career Orientation. On November 6, 2021, the second event took place and was attended by Engr. Julianta

Panjaitan, a senior petrophysicist, and Engr. Neil Bryan Closa, a reservoir engineer. On November 9, 2021, the third meeting took place in preparation for the Environmental Awareness Event that happened on November 26. It was attended by Mrs. Xiennia B. Mineses-Gapac, an administrative aide VI of Provincial Environment and Natural Resources, and Mr. Timoteo Lao Orain Jr., an environmental specialist.

Recent Events General Assembly

7 September 2021—The Society of Petrophysicists and Well Log Analysts (SPWLA) BatStateU SC is a nonprofit organization whose mission is to heighten awareness about petrophysics, formation evaluation, and well-logging practices in the oil and gas industry. The organization held an event entitled "SPWLA—BatStateU Sc Online General Assembly 2021." Two international speakers attended it, Ms. Fransiska Goenawan, the Vice President Education for SPWLA International, and an exploration geologist for Pakistan Oilfields Limited, Mr. Muhammad Tamoor Malik.

Career Orientation

6 November 2021—The SPWLA BatStateU SC wanted to help students make educational and occupational choices and make career decisions based on the demand and requirements of future work. The chapter held an "SPWLA Career Orientation" event. The theme that inspired it is the Korean drama "Start-Up." The invited presenters were Engr. Neil Bryan Closa, a reservoir engineer and Engr. Julianta Panjaitan, a senior petrophycisist. This event strived to foster the organization's members' viewpoint in making decisions for their future endeavors by inviting presenters with experience and work in the petrophysical-related field.

Environmental Awareness

26 November 2021—For this November, an environmental awareness month, the SPWLA BatStateU SC conducted an event entitled, "SPWLA-BATSTATEU SC Webinar on Environmental Awareness and Sustainable Development: LET'S GO FOR GREEN!" The event theme was "Wall-E," inspired by the Pixar movie. The invited speakers were Ms. Xiennia B. Meneses-Gapac, who studied forestry and works for the Department of Environment and Natural Resources, and Mr. Timoteo Lao Orain Jr., an environmentalist. The goal of this event was to broaden the horizons of the audience and become more locally and globally knowledgeable. Also, it adequately prepared everyone for future ecological sustainability and to be environmentally responsible.

Upcoming Events

- January to February 2022—Mentoring: SPWLA BatStateU SC aims to conduct an activity focusing on the technical development and communication skills of student members with an event named "SPWLA BatStateU SC: Knowledge Kickoff Beyond Horizon." The organization wants to become an instrument to help students grow, be aware, decide, and have a plan for what the future might be outside the university horizon. Mentorship will be about being, working, and living as a petrophysicist, geoscientist, and drilling engineer. The target date for this event is between January to February, three to five sessions of 45 minutes each via Google Meet. The expected time would be 8:00 pm to 8:45 pm Philippine Standard Time.
- 29 April 2022—Preparation for Job Opportunity: The student organization aims to conduct a webinar entitled "Career Readiness" from 1:00 pm to 4:00 pm at Philippine Standard Time via Google Meet. It is to demonstrate, sharpen, and develop skills, knowledge, behavior, and boost ideas in pursuing preferred professions that will prepare the graduating students for a successful transition into their life beyond Batangas State University.



Ms. Fransiska Goenawan and Mr. Mohammad Tamoor Malik each spoke about their respective experiences with the participants. Ms. Mary Grace Ilagan, a fourth-year BS petroleum engineering student, also discussed her experiences and provided college recommendations for petroleum engineering and geological engineering students.



Invited local and foreign guests were Engr. Bryan Neil Closa, a reservoir engineer, and Engr. Julianta Panjaitan, a senior petrophycist, respectively. Both talked about choosing a career and their occupation. This event happened virtually on November 6, 2021, via Google Meet.













Two local speakers were invited to talk about environmental awareness and net-zero energy on November 26, 2021, via Google Meet. The first speaker was Ms. Xennia Meneses-Gapac, who works in the government sector and is a forester. However, the second speaker was Mr. Timoteo Orain Jr., who works in the private sector and is an environmentalist.

BOSTON CHAPTER

Recent Events

As a token of appreciation for the effort and dedication that made such a success of the Boston 2021 SPWLA Symposium, the Boston Chapter has shipped some small commemorative gifts to the organizing committee, the student paper review committee, and the main SPWLA office. Thanks to all for their contributions!

29 November 2021—The Boston Chapter hosted Pablo Saldungaray (Schlumberger), Nicolas Carrizo Paez, and Emiliano Santiago (YPF) for an online presentation

- of their Distinguished Speaker lecture, "An Integrated Petrophysical Characterization of a Siliciclastic Tight Gas Reservoir in Neuquen Basin, Western Argentina." The talk was engaging and provoked many questions.
- 8 December 2021—The Boston Chapter will host Laurent Mossé (Schlumberger) in the auditorium of Schlumberger-Doll Research in Cambridge, MA, for an inperson presentation of his Distinguished Speaker lecture, "Identification of Breakout Behind Casing: Methodology to Obtain Openhole-Equivalent Caliper Measurements Through Slotted Liner Using the Density Tool." The in-person presentation is available to SPWLA Boston members via MS Teams.



Pablo Saldungaray (Schlumberger), Nicolas Carrizo Paez, and Emiliano Santiago (YPF) at their lecture webinar for the Boston Chapter on November 29, 2021.

General News

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

BRAZIL CHAPTER

General News

Since August 2020, our monthly meetings have been held online every third Tuesday of the month, at 4 pm (Brasilia Time). Anyone wishing to participate is welcome. We also post chapter updates and meeting links on our LinkedIn page (SPWLA Brazil Chapter). Check us out. We decided to discontinue our Facebook page. Please contact our secretary, Jesus Salazar (Jesus.Salazar3@bakerhughes.com), for further information about the chapter. Membership to our chapter is free and can be claimed by filling the form available at https://lnkd.in/g4KQjYf. Meetings are held in Portuguese or English, depending on the speaker's preference. Even if it is held in Portuguese, questions in English are also welcomed!

Recent Events

16 November 2021—We had Maira da Costa de Oliveira Lima Santo, researcher from Advanced Oil Recovery Laboratory

of Universidade Federal do Rio de Janeiro (UFRJ). The talk entitled "Petrophysical Correlations for the Permeability of Coquinas (Carbonate Rocks)" discussed the integration of several laboratory techniques as NMR T_2 relaxation, MICP, and microCT with pore network modeling and flow simulations to determine permeabilities, improving the understanding of the relevant aspects that contributes to the flow properties.



190ª Reunião Mensal Terça-feira, 16 de novembro, 16h - Teams meeting



Invitation to November monthly meeting of SPWLA Brazil Chapter.

21 December 2021—We expect to host Marcos Allyson Rodrigues and Guilherme Arruda presenting "Aplicação de Surfactante não Iônico no Controle da Estimulação Acida em Matriz Carbonática" (Application of Non-Ionic Surfactant in the Control of Carbonate Matrix Acid Stimulation). Guilherme is a researcher, and Marcos is a professor at Universidade Federal do Rio Grande do Norte (UFRN), working at the Reservoir Engineering Laboratory. The experimental work using HCl 15% solutions and different injection rates reveals that the surfactant impacts the dissolution pattern of the rock by retarding the reaction. The meeting will happen at 4 pm GMT-3 and can be accessed by a link released on our LinkedIn page. The talk and the link for the January meeting are also to be released.

Upcoming Events

- 22–24 March 2022—Chapter Brasil is also organizing the first Encontro Brasileiro de Petrofísica de Campos Maduros (Brazilian Meeting of Mature Field Petrophysics EBPCM), to be held online. Over the 3 days of the event, 30-minute talks are organized into seven technical sessions. Two 90-minute round tables with panelists and moderators are also planned at the end of the two last days, besides 4-hour mini-courses on the last day. It will cover technical, regulatory, and commercial aspects of the industry, relating to the following topics:
 - Formation assessment techniques (open and cased logs, sample characterization)
 - Characterization and modeling for enhanced recovery
 - Analysis of petrophysical uncertainties
 - Digital rock methods and applications
 - Carbon capture and storage



Organização



More information can be found at the website www.ebpcm.com.br and LinkedIn page www.linkedin.com/showcase/ebpcm. Sponsorships and other types of collaboration are still open so that interested companies can contact us at gabrielnf@petrobras.com.br or gcarneiro2@stb.com.

CHINA UNIVERSITY OF PETROLEUM(BEIJING) SPWLA STUDENT BRANCH

General News

The Logging Department of the School of Geophysics, China University of Petroleum (Beijing), and the SPWLA Student Branch jointly organized an academic exchange event to commemorate the 80th anniversary of the publication of the Archie formula. It will continue to hold activities related to the inheritance of logging culture.

Recent Events

8 November 2021—The Logging Department of the School of Geophysics and the SPWLA Student Branch jointly organized an academic exchange event to commemorate the 80th anniversary of the publication of the Archie formula. This event attracted the participation of many logging students. The purpose of the activity is to allow logging teachers and students to understand the significance of the Archie formula and learn Archie's rigorous scientific research spirit. At the beginning of the activity, Xiaozhuang Wang, the chairman of the SPWLA Student Branch, delivered an opening speech, introduced the purpose and significance of the activity, showed the Archie formula mind map he drew, and shared his understanding of the Archie formula.



Speech by Xiaozhuang Wang, chairman of the Student Branch.

Later, five outstanding student representatives gave a PPT report and shared their understanding of the Archie formula.



Student representatives report and exchange.

Finally, the leaders of the School of Geophysics summarized the activity, affirmed the significance of this activity, and encouraged the students to study Archie's scientific research spirit, and at the same time highly recognized the work of the SPWLA Student Branch.



Concluding remarks by college leaders.

Upcoming Events

Next, the SPWLA Student Branch will continue to host a series of activities related to the China University of Petroleum (Beijing) logging culture inheritance to further enhance the influence of the SPWLA association.



Group photo of participants.

COLOMBIA - UIS STUDENT CHAPTER



Board of Directors

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

Recent Events

18 November 2021—Conference on Water Resource Management: The Colombian Student Chapter SPWLA UIS and the National Colombian Association of Hydrogeologists (ACH-UIS) organized a virtual event for the Zoom platform called "Management of the Underground Water Resource Applying Electromagnetic Soundings in the Time Domain for the Island of Tierra Bomba, Cartagena" by Msc Ángel Fabián Salazar, who is a geologist.



Early December 2021—The Colombian Student Chapter SPWLA UIS organized two courses that were offered as a 2x1. The first course is called "Direct Well Logs Interpretation Techniques (Quick-Look Evaluation)" by MSc Jorge Barboza (Emerson A. Solution), senior petrophysicist. The second course is called "Introduction to the Analysis of Organically Rich Rocks" by MSc María Segovia (Ecopetrol), a senior petrophysicist.



Third Podcast Episode: The team launched the third episode of the podcast in Spanish with engineer Samuel Fontalvo to learn about opportunities, the process of studying for a post-graduate degree, and the experiences of the speaker in Saudi Arabia.



Technical Tour Petrophysical and Formation Damage Laboratories: The team organized a technical tour to the petrophysical and formation damage laboratories of the Guatiguara Technology Park in Bucaramanga. All SPWLA UIS Student Chapter members carried out the activity.









Hope's Christmas: The Colombian SPWLA, ACIPET, ACEIP, and SPE (UIS) Student Chapters joined forces to organize a campaign called "Christmas of Hope" to bring happiness to 150 children with cancer at the Hope Foundation.



Upcoming Events

January 2022—The team will have a new podcast episode.

January 2022—The SPWLA UIS team will host a webinar with a Distinguished Speaker

January 2022—The team will do a course on "Petrophysics and Advanced Well Logs" given by Natalia Castro (Weatherford Thailand).

February 2022—The Team will present the 2nd Geology and Petroleum Symposium UIS 2022 with the AAPG, SEG, ACGGP, EAGE, and ACH student chapters.

February 2022—The team is planning a new project for all petroleum engineering and geology students at the Universidad Industrial de Santander (UIS).



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/

EAST CHINA CHAPTER

Recent Events

3-5 November 2021—The virtual 12th UPC International Symposium on Well-Logging Technologies was successfully held in Qingdao. It was hosted by the East China Chapter of SPWLA and was held online at the China University of Petroleum (East China). This symposium provided a wonderful platform for international well-logging industry communication. It was held through a global online connection due to the influence of COVID-19. The symposium co-organizers included the Petroleum Well Logging Committee of Chinese Petroleum Society, Borehole Geophysics Committee of Chinese Geophysical Society, China Petroleum Logging Corporation, Sinopec Matrix Corporation Limited, etc. The symposium theme was intelligent logging and processing and applications of well-logging data. It was a great success, with total attendance exceeding 1,200, and a total of 61 academic reports presented by global well-logging specialists.



Group photo of domestic and overseas delegates attending the conference online

More than 20 special presentations were given by well-known experts and scholars from the United States, Russia, Singapore, other countries, and China. Invited speakers including Dr. Harry Xie, Vice President Information Technology SPWLA, Professor Carlos Torres-Verdin (University of Texas at Austin), Vice President Technology SPWLA, Lichun Kuang (China National Petroleum Corporation), Chicheng Xu (Aramco R&D Center in Houston), Professor Michael T. Myers (University of Houston), Dean M. Homan (Schlumberger Oil Services), Liang Lin (Schlumberger-Doll Research Center), Professor Viktor Martynov (Gubkin State University of Oil and Gas, Russia), Professor Aleksandr Shumilov (Perm State University, Russia), Arthur Cheng (National University of Singapore), Professor

Lizhi Xiao (China University of Petroleum (Beijing)), Professor Guiwen Wang (China University of Petroleum (Beijing)), Professor Hua Wang (University of Electronic Science and Technology of China), etc.

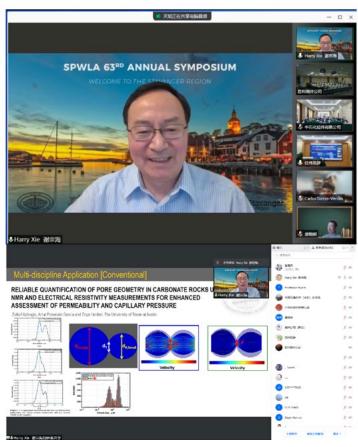


Professor Jun Yao delivered a welcome speech at the opening ceremony.



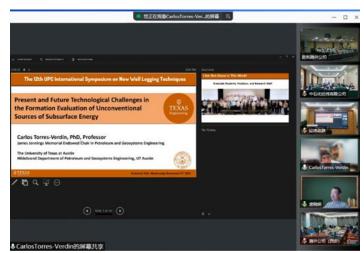
Professor Hua Liu hosted the opening ceremony.

The opening ceremony was hosted by Professor Hua Liu, dean of the School of Geoscience, and Professor Jun Yao, vice president (China University of Petroleum, East China) delivered a welcome speech at the opening ceremony. He pointed out that the technologies of artificial intelligence, big data, and cloud computing have gradually become the new engine in the oil and gas industry. The theme of this symposium had a great fit for international industry intelligent development and played a positive role in promoting oil and gas exploration and development.



Dr. Harry Xie is giving the special report online.

Dr. Harry Xie, Vice President Information Technology SPWLA, gave a speech on "Advances of NMR and Core Analysis From the Technical Report of the International Conference on Petroleum Industry." He also introduced the SPWLA 63rd Annual Symposium and welcomed global well-logging experts and scholars to attend this symposium.



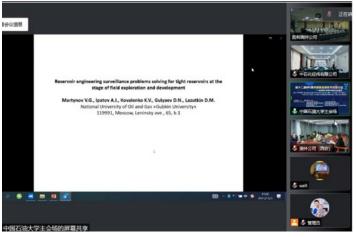
Professor Carlos Torres-Verdin gave his presentation online.

Professor Carlos Torres-Verdin, Vice President Technology SPWLA, presented the "Present and Future Technological Challenges in the Formation Evaluation of Unconventional Sources of Subsurface Energy."

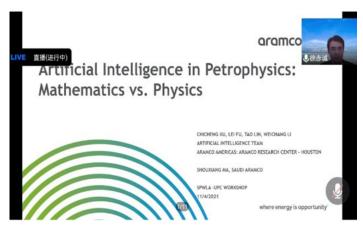


Lichun Kuang gave a theme report online.

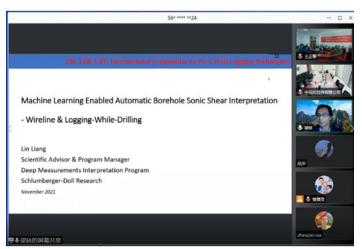
Lichun Kuang (PetroChina Science and Technology Management Department), general manager, gave a report focused on promoting the development of intelligent technology in the oil and gas industry. He analyzed the oil and gas development challenges and intelligent technology revolution in China based on detailed data and gave some suggestions on top-level design, talent training, cooperation, and sharing.



Professor Martynov V.G. gave a presentation online.



Dr. Arthur Cheng gave a presentation online.



Dr. Lin Liang is giving a presentation online.

Professor Martynov V.G. gave a presentation on "Reservoir Engineering Surveillance Problems Solving for Tight Reservoirs at the Stage of Field Exploration and Development." Chicheng Xu gave a presentation on "Artificial Intelligence in Petrophysics: Mathematics and Physics." Dr. Lin Liang gave a presentation on "Physics-Driven Machine Learning-Enable Automatic Borehole Sonic Shear Interpretation-Wireline and Logging-While-Drilling." Professor Guiwen Wang gave a presentation on the "Progress of Logging Intelligent Identification Methods for Complex Lithofacies Based on Machine Learning." Professor Lizhi Xiao gave a presentation on "Geophysical Logging in the Age of Intelligence." Other representatives from domestic and overseas universities, Petroleum Services Company, research institutes, and the East China Chapter of SPWLA also gave wonderful academic presentations. It was very significant for promoting the development and application of artificial intelligence and big data technology in the well-logging field.



Guoxin Li is delivering a speech at the closing ceremony.

In the closing ceremony, Guoxin Li (PetroChina Qinghai oilfield company), general manager, the alumni star of China University of Petroleum (East China), delivered an enthusiastic speech. He believes that this symposium has a good perspective and will certainly have a positive impact on the oil industry's intelligent development. He also hopes that we will strengthen the theoretical research to prompt great innovation and progress in intelligent well logging.

The summary report of this symposium was presented by Cancan Zhou, former director of PetroChina Exploration Well Logging Institute. He pointed out that this symposium was deemed a great success. Four aspects are highlighted, including the deep-level technical discussion, the theme of the symposium — intelligent logging, the combination of old, middle-aged, and young speakers, and many high-level innovation achievements were displayed. This symposium enhanced the academic atmosphere, expanded the international influence of well-logging technology, and received strong support from oilfield companies, logging service companies, other institutions, and colleges.

The UPC International Symposium on Well-Logging Technologies, hosted for the 12th consecutive year, was one of China's most influential professional conferences. We are looking forward to the 13th UPC International Symposium on Well-Logging Technology in 2022.

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. Our meetings are held the second Tuesday of each month in person for those in Perth and online via a Schlumberger-hosted webinar. Webcasts of the presentations are also available soon after for members to review as they wish. We welcome new members to visit www.fesaus.org for meeting information. Since July, we've moved to sundowner formats, which have been received very well by our members and have increased the mingling and subsequent networking.

Our committee meetings are now held via Zoom as we all work in our various home offices, and we welcome new committee members with open arms.

Recent Events

- 9 November 2021—Zach John (Schlumberger) presented "How 3D Geomechanics Is Providing Deeper Insights Into Solving Drilling and Reservoir-Related Challenges in the Life of a Field" to a lively crowd at our monthly sundowner event. It was an enjoyable event with the opportunity to learn from an industry expert in geomechanics and network all in one.
- 14 December 2021—Technical Presentation and Webinar: For our final meeting of the year and Christmas talk, we had Dariusz Jablonski present "How Real Is the Present-Day Sea Level Rise?" Dariusz started with a sequence stratigraphical review of local Perth outcrops, incorporated data from NASA and NOOA, and answered the question, "Will quokkas on Rottnest become our first climate refugees?"



Wes Emery and Zach John.

2021 Committee Members

Wesley Emery President/Treasurer
Martin Kennedy Vice President
Vacant Company Secretary
Vacant Assistant Treasurer

Diego Vasquez Website Coordinator/ Data Standards

Focal Point

Zeyn Safarkhanlou Monthly Meeting Coordinator Vacant Secretary/Social Coordinator/

Special Events and Awards Membership Coordinator

Siobhan Lemmey Membership Coordinator

Dunston D'Souza New Technology Forum Coordinator

Vacant Education Group Leader
Nigel Deeks Audio Visual Coordinator
Vacant Sponsorship Coordinator
Yang Xingwang Audio Visual Coordinator

Bronwyn Djefel Newsletter Coordinator/Inter-Society

Liaison/ New Technology Forum Coordinator/Masterclass Coordinator

Sally Edwards Queensland Representative
Ashish Datey Victoria Representative
Harris Khan NSW Representative

Matthew Pfahl South Australian Representative

MALAYSIA CHAPTER (FESM)

General News

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

Recent Events

25 November 2021—FESM hosted another Virtual Series Technical meeting for 2021 with the topic of "Casedhole Formation Evaluation: An Alternative to Optimize Data Acquisition and Reduce Overall Costs in Mature Fields" by Pablo Saldungaray (Schlumberger), petrophysicist. At the beginning of the talk, he briefly mentioned that moving the data acquisition from open hole (OH) to cased hole (CH) and performing the operations without a drilling rig is opted by many operators in Argentina and around the world to reduce cost. This saves the time to condition the well, in addition to the logging operations, saving several rig days. CH logs can be an effective solution to reduce costs for wells drilled "infill" in mature fields, where the formations are known, and the petrophysical

properties and models are well calibrated. During the talk, he presented the technologies available to evaluate the formation behind casing and presented some case studies from Argentina in multilayered tight oil reservoirs in the San Jorge Basin and tight gas sands in the Neuquén Basin, combining advanced pulsed-neutron logs and other measurements to perform a petrophysical analysis behind casing and support subsequent well completion operations

HOUSTON CHAPTER

General News

The SPWLA Houston Chapter recently organized a seminar on October 28 with **Bernd Ruehlicke**, the SPWLA Distinguished Speaker and VP Westside of the Houston Chapter of SPWLA, titled "Taming the Thunder Horse with Axes and Vectors." Bernd also presented his work on two virtual seminars on November 18, where petrophysicists from all over the world had the opportunity to attend.

We also consistently support great initiatives proposed by student chapters. This time, we supported the SPWLA UH Student Chapter with the "The Ultimate Networking Event." SPWLA Houston Chapter board members and professionals joined UH students in bowling matches and lively discussions about petrophysics and careers in the oil and gas industry. We hope to see more initiatives like these from all student chapters. Congrats on the success of the event, SPWLA UH Student Chapter!

As we continue our in-person events, we hosted a lunch seminar with Isaac Easow (Geolog Americas Inc.) on December 8. Isaac gave a talk titled "Advanced Surface Logging Techniques Provide Cost Optimized Solutions for Reservoir Characterization." This was a free seminar (i.e., sponsored by Geolog) where lunch boxes were provided, and there was also a tour at Geolog facilities, training rooms, and inside the units.

The SPWLA Houston Chapter hosted our biggest in-person event of the year: the **Software Showcase**, **on December 10**. This has been traditionally a popular event among SPWLA members in Houston, and now it is finally back after three years. We hosted the software show at a magnificent location, the Hyatt Regency Houston West. This showcase was a one-day event with five great talks distributed during the day with plenty of opportunities for networking and seeing the latest advances in software development and applications to formation evaluation.

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 would like to receive additional information. As always, we are open to new speakers in 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 if you have a presentation you would like to share.

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

Recent Events

SPWLA Houston Chapter October Seminar

28 October 2021—The Houston Chapter of SPWLA recently organized a seminar with the SPWLA Distinguished Speaker and VP Westside of the Houston Chapter of SPWLA, Bernd Ruehlicke. His talk titled "Taming the Thunder Horse with Axes and Vectors" was very informative. This was our first in-person meeting in the Westside for the SPWLA Houston Chapter in almost two years and the second for our chapter! We hope to see you at our upcoming events! Thanks to Bernd Ruehlicke for a great talk, BP America for hosting us, and Gerardo Cedillo for making all the arrangements! More events at BP Helios and other venues in Houston will be coming soon! Contact us if you are interested in presenting at one of our locations across the Houston metro area or want to host a petrophysics-related event.

SPWLA November Virtual Webinar

Bernd also presented his work on two virtual seminars organized by SPWLA as part of the Distinguished Speaker Series. Petrophysicists from all over the world had the opportunity to attend these talks.

Supporting Student Chapters of SPWLA

The Houston Chapter consistently supports (financially and otherwise) great initiatives proposed by student chapters. Hence, we would like to give a shout-out to the SPWLA UH Student Chapter for organizing and hosting the "The Ultimate Networking Event." Students, professionals, and SPWLA Houston Chapter board members gathered to discuss career journeys and current oil and gas industry trends while having fun. We hope to see more initiatives like these from SPWLA UH Student Chapter as well as from other student chapters. Congrats on the initiative and the success of the event, SPWLA UH Student Chapter! Go Coogs!

- 8 December 2021—A seminar was held on "Advanced Surface Logging Techniques Provide Cost-Optimized Solutions for Reservoir Characterization" by Isaac Easow (Geolog Americas Inc.). This activity included a boxed lunch with the talk and a tour of the Geolog laboratory after the presentation. The seminar was sponsored by GEOLOG.
- 10 December 2021—SPWLA Software Showcase: The Houston Chapter of SPWLA hosted this excellent opportunity for learning and networking in a fantastic location (Hyatt Regency Westside Energy Corridor). Participating companies included Schlumberger, GeoSoftware, Emerson, ROGII, Eriksfiord, KAPPA Engineering, K Business Solutions Inc, GOWell, and iSys, among others. Aside from a full day of talks, the registration covered exhibition access, networking, a full Texas-style breakfast, lunch, and coffee breaks! There were also great giveaway prizes! In addition to the lunch talk given by an SPWLA Distinguished Speaker Sabyasachi Dash titled "Enhanced Assessment of Fluid Saturation in the Wolfcamp Formation of the Permian Basin," four (4) other talks were given throughout the day:
 - "Evolving Geomechanics With JewelSuite in the Cloud" by Elijah Odusina (Baker Hughes)
 - "Geolog 21: Reduced Time to Results and Expanded Capabilities for Energy Transition Applications" by Leomar López Moreno (Emerson Automation Solutions)
 - "Applications of Well Similarity Analysis With Unsupervised Machine Learning," by Fred Jenson and Chiranjith Ranganathan (GeoSoftware)
 - "Automatic Interpretation and Pressure Transient Analysis of Formation Test Data Using Azurite," by Juan Carlos Nunez (KAPPA Engineering)

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

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



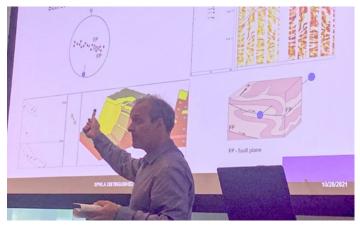
SPWLA Houston Chapter President Javier Miranda acknowledged the SPWLA Distinguished Speaker and VP Westside of the Houston Chapter of SPWLA, Bernd Ruehlicke, for his very informative talk.



SPWLA Houston Chapter President Javier Miranda introduced the SPWLA Distinguished Speaker, VP Westside of the Houston Chapter of SPWLA, and president of Eriksfiord Inc, Bernd Ruehlicke.



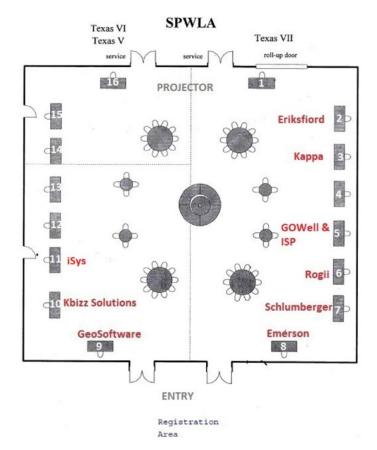
VP Westside of the Houston Chapter of SPWLA Bernd Ruehlicke explains the beauty of the statistical eigenvector analysis technique for dip data analysis.



VP Westside of the Houston Chapter of SPWLA Bernd Ruehlicke explains how to tame the Thunder Horse using axes and vectors.



The Hyatt Regency Houston Westside is the magnificent location where the Houston Chapter of SPWLA hosted the SPWLA Software Showcase on December 10, 2021.



The layout of the SPWLA Software Showcase.



A shout-out to the SPWLA UH Student Chapter for organizing and hosting the "The Ultimate Networking Event." Congrats on the initiative and the success of the event, SPWLA UH Student Chapter! Go Coogs!

SPWLA Houston Chapter Board for 2020–2022



IGUP STUDENT CHAPTER-PAKISTAN

General News

We hope everyone is enjoying good health. SPWLA IGUP Student Chapter-Pakistan was inaugurated on July 8, 2021. It remains active through online meetings and webinars. While local travel restrictions remain firmly in place, the local chapter is working behind the scenes to bring interesting presentations and webinars to the members. Since August 2021, a number of meetings have been conducted online among team members to discuss innovative ideas for the prosperity of the chapter. Moreover, two webinars have already been conducted where students from all over the country participated.

Boards of Directors (2021–22)

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

Dr. Muhammad Armaghan Faisal Miraj Faculty Advisor armghan.geo@pu.edu.pk

Mr. Muhammad Bilal Malik President bilalmalik00791@gmail.com

Miss Pal Washa Shahzad Rathore Vice-President palwashashahzad97@gmail.com

Mr. Rana Faizan Saleem Secretary ranafaizan7737@gmail.com

Mr. Sher Afgan Treasurer sherafgan1994@gmail.com

Miss Maha Ali Haider International Relations Chairperson mahaalihaider26@gmail.com

Miss Irza Akhtar Membership Chairperson irzaakhtar1999@gmail.com

Mr. Shan Shahzad Event Manager shan.mphil.geo@pu.edu.pk

Recent Events

30 November 2021—Recently, the SPWLA IGUP Student Chapter-Pakistan organized the second episode of the webinar series in hybrid mode. The Institute of Geology hosted the second episode. SPWLA IGUP Student Chapter-Pakistan was honored to have key speaker, Mr. Shahid Aziz ul Haq (Schlumberger USA), reservoir domain head, with the topic "So What is Petrophysics?" The flyer for the episode is as follows:

SECOND EPISODE OF THE WEBINAR SERIES OF

SPWLA IGUP STUDENT CHAPTER-PAKISTAN



PRESENTER: SHAHID AZIZUL HAO

Shahid Azizul Haq is Reservoir Engineering Advisor in Schlumberger. He currently holds two positions; Reservoir Domain Head (RDH) for Schlumberger Well Construction Division and Schlumberger Reservoir Discipline per Manager. He is subject matter expert cornation testing (FT), production logging has been with Schlumborger for 33 years. the past 13 years, as RDH, Shahid's nary role is to manage the development of formation testing engineering techniques/workflows/answer-products for the "while drilling" environment. He has pioneered the workflow of Real Time Productivity Steering also known as RTPS, a key enabler for the real-time applications of ervoir engineering while drilling horizo ls. Shahid has co-authored more than technical papers. He holds BS and MS degrees in petroleum engineering. Shahid rees in petroieum engineering. Shahid been a member of various SPE, SPWLA and IPTC program committees as well as the Editorial Review Committee for SPE Reservoir Evaluation & Engineering, Shahid received 2017 SPE Regional Service Award for Gulf Coast North Assistance in Service Award for Gulf Coast North America Region. He was SPE Distinguished Lecturer for 2019-20 and the title of his talk was "Reservoir Engineering While Drilling" in Horizontal Wells.

CONTACT

Prof. Dr. Naveed Ahsan (Director) Email: director.geo@pu.edu.pk Website: www.geology.edu.pk Phone: +92 3334242056, +92 3335954449

SO WHAT IS PETROPHYS

In short, it is the branch of geology concerne

According to Wikipedia, Petrophysics the Greek πέτρα, petra, "rock" and ophysis, "nature") is the study of physic chemical rock properties and their interactions with fluids. A major application of petrophysics is in studying reservoirs for the hydrocarbon industry. Petrophysicists are employed to help reservoir engineers and geoscientists understand the rock properties of the reservoir, particularly how pores in the subsurface are interconnected, controlling the accumulation and migration hydrocarbons. Some of the key prope studied in petrophysics are lithology, porosity, water saturation, permeability and density. A key aspect of petrophysics is measuring and evaluating these rock properties by acquiring well log measurements – in which a string of measurement tools are inserted in the borehole, core measurements - in which rock samples are retrieved from subsurface, and seismic measurements. These studies are then combined with geological and geophysical studies and reservoir engineering to give a complete picture of the

First episode of the "The SW Series" titled "So What is Petrophysics?", Shahid Haq will take a deeper dive into the basics as well as practical applications of petrophysics, and its relationship to other disciplines in the oil and gas industry

REGISTER HERE

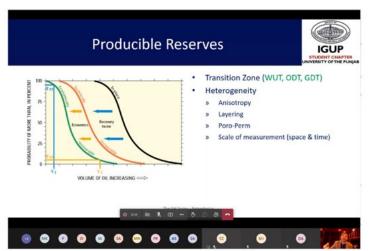
https://tinyurl.com/4drtvtps

Time: 09:00-11:00 am (PKT)





Flyer for the second episode of the SPWLA IGUP Student Chapter-Pakistan webinar series.



Mr. Shahid Azizul Haq (Schlumberger USA), reservoir domain head, addressed the webinar's audience organized by the SPWLA IGUP Student Chapter-Pakistan.

ternational Relations Chairnerson (Miss Maha Ali Haider) of the SPWI

International Relations Chairperson (Miss Maha Ali Haider) of the SPWLA IGUP Student Chapter-Pakistan discussing the detailed program of the second episode of the webinar series of the IGUP chapter.

December 2021—SPWLA IGUP Student Chapter-Pakistan is planning to organize the third episode of the webinar series in December for the students. Moreover, the Student Paper Competition within the country is planned for the upcoming months, and the winner will get a chance to present at the SPWLA Annual Symposium 2022. Furthermore, a one-day geologic field trip is planned during December with professionals from industry and academia.

Upcoming Events

More details about the upcoming events and updates can be seen on our social pages:

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

https://tinyurl.com/m9jbys5y

Facebook: https://www.facebook.com/SPWLA-IGUP-Pakistan-107338908181070 or https://tinyurl.com/8aj2eap6

Contact Details: spwla.igup.pak@gmail.com



Audience presence at the second webinar at the Institute of Geology, University of Punjab.



Active participation in the webinar from the audience



Group photo at the end of the second episode of the SPWLA IGUP Student Chapter-Pakistan webinar series at the Institute of Geology, University of the Punjab, Lahore, Pakistan.

LONDON PETROPHYSICAL SOCIETY (LPS)

General News

In November, the LPS held its AGM. This was followed by an off-topic talk by Orsted on "An Introduction to Site Investigation Within Offshore Windfarm Development." The talk started with some general background information on the layouts and economics of wind farms. This was followed by some detailed explanations on the relevance of petrophysics in placing wind turbines.

The new committee for 2022 was elected at the AGM, so many thanks to those who volunteered to serve the LPS members

Role	Name	Company
President	lan Draper	Baker Hughes
Past President	Dawn Houliston	ERCE
Treasurer	Henry Mortley	Schlumberger
Secretary	Phil Gibbons	Gaffney Cline
VP Technology	Kirsty Hitchen	BP
VP Seminars	Alina Khmelevskaya	BP
VP Sponsorship	Jack Willis	One and Zero
VP Publications	Sherif Farag	Independent
VP Arrangements	Ollie Tallon	Tullow
VP Membership	Rebecca Lee	Halliburton
VP External Liaison	Rebecca Nye	Enovate
Newsletter editor	Ross Kerr	Independent

Recent Events

December 2022—The LPS hosted a seminar on "Petrophysics for Geomodeling." At the time of writing, we are hoping to have done this in person, subject to the current COVID variant.

Upcoming Events

15 February 2022—The LPS is anticipating hosting an inperson evening talk. Currently scheduled at the Geological Society; talk to be announced shortly.

24 February 2022—The LPS will hold an online New Technology Day. This is an occasion for service companies to introduce new services or case studies to the LPS members.

SAUDI ARABIA CHAPTER

Recent Events

- 20 October 2021—After a successful first three sessions with a record attendance of 400 attendees, the SPWLA SAC 10th Topical Workshop on Data-Driven Petrophysics continued with a fourth online workshop session. This session was dedicated to applications in rock typing and formation evaluation. Vasileios Gkortsas (Schlumberger) opened the session with a talk on unsupervised electrofacies classification from well logs. Nicolas Leseur also presented an unsupervised facies classification technique, but this time based on core images (based on work he did while at Baker Hughes). Emad Mohamed (KFUPM) showed his work on rock typing using NMR logs. Wei Shao (Halliburton) described how to use principal component analysis for temperature correction of NMR T₂ distributions. Baoyan Li (Baker Hughes) closed the workshop with a talk about blind source separation applied to NMR core data to quantify rock wettability.
- 27 October 2021—The fifth session of the 10th SPWLA-SAC Chapter online workshop on Data-Driven Petrophysics was dedicated to applications in reservoir evaluation. Klemens Katterbauer (Saudi Aramco) opened the session with a talk about reservoir history matching utilizing cross-well electromagnetics and initial ensemble generation. It was followed by a presentation from Zeeshan Tariq (KFUPM) about water saturation prediction in carbonates. Jacqueline Floyd (Baker Hughes) presented a machine-learning-based system to provide an early warning of induced seismicity in underground gas storage salt caverns. Laila Alshammasi and Yacine Meridji (Saudi Aramco) closed the workshop with a talk about using mudlogs and drilling parameters in a machine-learning algorithm to supplement formation evaluation when well logs were not available.
- 3 November 2021—The sixth session of the 10th SPWLA-SAC Chapter online workshop on Data-Driven Petrophysics was dedicated to applications in formation testing and sampling. Bin Dai (Halliburton) opened the session with a talk about the use of artificial intelligence to plan and optimize formation pressure-testing jobs. Shahnawaz Molla and Maneesh Pisharat (Schlumberger) presented a machine-learning technique to estimate heavier

hydrocarbon fractions from advanced mud-gas analysis and build a complete model of the reservoir fluid while drilling. Anup Hunnur (Baker Hughes) described an automated method for predicting sample contamination using fluid density and sound speed. Melanie Jensen (Schlumberger) closed the session with a presentation about an automated workflow to indicate reservoir connectivity through asphaltene equilibrium.

10 November 2021—The final session of the 10th SPWLA-SAC chapter online workshop on Data-Driven Petrophysics was dedicated to applications in unconventional source rock evaluation. Ayyaz Mustafa (KFUPM) opened the session with a talk about shale brittleness prediction using machine learning. It was followed by a presentation from Lalitha Vankataramanan (Schlumberger) about blind source application to NMR T_1 - T_2 maps to evaluate fluid volumes in unconventional reservoirs. Paul Craddock (Schlumberger) presented a machine-learning technique to evaluate mineralogy with uncertainty from spectroscopy logs. He followed with a bonus talk about the various spectroscopy techniques and their advantages and limitations to evaluate mineralogy and elemental composition from core, closing the workshop's final session with petrophysical fireworks!

In summary, the 10th SPWLA-SAC Chapter online workshop on Data-Driven Petrophysics consisted of seven sessions covering a wide range of topics related to data analytics and its applications in petrophysical topics: fundamentals of data analytics, data preparation and QC, applications formation evaluation, dynamic petrophysics, image analysis, rock typing, rock-geo-mechanics, and unconventional source rock evaluations, attracted hundreds of local and international audiences. The SPWLA SAC Chapter sincerely thanks all presenters for sharing their brilliant work with our audience. We also thank the participants for engaging in interesting discussions with the presenters. Finally, we thank Schlumberger for sponsoring this workshop and management teams to support our efforts to contribute to the knowledge sharing on the important topic of data-driven petrophysics. The chapter is thankful to Marie van Steene and the rest of the technical committee for an excellent job well done.

Please stay tuned to our chapter website for details on next year's events on (www.spwla-saudi.org).



SOUTHWEST CHINA CHAPTER

General News

In the past year, SPWLA Southwest China Chapter actively participated in various academic and industry activities in China, continuously promoting the brand of SPWLA to all sectors in mainland China. The chapter also plays an active role in the skill trainings for students and professionals in China. With the efforts of the SPWLA Southwest China Chapter and its associated member units, the members of SPWLA in China have increased from 20 to more than 120.

Recent Events

25–28 May 2021—"The Sixth National Logging Skill Competition for College Students" and "The First National Logging Basic Teaching Skill Competition for Young Teachers" were successfully held in Beijing. Several executive members of the SPWLA Southwest China

Chapter led a group of student members to participate in the competition and achieved excellent results. The competition further strengthened the friendship between student members and helped student members know more about petrophysics and well-logging skills. In the skill competition for young teachers, associate researcher Chen Meng and Professor Lai Fuqiang, members of the Executive Committee of SPWLA Southwest China Chapter, won the first and second prizes, respectively.



Chapter members attended the National Logging Skill Competition for College Students.



National Logging Basic Teaching Skill Competition for Young Teachers.

30 May 2021—Members of the SPWLA Southwest China Chapter participated in an SEG workshop held in Chengdu and presented technical talks on the recent progress of rock physics and well-logging techniques.



Chapter members attended the 2021 SEG workshop in Chengdu.

17–18 June 2021—The inaugural meeting of the "Geophysical and Logging Professional Committee of Sichuan Petroleum Society" was successfully held in Mianyang, Sichuan, China. The conference was hosted by the Sichuan Petroleum Society and organized by Sinopec Southwest Oil and Gas Company. More than 90 industry leaders, experts, and technicians from 17 units, including PetroChina Southwest Branch, Sinopec Southwest Oil and Gas Branch, PetroChina Oriental Geophysical Company, Southwest Petroleum University, Chengdu University of Technology, and University of Electronic Science and Technology, attended the meeting. Xu Yongjie, vice president of Sichuan Petroleum Society, attended the meeting and delivered the opening speech. The meeting reviewed and approved the constitution of the Association of Geophysical and Logging Professional Committee, democratically elected the director, deputy director, secretary, deputy secretary, and members of the first Geophysical and Logging Professional Committee. The meeting unveiled and awarded the seal for the newly established Geophysical and Logging Professional Committee of Sichuan Petroleum Society. In this inaugural meeting, several executive members of the SPWLA Southwest China Chapter were nominated as the deputy secretary and members of the professional committee. The founding of the Geophysical and Logging Professional Committee brings new opportunities for information exchange and joint promotion of oil and gas exploration and development in the Sichuan Basin.



Chapter members attended the Geophysical and Logging Professional Committee of Sichuan Petroleum Society, and several executive members were elected as board members

12-30 July and 11 October-30 November 2021—The chapter and its member unit Yangtze University hosted two training courses to field engineers from CPL. The courses about Imaging Logging Acquisition and Production Logging Interpretation were held at the Wuhan campus at Yangtze University. The courses were sponsored by CNPC Logging Co., Ltd. and organized by the School of Geophysics and Petroleum Resource of Yangtze University, the Key Laboratory of Oil and Gas Resource, and the Ministry of Education (Yangtze University), and the PetroChina Key Laboratory of Well Logging (Yangtze University Branch). There were 72 attendees in the two training sessions, including industry members from Daqing, Liaohe, Jilin, Tianjin, Xinjiang, Tarim, Tuha, Qinghai, and Southwest Branches. Professor Wang Hua, chairman of the SPWLA Southwest China Chapter, and SPWLA Southwest China Chapter members were invited as lecturers to provide special training on petroleum geology, imaging logging, production logging, and machine learning.



The Chapter and its member unit Yangtze University hosted two training courses to field engineers from CPL. The courses were on Imaging Logging Acquisition and Production Logging Interpretation, including basic knowledge of petroleum geology, imaging logging, production logging, and machine learning.

13 October 2021—Chongqing University of Science and Technology, an SPWLA Southwest China Chapter member unit, held the school trial of the 9th Oriental Geophysical Exploration Competition. A total number of 12 teams participated in the competition. Three teams were selected to participate in the national final competition after several activities, such as theoretical examination, report preparation, and oral defense.



Student Geophysical Exploration Competition held in Chongqing by a member unit of SPWLA Southwest China Chapter.

23 October 2021—Members of the SPWLA Southwest China Chapter participated in the Fifth National Petroleum Geology Competition (NPGC) held at Southwest Petroleum University. After two days of fierce competition, they have achieved excellent results.



The Chapter members participated in the Fifth National Petroleum Geology Competition (NPGC) in Chengdu.

24 November 2021—SPWLA Southwest China Chapter, together with Sichuan Key Laboratory of Natural Gas Geology, invited Dr. Shanjun Li (president of GeoPrance Company and former senior technical consultant and chief scientist of Halliburton, chief scientist of Weatherford, and president of Beyond Bits Technology) to give a talk on "The International Progress of Electromagnetic Logging Technology."

that are smaller than tool resolution. This approach is compared with more traditional models that emphasize changes in signal intensity.

UFRJ SPWLA STUDENT CHAPTER

General News

Our chapter maintains normal activities with 10 active members 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: Sarah Aleixo

(sarahaleiixo@gmail.com)

Executive Members

Bruno Valle (bruno@geologia.ufrj.br)
Teresa Mourão (teresamouraoo@gmail.com)

Marketing Members

Caio Guedes (caiobittencourtg@gmail.com)

(coordinator)

Shirlene Barros (shirlenebarros1@hotmail.com)

lago da Costa (iago.cjaques@gmail.com)

Logistic Members

Gabriel Ferraz (gabrielferraz036@gmail.com)

Recent news

Our members get together at least once per month to discuss our marketing strategy and organize future events. We keep posting informational content on our social media, and each member of the chapter is responsible for searching for content related to petrophysics or well logging. We're having a great response with this method now that we have distributed our tasks better towards our marketing strategies.

As some members have finished their activities in the chapter, we believe this is a good opportunity to invite some new members. Because of that, we decided to open a recruiting period from November 16 to 28 for all geology students at the Federal University of Rio de Janeiro. Once we have attracted some interested students, we will have a formal interview to get to know our possible new members better and start our new activities for next year. We are very excited to meet our new members!

地层界面和前探测仪器结构图

两个线圈为发射天线、两个ME天线为接收天线中间一个X-方向发射线圈



1. 电阻率测量;

2. 地质导向测量(like PeriScope, AziTrak and ADR);

3. 远距离地质导向(like Geosphere, VisiTrak ,EarthStar);

4.前探测量;

The chapter invited Dr. Shanjun Li to talk on "The International Progress of Electromagnetic Logging Technology."

Upcoming Events

SPWLA Southwest China Chapter will help students in Southwest China build the SPWLA Southwest China Student Chapter in spring 2022. The Chapter's annual meeting will be organized at the end of 2021.

TULSA CHAPTER

Recent Events

Chapter officers continue to seek ways to keep the chapter active during the continuing pandemic that affects meeting site availability, along with the exodus of petrophysicists from Tulsa as companies relocate.

Upcoming Events

January/February 2021—Pat Ryan will introduce members to the contents of the Oklahoma Well Log Library located in Tulsa. The nonprofit organization, OWLL, is the repository of all wireline logs and other geological data and reports for Oklahoma and surrounding states.

February/March—James Howard will talk on "The Use of Al-Methods to Enhance Fracture Resolution From Borehole Image Logs." This work uses combined machine-learning and deep-learning algorithms to extract fractures from borehole images and then quantify fracture widths



Post created to promote our selection process, posted on Instagram, LinkedIn, and Facebook (language: Portuguese).

Upcoming Events

22–24 March 2022—Our team intends to keep organizing courses with great specialists to teach basic but important concepts in petrophysics and well logging so that both old and new members stay updated on these topics. As the pandemic has reduced risks, we plan to start new inperson activities like visiting some oil and gas companies next year. Besides that, our chapter and SPWLA Brazil are working together looking for qualified professionals who could participate in a well logging and petrophysics event called "I Encontro Brasileiro de Petrofísica de Campos Maduros."

Finally, we will keep sharing through our social media posts, trivia, and some concepts about well logging and petrophysics. To reach a wider audience, we intend to explore new ways to share our content, such as videos, Stories, Reels, and IGTVs. We recognize the current importance of being active on social media nowadays.

UNIVERSITAS PERTAMINA STUDENT CHAPTER

General News

SPWLA Universitas Pertamina Student Chapter was founded in 2019. Our third cabinet in the SPWLA UP SC is the Enhancement Cabinet. We just renewed our cabinet a few months ago. Our chapter is the most active amongst SPWLA student chapters in Indonesia. We have 40 officers with a total of eight departments, and four divisions included. Our officers are mostly majoring in petroleum, geology, and geophysics engineering. Our student chapter is assisted by Petroleum Engineering Student Associations.

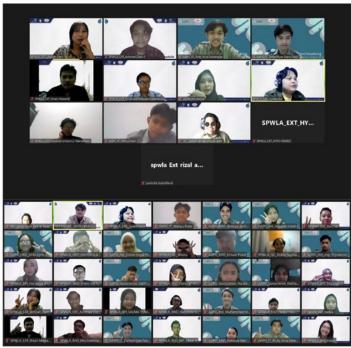
Our cabinet has many work programs for internal and external organizations to develop the officers and Universitas Pertamina's students, especially the Faculty of Exploration and Production Technology's students, such as hard and soft skills to prepare them for work and career life. We have monthly meetings every last week at the end of the month to evaluate the performance of officers and work programs. In November, we held our monthly meeting on November 1, 2021. In October, we held a few events that were open to the public, such as IGNITE, and a few events that were held just for internal officers of the SPWLA Universitas Pertamina Student Chapter. Other events were held for the public that everyone could participate in, including the International PetroWell Event (IPW) 2021, Upgrade Your Skill, Vol. 2, Lifting, and ICE/PSC.



Monthly Meeting held on November 1, 2021.

Recent Events

24 October 2021—Benchmarking with AAPG UB is an activity about comparing work processes, organizational policies, strategies, and programs/activities of other organizations with other organizations. This activity can also build relationships between organizations for the development of each other. Last time, we got to benchmark with AAPG Universitas Brawijaya. This internal meeting was attended only by our internal SPWLA UP SC and internal from APPG UB SC. The meeting was held via Zoom.

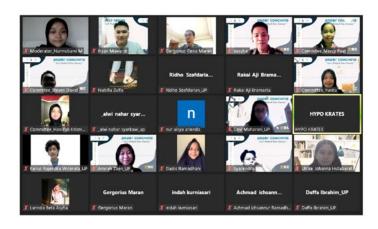


Upgrade Your Skill, Vol. 2: How to Maintain a Mental Stability 101.

31 October 2021—Upgrade Your Skill is a series of webinar collaborations between the HRD Department and the Public Relation Division. This webinar gave participants some tips on maintaining mental stability during the pandemic. Mrs. Aldani Putri Wijayanti was our amazing speaker. The event was well attended with 55 participants, only to maintain the focus group discussion of the courses. It was held via Zoom.



6 November 2021—Paper Coaching is a webinar held by the Education and Training division. This webinar talked about coaching for people who want to join paper and poster competitions about oil and gas. Mr. Gergorius Gena Maran was the speaker. The event was well attended, with 70 participants only to maintain the focus group discussion of the courses. It was held via Zoom.



- 27 November 2021—Talktion is a live streaming-based talk show using SPWLA UP SC Instagram. We invite experts as our speakers. TALKTION 1.0 is about non-technical matters in work and career life. The participants get new insights and share experience and knowledge.
- 4 December 2021—The International PetroWell (IPW) Event is an annual international event for geoscience enthusiasts, especially undergraduates. IPW 2021 has two major events, the PetroWell Study Case Competition (PSCC) and the annual forum on the theme of "Future Challenges for Petrophysics in Energy Industry" this year. In addition to the PetroWell Study Case Competition (PSCC), there is also "The Role of Geoscientist in the Transition of Unconventional Hydrocarbons and Challenges in the Future Oil and Gas Industry." Also, the best of the event is the winner of the PetroWell Study Case Competition (PSCC).



The International PetroWell Event series of events began with the PetroWell Study Case Competition and ended with the Annual Forum on December 4

5 December 2021— IPW Annual Forum 2021 is another main event series from IPW as a webinar. There are two sessions regarding the Annual Forum. The first session discussed "Core Log Integration: A Hybrid Intelligent Data-Drive Solution to Improve Elastic Parameter Prediction" and was delivered by Mr. Zeeshan Thariq, as a post-doctoral research fellow at KFUPM Saudi Arabia. The second session discussed "Petrophysicists and Challenges in the Future" and will be delivered by Mrs. May Sari Hedrawati (Petronas Malaysia), a petrophysicist.



Upcoming Events

February 2022—Lifting is a webinar about technical matters during the exploration and exploitation of oil and gas. We will invite experts as our speakers. The participants get new insights and share their experience and knowledge. This program will be held via the SPWLA UP SC Zoom Meeting Room.

UNIVERSITY OF HOUSTON STUDENT CHAPTER

Recent Events

Petrophysics Help Session

15 October 2021—SPWLA UH conducted a 90-minute inperson/online midterm help session for Professor Mike Myers' Masters Well-Logging class. Topics included Archie's equation, Tornado charts, permeability indicator logs, and Darcy's equation. On October 29, 2021, the immediate past president of SPWLA UH, Charles Adams, held a Well-Logging help session with Professor Lori Hathon's students.



SPWLA UH Petrophysics tutors Jeffrey Daniels and Andres Villarroel to the right.

Hershey Beach Galveston TX – Beach Cleaning Community Service

16 Oct 2021—UH SPWLA, in collaboration with AADE UH, conducted a beach cleaning exercise to contribute our quota to a cleaner environment.



29 October 2021—SPWLA UH hosted Ting Li (Chevron) at the Petroleum Engineering Graduate Seminar at the University of Houston who spoke on his 2020—2021 SPWLA Distinguished Speaker topic "Formation Evaluation With NMR, Resistivity, and Pressure Data — A Case Study of a Carbonate Oil Field Offshore West Africa." The Graduate Seminar is a weekly event designed as an important part of our academic programs. It provides an opportunity for petroleum engineering students to learn about current research in the petroleum industry as well as its applications.



Bowling with Professionals SPWLA UH + SPWLA HOUSTON

SPWLA UH collaborated with the SPWLA Houston Chapter for an evening of fun, food, and networking with industry professionals. Special thanks to SPWLA Houston members and the Activities Funding Board (AFB) UH who bankrolled the event.



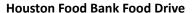


SPWLA UH vice president Ileana Cordova to the right at UH bowling alley.

Fundamentals of Gyros Workshop With Gyrodata

17 November 2021—SPWLA UH collaborated with AADE UH to host Rob Shoup (Gyrodata), VP of special projects, who provided training on the fundamentals of gyros and discussed the importance of gyros in wellbore placement during drilling operations.





18 November 2021—As part of our community outreach, Houston Food Bank boxes were placed at the ERP to help Houston's most vulnerable and needy, who were especially affected during the COVID pandemic. Collected food items were taken to the Food Bank on November 18, 2021.



SPWLA UH coordinator Professor Lori Hathon (left) at the Houston Food Bank.



SPWLA UH team at the Houston Food Bank.

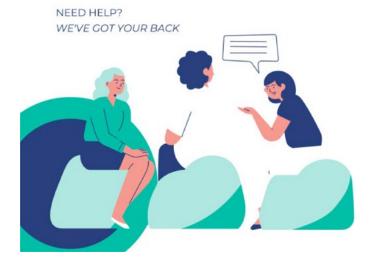
Upcoming Events

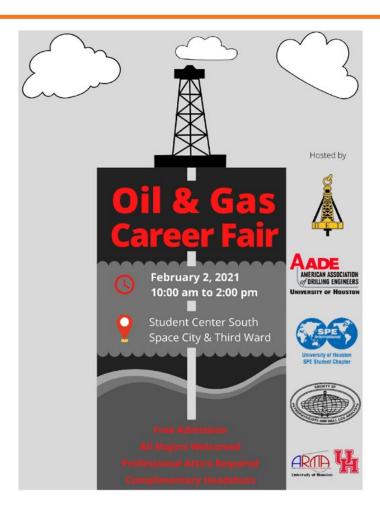




FRIDAY
DECEMBER 3rd
NOON

REGISTER ONLINE





UNIVERSITY OF LOUISIANA AT LAFAYETTE STUDENT CHAPTER

General News

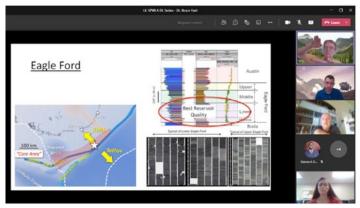
The SPWLA Student Chapter at the University of Louisiana at Lafayette performed a raffle to give away 10 free student memberships. Congratulations to our new members, and welcome to the SPWLA family:

- Ebuka B. Osunwoke, graduate student in petroleum engineering
- Nicholas W. Mascari, senior student in petroleum engineering
- Dylan R. Wiltz, freshman student in petroleum engineering
- Hashim O. Albar, senior student in petroleum engineering
- Danial T. Alawadh, senior student in petroleum engineering
- Sage D. Banks, senior student in petroleum engineering

- Kaitlyn E. Caminita, freshman student in geosciences
- Wiley M. Griffin IV, graduate student in geosciences
- Haley Magliari, graduate student in geosciences
- Precious E. Batubo, graduate student in geosciences

Recent Events

17 September 2021—The UL Lafayette Student Chapter hosted three online talks as part of the fall 2021 Distinguished Lectures Series. Dr. Bruce Hart, an adjunct professor at the Western University in Ontario, discussed what makes a shale play successful and compared the Eagle Ford and Tuscaloosa Marine Shale Formations.



Dr. Bruce Hart presented on September 17.

22 October 2021—Our second meeting of the fall semester gave us the opportunity to learn from Dr. Marie Lefranc (Schlumberger), a program manager and senior research scientist. Students showed a lot of interest in Dr. Lefranc's research and asked several questions about the topic of "Deep-Learning-Based Automated Sedimentary Geometry Characterization From Borehole Images."



Dr. Marie Lefranc presented on October 22.

5 November 2021—The president of RedOx Systems, Mr. Brent Halldorson, gave a talk on "New Horizons for Oilfield Water Management" to all those interested in current recycling technologies for produced water. Students from the Civil Engineering department also attended, discussing matters of interest, regulations, and future oilfield water management plans.



Mr. Brent Halldorson presented on November 5.

Welcome New Members: October 21, 2021 - November 30, 2021

Acosta, Luana, Universidad De Buenos Aires - FCEN, Ituzaingó, Buenos Aires, Argentina

Afari, Samuel, University of North Dakota, Grand Forks, ND, United States

Alawadh, Danial, University of Louisiana at Lafayette, Lafayette, LA, United States

Albar, Hashim, University of Louisiana at Lafayette, Lafayette, LA, United States

Alsulami, Ghadeer, Saudi Aramco, Khobar, Eastern Province, Saudi Arabia

Bakelli, Omar, University of North Dakota, Grand Forks, ND, United States

Banks, Sage, University of Louisiana at Lafayette, Lafayette, LA, United States

Batubo, Precious, University of Louisiana at Lafayette, Lafayette, LA, United States

Birkeland, Kristoffer, AkerBP, Hafrsfjord, Norway

Calvo, Karen, Universidad De Buenos Aires - FCEN, Lomas Del Mirador, Buenos Aires, Argentina

Caminita, Kaitlyn, University of Louisiana at Lafayette, Covington, LA, United States

Cancinos, Cintia, UTN Plaza Huincul, Cutral Co, Neuquén, Argentina

Ceballos, Micaela, UTN Plaza Huincul, ZAPALA, Neuquén, Argentina

Chen, Zhonghuan, Halliburton, Singapore

Debora, Alfaro, U.N. La Plata, Buenos Aires, Argentina

Evans Akuoko, Ansah, Ghana National Petroleum Corporation, Kumasi, Ashanti, Ghana

Griffin, Wiley, University of Louisiana at Lafayette, Lafayette, LA, United States

Guo, Jingzhe, Northwest University - China, Xi'an, China **Haas, Maximilian,** European Organization for Nuclear Research (CERN), ETH Zurich, Montanuniversität, Prevessin-Moens, Switzerland

Hovsepian, Mariano, Universidad De Buenos Aires - FCEN, Morón, Buenos Aires, Argentina

Insaurralde, Fiorella, Universidad De Buenos Aires - FCEN, Mariano Acosta, Buenos Aires, Argentina

Jacinto, Marcos, UFRN, Parnamirim, Rio Grande do N, Brazil **James, Zachary,** Humble, TX, United States

Kapluk Barrera, Florencia, UTN Plaza Huincul, Neuquén, Argentina

Li, Bo, University of Leeds, Leeds, United Kingdom

Magliari, Haley, University of Louisiana at Lafayette, Lafayette, LA, United States

Mansouri, Houshang, Independent, Teddington, Middlesex, United Kingdom

Mascari, Nicholas, University of Louisiana at Lafayette, Lafayette, LA, United States

Miranda, Carlos, Universidad De Buenos Aires - FCEN, CABA, Buenos Aires, Argentina

Modica, Milena, U.N. Comahue, Neuquén, Argentina

Osunwoke, Ebuka, University of Louisiana at Lafayette, Lafayette, LA, United States

Otero, Santiago, Universidad De Buenos Aires - FCEN, CABA, Buenos Aires, Argentina

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William A. "Bill" Grieves
FEBRUARY 20, 1926-NOVEMBER 30, 2021

William A. "Bill" Grieves passed away on November 30, 2021. Bill was born on February 20, 1926, in Coffeyville, Kansas; however, his parents soon moved to Tulsa, Oklahoma, where he grew up and went to school. A bright lad, he landed a US Navy scholarship at the University of Oklahoma from the Department of Defense during WWII and graduated with a BS degree in chemical engineering in 3 years. The war ended about the time of graduation, but Bill decided to take his naval commission and see the world for a while. He returned to Tulsa in 1947 and joined an Exxon predecessor called Jersey Production Research.

There Bill met another chemistry graduate, Margaret Barron, and they married in 1950. A son, Bill Jr., followed in 1952, and daughter Carolyn arrived in 1954. His career took a turn when he went to a six-week course on Well Log Analysis. When Bill returned from the seminar, he became the "expert" and did training for various affiliates outside the US. It was during this time that Bill and Margaret spent a month in Bourdeaux and, between training classes, toured this region of France. It began a life-long affair with travel around the world, good cuisine, and a love of France in particular.

His career continued with the Exxon Corporation, where he was involved in well evaluations, technical advice, and arbitrations while living in Houston, Los Angeles, Denver, and then returning to Houston headquarters. He retired from Exxon in 1986 and was then active as a consultant and expert witness.

Bill joined SPWLA in 1961 and continued his membership through 2021. He was a generous volunteer to SPWLA, serving in many capacities over many decades. Positions held were VP Publications of *The Log Analyst*, VP Technology, and moving up to President from 1976–1977. Bill served on the Board of the SPWLA Foundation and was Treasurer from 1986–2014, which included issuing grants and scholarships to students and facilities globally. He received the Distinguished Service Award in 1991 and the Medal of Honor for Career Service in 1998 for his service, especially his work in establishing the SPWLA Foundation.

He and Margaret continued their travels around the world, and when in Houston, they were supporters of the Houston Symphony, Houston Ballet, and Houston Grand Opera. Returning from a trip, Bill was asked to step in to teach a graduate course in Well Evaluation at the University of Houston in 1987. This lasted for three years, and then one day, while on campus, he stopped by KUHF, the classical radio station. Bill began doing volunteer work at the station, and in 1997, was named Volunteer of the Year.

Margaret passed away in 1993. One evening at the Symphony, Bill ran into Dorothy McDonnell. They dated once at OU, and Dorothy would say it took him 50 years to ask her out again. He and Dorothy married in 1999. They traveled together far and wide, and both enjoyed and supported the performing arts in Houston. They moved to The Hallmark in 2015, where they found a compatible and friendly group of residents and staff. Dorothy passed away in 2017. Bill continued living at The Hallmark and was happy with his life there, continuing to travel while his health held out.

Bill is survived by son Bill, Jr. of Houston, TX, daughter Carolyn Conway and husband Ron of Marysville, WA, nephews Scot and Jim Grieves of St Joseph, MO, and cousin John Grieves, daughter Tessa and husband James of Kew, England.

In lieu of customary remembrances, memorial contributions to the Houston Symphony Endowment, 615 Louisiana, Houston, TX 77002, or to the charity of your choice would be appreciated.

