

Society of Petrophysicists and Well Log Analysts 8866 GULF FREEWAY, SUITE 320 • HOUSTON, TX 77017 • (713) 947-8727 • FAX (713) 947-

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## **CALL FOR ABSTRACTS** SPWLA 63<sup>rd</sup> Annual Logging Symposium Stavanger, Norway • June 11-15, 2022

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The SPWLA Board of Directors invites you to join us in **Stavanger, Norway, June 11-15, 2022** to showcase your case studies, new technologies and innovations at the **SPWLA 63<sup>rd</sup> Annual Logging Symposium**.

We are soliciting papers in the following General Themes:

- **1.** Formation Evaluation of Conventional Reservoirs
- 2. Formation Evaluation of Unconventional Reservoirs
- 3. Automated Methods of Formation Evaluation
- 4. Specialized Measurement Techniques and Interpretation Methods
- 5. Core and Well-Log Integration
- 6. Case Studies

Likewise, we are soliciting papers in the following Special Organized Sessions:

- 1. Nuclear Magnetic Resonance of Cuttings: Measurements and Interpretation
- 2. Distributed Fiber Optics for Formation Evaluation
- **3.** A Decade with UDAR Technology: Status of look-around and look-ahead applications and future potential
- 4. Surface Logging Technology in the Era of Digitalization and New Energies
- 5. Deep Learning with High-Dimensional Petrophysical Data
- 6. The Role of Long-Term Petrophysics in Carbon Capture Utilization and Storage
- 7. Advances in the Integration of Well Logs and Surface Electromagnetic Measurements for Reservoir Monitoring
- 8. Recent Advances in Borehole Image Technology and Interpretation
- 9. Automation in Borehole Geology
- **10.** Digitalization in Petrophysics: A Revolution in Formation Evaluation?

Detailed information about abstract submission is being provided in an accompanying document. The material contained in your abstract is the basis for the acceptance of your paper into the technical program. Your abstract should contain 300-500 words. Do not feel obligated to use the full allocated length. The Technology Committee is looking for papers containing strong technical and innovative content. We ask you to refrain from commercialism and focus on the promotion of petrophysics and formation evaluation. Your submitted abstract needs to be the same as the abstract published in your paper. Before submitting you must agree to meet all deadlines defined on the abstract submission page. All abstracts and final manuscripts must be in English.

Abstracts must be submitted no later than **Sunday 7<sup>th</sup> November 2021** via online submission at <u>https://www.spwlaworld.org/abstract-submission/</u>

Notification of acceptance will be made in December 2021. If selected, your abstract will be published online on the Symposium's website in February 2022. You will then be required to submit a draft manuscript for the Symposium transactions by Monday 28<sup>th</sup> March 2022 and your final manuscript by Monday 25<sup>th</sup> April 2022. Any paper not submitted in finalized format by then will be removed from the program. After submitting, authors will work with two members of the Technology Committee to review their manuscript in order to ensure clarity and to avoid commercialism. For questions, please contact Stephanie Turner at SPWLA either by phone (+1) 713-947-8727 or email stephanie@spwla.org.

We look forward to reviewing your abstracts!

Best regards, Carlos Torres-Verdín, PhD Vice-President Technology 2021-22



Iulian Hulea, PhD Technical Program Co-Chair





Photograph by Carlos Torres-Verdín

# Instructions for Submitting 2022 SPWLA Symposium Abstracts Online

Please read these instructions carefully. When done, print and save a copy, then return to the abstract submission website (<u>https://www.spwlaworld.org/abstract-submission</u>) and either login or create an account to begin the submission process.

Note: For your convenience, the information and contents of this descriptor can we accessed at <a href="https://www.spwlaworld.org/call-for-abstracts-verbose/">https://www.spwlaworld.org/call-for-abstracts-verbose/</a>

#### **Submission Information**

Before submitting an abstract, please gather the following information:

- Abstract/Presentation/Paper Title
- Submission Theme (to be selected from the list online and shown below, including special organized sessions)
- Submission Category
- First-Author Region (i.e., the continent of current residency)
- Author(s) Information
- First and Last Name
- Company
- o email address

Please note that when entering the authors, you will need to identify the Presenting Author (by default, the submitter). The Presenting Author will become the main point of contact and will receive ALL correspondence regarding the submission. It is then the responsibility of the Presenting Author to share all pertinent information with his/her Co-Authors.

- Publication Information (in case your paper has been published before; all submissions will be verified for plagiarism)
- Text of abstract (300 words minimum and 500 words maximum)

#### Abstract/Manuscript Title

The abstract title should be standardized with all letters capitalized. Also:

- Do not underline any portion of your title
- Do not use bold or italics in your title

#### **Abstract Requirements and Format**

- All abstracts must be a minimum of 300 words and a maximum of 500 words as determined by the Technology Committee and specified on the online submission form. All abstracts should be written in English.
- Identify the primary theme area and/from the list provided below to which the abstract is best suited. This includes the selection of a Special Organized Session, if that is your intention. Abstracts are reviewed by the Technology Committee based on the primary theme/session designated by the author.
- Abstracts suggesting commercialism in any form will be rejected. SPWLA has a stated policy against use of commercial trade names, company logos, or text that is commercial in tone in the paper title, text or slides.Use of such terms will result in careful scrutiny by the Technology Committee in evaluating abstracts and the presence of commercialism in the paper may result in it being withdrawn from the program.
- The substance of the abstract should not have been presented or published before in any other conference or publication venue.
- The abstract should stand on its own and not refer to another work, unless associated with current work.
- Do not include the title or author names in the body of the abstract. The title and author information willbe requested separately through the submission system.

Abstract submissions should also include specific information concerning the following items:

- 1. Objectives/Scope
- 2. Methods/Procedures/Processes
- 3. Results/Observations/Conclusions
- 4. Application/Significance/Novelty Information
- 5. Optional: any other pertinent and relevant information

<u>The submission website includes boxes to be completed for each of the above items</u>. Please note that the Technology Committee will only accept abstract submissions that include information specific to the above items and which was entered through the corresponding submission website in English.

Additionally, <u>the submission of the abstract should be accompanied with a representative figure or image</u> (with caption) that graphically describes the objectives and methods underpinning the work to be <u>presented</u>. The submission website includes a placeholder for uploading this figure/image prepared with a common graphical format (e.g., JPEG, PNG, TIFF, and PDF). The maximum size for uploads is 4MB.

#### **Submission Deadline**

All submissions must be received electronically by the stated deadline. Submissions received after the abstract submission deadline will not be considered for review by the Technology Committee. No exceptions will be made.

#### **Confirmation of Submission**

An automated email confirmation will be sent upon finalizing your electronic submission, as well as a PDF attachment of your abstract for review and verification. You can also view and edit your submission up until the closing date for abstract submissions. Please note your Abstract ID and use it in any future correspondence regarding your submission.

#### **Abstract Review Process**

All abstract submissions are reviewed by the Technology Committee. Each abstract will be reviewed by at least 6 different Technology Committee members who are experts in the corresponding Symposium Theme or Special Organized Session. The review is strictly author/affiliation blind to mitigate potential biases. Additionally, the review is based on a metric system that apportions points to the various components of the abstract listed above. Points will be deducted because of undue and blatant commercialism.

#### **Author Notifications**

Author notifications will be sent to each *Presenting Author* regarding the status of their submission. The notification will provide a link to the appropriate status letter (which can be printed as often as necessary). Notification letters are addressed to the *Presenting Author* only. It is then the responsibility of the *PresentingAuthor* to share all pertinent information with all Co-Authors.

Please note: Highly sensitive anti-spam software may block this notification since it is actually emailed by a third party. If you do not receive this email by notification date, contact the SPWLA (<u>stephanie@spwla.org</u>) immediately.

Confirm that you have provided your correct and complete email address to ensure receiving this notification in a timely manner.

#### Changes, Cancelations, and Withdrawals

SPWLA and the Technology Committee consider a submitted abstract a commitment to present. If extenuating circumstances prevent the author from making the presentation, it is the author's obligation to find an alternate presenter from the list of co-authors and notify the SPWLA and their session chair(s) (if applicable). Withdrawals must be made in writing to the SPWLA office (stephanie@spwla.org) as soon as possible.

Abstracts can be edited by the submitting author up until the closing submission date; no changes are possible after that. Cancellations, particularly after the abstract has been accepted and publicized, are viewed by the Technology Committee as highly unprofessional.

#### **Speaker Registration/Funding**

**No funding is available for Presenting Authors or Speakers.** All technical session speakers **must** register for the Symposium. Speakers attending the Symposium for the day of presentation must register at the prevailing one-day rate.

#### **Presentation Modality**

The Symposium will offer only two presentation modalities: **Live Presentation** and **Poster Presentation**. There will be no E-Poster presentations during the Symposium. Poster presentations are the customary poster presentations printed on large paper format and affixed to an elevated surface fixture by presenters. Poster presentations will be delivered during Symposium time segments and quiet rooms planned expressly for this presentation modality, which require that the author be present to deliver his/her presentation to a live audience congregated around the poster.

#### Audio Visual (AV) Support

All slide presentations must be made in PowerPoint format (PPT/PPTX) and submitted to the SPWLA when requested. **No speaker may use his/her personal laptop to give a presentation.** If you have a question, please contact the SPWLA staff before submitting. Specific guidelines and suggested template along with instructions will be included in the Author Kit.

Should the Symposium become an online event because of extenuating circumstances then specific instructions will be made available ahead of time detailing how to generate a pre-recorded video in the proper format.

#### **Technical Support**

If you encounter any technical problems with the system, please contact <u>stephanie@spwla.org</u> at the SPWLA Business Office.

#### Abstract Submissions for Special Organized Session

Authors who intend to submit abstracts for a Special Organized Session (listed below) are encouraged to contact the session organizers to make them aware of your submission. Special Session Organizers are motivated to work with potential paper authors to make sure that their abstract submissions are strong, relevant, and well written. All abstracts submitted for Special Organized Sessions will be subject to the same vetting/examination process by the Technology Committee as for abstracts submitted to general themes.

#### **General Symposium Themes**

- 1. Formation Evaluation of Conventional Reservoirs
- 2. Formation Evaluation of Unconventional Reservoirs
- 3. Automated Methods of Formation Evaluation
- 4. Specialized Measurement Techniques and Interpretation Methods
- 5. Core and Well-Log Integration
- 6. Case Studies

#### **Special Symposium Organized Sessions**

Nuclear Magnetic Resonance of Cuttings: Measurements and interpretation
Organizer:
Adam Haecker Continental Resources Inc. (adam haecker@clr.com)

Adam Haecker, Continental Resources, Inc. (adam.haecker@clr.com)

Nuclear Magnetic Resonance (NMR) of drill-bit cuttings has been shown to be viable at the 2021

SPWLA symposium (Singer et al. 2021; Dick et al. 2021). Building upon previous work in the field, we invite authors to submit papers detailing pitfalls, best practices, case studies, sample preparation ideas, and processing of data.

2. Distributed Fiber Optics for Formation Evaluation

#### Organizers:

Isabelle Pellegrini, Ziebel (<u>isabelle.pellegrini@ziebel.com</u>) Garth Naldrett, Silixa (<u>garth.naldrett@silixa.com</u>) Glynn Lockyer, Lytt (<u>glynn.lockyer@lytt.com</u>) Colin Wilson, Schlumberger Fiber Optic Global Advisor (<u>CWilson7@slb.com</u>)

Deployed permanently or using novel intervention methods, Distributed Fiber Optics (DFO) sensors provide dense spatial and temporal measurement of temperature, strain, and acoustics along the length of the wellbore. These measurements enable new and improved approaches to well integrity, production optimization, reservoir optimization, and field management by delivering rich and extensive data sets. This session will offer an opportunity to showcase the latest advances in acquisition, deployment and analysis of DFO sensors.

# **3.** A Decade with UDAR Technology: Status of look-around and look-ahead applications and future potential

<u>Organizers</u>: Frank Antonsen, Equinor ASA (<u>fraan@equinor.com</u>) Maurizio Mele, Eni SpA (<u>Maurizo.Mele@eni.com</u>)

Monica Vik Constable, Equinor ASA (<u>mvc@equino</u>r.com)

Michael Rabinovich, BP (Michael.Rabinovich@bp.com)

How is UDAR technology helping operators today, and what are the main challenges to achieve full potential of the technology? Answers to these questions should stimulate a good discussion on potential future UDAR technology and interpretation improvements for an even more effective use of the technology.

### 4. Surface Logging Technology in the Era of Digitalization and New Energies

Organizers:

Ilaria De Santo, Schlumberger (<u>IDeSanto@slb.com</u>) Tao Yang, Equinor (<u>tay@equinor.com</u>)

Surface logging technology provides alternative solutions for formation evaluation in the era of digitalization and new energy exploration. We welcome new advances covering but not limited to mud gas technology, real-time fluid identification, geothermal, hydrogen, and lithium in this special session.

#### 5. Deep Learning with High-Dimensional Petrophysical Data

Organizers:

Chicheng Xu, Aramco Americas (<u>Chicheng.xu@aramcoamericas.com</u>) Tao Lin, Aramco Americas (<u>Tao.Lin@aramcoamericas.com</u>) Lei Fu, Aramco Americas (<u>Lei.Fu@aramcoamericas.com</u>) This session showcases the advantages of cutting-edge deep learning algorithms in accomplishing challenging petrophysical interpretation tasks that involve high-dimensional data. Participants are also encouraged to share insights on how to overcome the potential limitations of deep learning for practical field applications.

#### 6. The Role of Long-Term Petrophysics in Carbon Capture Utilization and Storage Organizers:

Luis Quintero, Halliburton (<u>Luis.Quintero@halliburton.com</u>) Kelly Skuce, Independent Consultant (<u>kellyskuce@shaw.ca</u>)

The process of Carbon Capture Utilization and Storage (CCUS) relies heavily on the proper assessment of the target reservoir in terms of long-term seal, capacity, injectivity, etc. Petrophysics and well-log analysis are therefore key disciplines in any CCUS project. This special session will focus on the impact of key petrophysics subdomains such as geomechanics, cased hole saturation monitoring, and wellbore and cap rock integrity on the successful completion of CCUS projects.

#### 7. Advances in the Integration of Well Logs and Surface Electromagnetic Measurements for Reservoir Monitoring

#### Organizers:

Yardenia Martinez, KMS Technologies (<u>vardenia@kmstechnologies.com</u>) Herminio Passalacqua, Red Tree Consulting LLC (<u>hpassalacqua@redtreesonsultingllc.com</u>)

This session showcases borehole and surface electromagnetic methods for reservoir monitoring. Applications include: geothermal, CCUS, and EOR. It highlights the importance of correlating borehole and surface EM measurements necessary to estimate reservoir-scale properties. Such correlation is critical for better understanding and inference of fluid transport from surface measurements, which reduces time for important decision making.

#### 8. Recent Advances in Borehole Image Technology and Interpretation

#### Organizers:

Peter Barrett, Halliburton (<u>Peter.Barrett@halliburton.com</u>) Christian Rambousek, Nimbuc Geoscience (<u>rambousek@nimbuc.com</u>)

This session focuses on advances in borehole Imaging technology from the wellbore to dynamic reservoir modelling. It will include the latest developments in tool technology, machine learning as an aid to interpretation, data analysis techniques, dip feature deliverable standardization, and the use of the data in reservoir modelling.

#### 9. Automation in Borehole Geology

#### Organizers:

Chandramani Shrivastava, Schlumberger (<u>cshrivastva@slb.com</u>) Peter Schlicht, Schlumberger (<u>PSchlicht@slb.com</u>)

The session intends to attract professionals and researchers from borehole geology and related disciplines (image logs, drill-cuttings, sidewall cores, etc.) to share their case studies and recent developments in automated processing and interpretation. Participants are encouraged to

share their experiences with machine learning applications in borehole geology and how formation evaluation is benefiting from those advances.

#### **10.** Digitalization in Petrophysics: A revolution in formation evaluation? Organizers:

Sarah Magdalena Birkeland, Equinor (<u>samap@equinor.com</u>) Gerrit Toxopeus, Equinor (<u>gtox@equinor.com</u>)

The main objective of this session is to highlight how new ways of working and digitalization in Petrophysics will continue to revolutionize the discipline. Participant will learn about existing solutions and will be encouraged to share their experiences and ideas.