



# Call for Papers



## 5<sup>th</sup> SPWLA India Symposium & Exhibition, 2023

### *Theme*

**“Ideate, Innovate, Integrate”**

**Petrophysics: The E&P Gateway from Discovery to Recovery and Beyond**

**Mumbai, 15<sup>th</sup> - 16<sup>th</sup> April, 2023**

### **Important Dates**

Date for Submission of Extended Abstracts:	31.12.2022
Intimation of Acceptance:	31.01.2023
Last date for submission of Full papers:	15.02.2023

For regular updates please visit the website: [www.spwlaindia.org](http://www.spwlaindia.org)

We are soliciting papers on the following topics:

### **Integrating Petrophysics in de-risking Exploration**

- Reservoir characterization in complex reservoirs
- Innovative workflows for uncertainty mitigation and de-risking Exploration
- Multi domain integration for realistic reserve estimation in Frontier and emerging Basins
- Validating workflows with improved Core analysis
- Deep water exploration and challenges
- Unlocking unconventional plays

### **Maximizing Asset value in Brown fields and Mature Basins**

- Integrating multi domain studies for addressing Brown field issues
- Improved Production/ Injection profiling & advancements in Production logging
- Breakthroughs via Analysis behind Casing
- Time lapse studies in mature Basins
- Advancements in IOR/EOR techniques and effective reservoir management
- Challenges in Marginal Field Development - Optimization of well platforms

### **Geomechanics in E&P life cycle**

- Improved MEMs for safe drilling, borehole stability & well placement
- Geomechanics for effective stimulation and completion designs
- Understanding reservoir stress anisotropies for resolving production anomalies
- Rock physics & Geomechanics
- Geomechanics for Unconventional Reservoirs

### **Testing, completion and well surveillance**

- Emerging trends in Production Testing and completion technologies
- Innovative engineering solutions for well surveillance
- Rig-less interventions
- Well salvaging
- Alternative fracking technologies

## Hydrocarbon to low-carbon & no-carbon: Attaining financial resilience in new energy paradigm

- Geothermal
- Coal Bed Methane
- Gas Hydrate
- Uranium
- Carbon capture, utilization and storage
- Energy Regulatory aspects

## Value unlock from emerging technologies

- One Company One data- Breaking the barriers
- Riding AI/ML for data driven solutions
- AI/ML for improving operational efficiency in E&P lifecycle
- New advents in Wireline, LWD & Mud logging (data acquisition and evaluation)
- Innovative methods in Formation Evaluation

## Guidelines for Submission of Extended Abstracts

- ✓ The material contained in the abstract is the basis for acceptance of the paper into the technical program. All abstracts will follow the same reviewing process.
- ✓ All extended abstracts must be submitted in English only. Commercial trade name and company logo should be avoided in the abstract.
- ✓ Your extended abstract should be submitted online to [uploads.spwlaindia@gmail.com](mailto:uploads.spwlaindia@gmail.com).
- ✓ These abstracts will be evaluated based on their Relevance to the theme, Novelty and Clarity. The abstract should clearly bring out the actual work done, data analysis, interpretation and accrued benefits.
- ✓ The length of the abstract should be between 1000 to 1200 words. The abstract can also have a maximum of two figures.
- ✓ The abstract should be written in Arial Font throughout.
- ✓ The first item should be the Title of the paper. This should be in 12 point Bold. The next item should be the name of the presenting author followed by co-authors and the affiliations of the authors in 10 point bold. This should be followed by the e-mail id of the presenting author.
- ✓ The body of the abstract should be in 10 point Arial font and single line spacing. Proper sub-headings may be used in the abstract for clarity.

For any queries, please contact **Ms. Soma Chatterjee**, either by phone (+91) **9428007814** or by email: [chatterjee\\_soma@ongc.co.in](mailto:chatterjee_soma@ongc.co.in)



The technical sessions mentioned overleaf should broadly revolve around the following key points.

### *Technical Session – I*

#### **Integrating Petrophysics in de-risking Exploration**

The topic focuses on Petrophysics as an important cog in the wheel of exploration. Integration of Petrophysics with other G&G data adds immense value to mitigate the inherent uncertainties in exploration of frontier and emerging Basins. Works and papers involving the use of Petrophysics in de-risking exploration of unconventional plays and other capital intensive projects such as deep water exploration may be deliberated. Studies relating to integrating Core analysis into workflows of MEMs, NMR Petrophysics and spectroscopy could be discussed. Petrophysical insights for fine tuning reservoir characterization and techno economics of complex reservoirs, applications of Petrophysics and formation evaluation in Petroleum Resources Management System may be dealt at length.

### *Technical Session – II*

#### **Maximizing Asset value in Brown fields and Mature Basins**

Managing matured fields or fields that have reached the declining stages of production has been one of the greatest and most complex challenges faced by E&P companies worldwide. The topic is intended to evince interest among participants in multi domain studies related to extending the economic producing life of brownfields. By maximizing the asset value in declining fields, companies aim to improve overall efficiency of the existing assets, bring in breakthrough technologies to control water cut and flooding, enhance production and reduce operating costs. Papers or works relating to advancements in production logging for sick well analysis, production/injection profiling and other well interventions can be subjects for deliberation. Papers or works dealing with field re-development plans, time lapse measurements and studies, exploring additional reserves and bypassed hydrocarbons through re-evaluation of existing data or through additional logging programs may be deliberated. Other interesting areas for discussion are challenges and opportunities in developing marginal fields through optimization of well platforms and implementing improved reservoir surveillance for effective reservoir management.

### *Technical Session – III*

#### **Geomechanics in E&P life cycle**

The Geomechanical continuum in oil & gas fields begin at their exploration stage, affects through the appraisal and development stages up until their eventual abandonment. Integration of Geomechanics with standard E&P workflows enables the reduction of risks associated with drilling, production and field development by improved understanding of subsurface challenges for both conventional and unconventional plays. The session would focus on geomechanical modelling for safe drilling, geo-steering and well placement, infill drilling, completion design, production, recovery etc. Geomechanical insights for wellbore stability, hydraulic fracturing, sanding prediction, etc. with broader understanding on stress anisotropies may be deliberated at length. Induced stress in oil & gas fields due to production/injection related changes in pore pressure could contribute to compaction and subsidence, fault and fracture reactivation, loss of fluids, loss of seal, and well integrity problems. Papers on integrated case studies and new approaches addressing all such issues are invited for intense deliberation thru this forum. Works on rock physics and Geomechanics integrated seismic modelling and time-lapse, or 4D, Geomechanical monitoring for predicting changes in reservoir properties during the life of the field are also solicited for presentation and publication.



## *Technical Session – IV*

### **Testing, completion and well surveillance**

This section aims to deliberate on advancement in technology for production testing through Tubing Conveyed Perforation-Drill Stem Testing, multiple zone testing (Cross-fire) and further on artificial lift, intelligent completion/ ICD/ segmented completion etc. Real time reservoir characteristics in static & dynamic conditions and transmission through wireless & satellite communication can also be discussed. Papers are invited on well integrity and well surveillance through Rig-less intervention operations in development wells as well. Advancement in different types of fracking and Gravel pack technologies and value additions there upon may be deliberated. Alternative techniques to hydraulic fracturing like Pulse Plasma technology, Gas frac (LPG, CO<sub>2</sub> etc.), Fishbone stimulation (jetting) technology etc. in the exploration and exploitation especially for difficult reservoirs and non-conventional hydrocarbon deposits can also be included. Further papers can also be submitted on challenges in Well intervention, well salvaging & related services along with latest technology available worldwide.

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## *Technical Session – V*

### **Hydrocarbon to low-carbon and no-carbon: Attaining financial resilience in new energy paradigm**

In the current global economic and environment scenario and as per defined key drivers of India's energy strategy, we must deeply ponder as the world transitions to a low-carbon future aiming towards net zero. With that perspective, this technical session aims to deliberate on different sustainable, low carbon, clean and green energy solutions like Geothermal, Coal Bed Methane, Gas Hydrates, Uranium etc. Another significant topic is CCUS that refers to a suite of technologies that can play a diverse role in meeting global energy and climate goals. CCUS portfolio includes technologies for capture, transport, storage, monitoring, and well services—to develop and deploy solutions to enable a net-zero future for the energy sector and beyond. Advanced energy technology like fit-for-purpose CO<sub>2</sub> compression technology etc. is critical to any CCUS project. Papers are invited across the industry and academia discussing and putting forth the newer lights on these future dynamics. And finally, on this very session, different pertinent energy regulatory aspects and Techno-economic decisions may be thrown light upon via technical contributions and deliberations.

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## *Technical Session – VI*

### **Value unlock from emerging technologies**

'DATA is the new OIL' is a perfect metaphor in E&P industry. Machine Learning (ML) and Artificial Intelligence (AI) provide an opportunity to upstream oil companies to minimize uncertainty and improve Asset health with enhanced operational efficiency by applying deep learning techniques and technologies. Within the Petrophysical domain, machine learning has been used to speed up workflows through automated outlier detection, well log repair & normalisation, automated well log correlation and predictive analytics. Innovative works and approaches adopted for data driven evaluation or analysis may be dealt under this technical session. Since E&P business deals with huge amount of real time and legacy data, effective data management becomes essential. Hence, renewed efforts and workflows for breaking all barriers in new age Database management is solicited in this forum. Also technical contributions are invited on emerging technology in Wireline, LWD & Mud logging data acquisition and its evaluation. Maximizing efficiency through innovative methods in Formation Evaluation is the need of the hour. All novel and unique robust approaches and leveraging the global analogues are solicited for in depth deliberation.