



IADC
SOUTH CENTRAL
ASIA CHAPTER

25
YEARS
SINCE 1998

37TH TECHNOLOGY CONFERENCE

"DRILLING – SMARTER & SUSTAINABLE"

26-27 OCTOBER 2023
TAJ LANDS END, MUMBAI, INDIA

ORGANISED BY
IADC SOUTH CENTRAL ASIA CHAPTER

UNDER THE AEGIS OF
INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS (IADC), HOUSTON

Chief Guest



Shri. Arun Kumar Singh
Chairman & CEO, ONGC

Guest of Honour



Shri. Om Prakash Singh
Director (T&FS), ONGC
Chairman IADC SCA Chapter



Shri. Pankaj Kumar
Director (Production), ONGC



Shri. Mike DuBose
Senior Vice President
IADC Houston



IADC, headquartered in Houston, USA, was founded in 1940 by a group of visionaries to assist the Industry with technical publications, safe procedures, and collaborative initiatives and over the years, IADC operates on 6 continents, and our members are the global leaders in the drilling industry. IADC's role could be evinced in the fact that it has 790 global member companies consisting of leading E&P Operators, Service companies and Equipment manufacturers and other regulatory associates.

IADC SCA chapter, India, founded & started in 1998 is one of the most vibrant and inclusive chapter globally, has grown from strength to strength with its team consisting of 28 full members and 32 associate members consisting of all major E&P operators, service companies and equipment manufacturers. In collaboration with IADC Houston, **SCA chapter over 25 years has conducted 36 Technology meets with the involvement of all its members and its People working offshore and onshore.**

IADC SCA has established 2 student chapter in India with leading Petroleum schools, Pandit Deendayal Energy University (PDEU), Gandhinagar, Gujarat and MIT, Pune. Industry members, faculty and students are working together through Internships, field visits, interaction with subject matter experts and it is adding immense value to the unique hands-on Industry Academia initiative.

IADC SCA chapter, as part of its safety initiatives, carries out collaborative and experience sharing DORIC (Drilling Operations Incident Review committee) quarterly, Offshore and Onshore for all stakeholders to learn from incidents and it has resulted in a safer work places. It has carried out multiple offshore/onshore/integrated workshops involving operational managers and rig crew in sharing matters related to incidents and how we can reduce/mitigate and eliminate incidents and accidents.

The chapter has always risen to the occasion wherever its assistance is required. In recent years, especially during COVID 19 global crisis, IADC SCA and its members, with assistance from IADC Houston, devised and executed safe processes which kept the offshore and onshore rigs working continuously. Post the unprecedented super cyclone Tauktye, IADC conducted 4 workshops virtually with Hurricane/Cyclone experts from USA/Europe and others for collaborative learnings on cause and effect and mitigation for such events in coming years.

To commemorate 25 years of completion of IADC SCA chapter, the two day Technology Conference will delve into the challenges before E&P companies, Drilling Contractors and Service providers to achieve the ultimate objective of drilling safely to hit the target pay zone. It is designed to address issues on several fronts - Energy future, Latest Advancements & Industry Challenges, Safety & ESG Norms in Drilling Industry, Diversity & Inclusivity.

Shri Om Prakash Singh
Chairman, IADC SCA Chapter

Shri Narender Jindal
Vice-Chairman, IADC SCA Chapter



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Thursday, 26th October 2023

CONFERENCE PROGRAMME

09:00 - 10:00	Delegates Registration
10:00 – 10:05	Safety Briefing by Hotel
10:05 – 10:15	Lamp Lighting Ceremony
10:15 – 10:30	Welcome address by Shri Om Prakash Singh, Chairman, IADC SCAC
10:30 – 10:40	Address by Shri Mike DuBose – Senior VP, IADC Houston
10:40 – 10:50	Address by Shri Pankaj Kumar – Director (Production), ONGC
10:50 – 11:05	Address by Shri Arun Kumar Singh - Chairman & CEO, ONGC
11:05 – 11:20	Unveiling the Journey of IADC SCA Chapter
11:20 – 11:30	Felicitation of Founding Members & Chapter's Ex-Chairman
11:30 - 11:45	Tea / Coffee Break.

DAY 1: FIRST SESSION

11:45 - 12:15

HSE & ESG in Drilling Industry – Way Forward

Digitalization in the Drilling Industry to improve Safety & Efficiency

Mr. Ramesh Venkataraman, Director & Head of the Drilling Business, Foresight Group

We as humans are always set to move science & technology to greater heights, with a desire to improve our ability to perform and live better. Over the recent years, we see several applications of technology in human life which has transformed our personal and Professional lives. This included the Energy and Oil Gas sector as well.

In the Upstream Oil and Gas sector, Drilling Industry was always behind in using latest technology and was an area where human intervention and manual labor was the maximum. With a nature of highly capital-intensive business, remote and extreme work conditions, 24 x7 work culture, assessing the risks and keeping them at ALARP levels was always a top priority.

Many of us have seen tremendous change in the past 20 years where drilling efficiency and performance has been enhanced with several application on Downhole and Surface areas. Along with this, Safety of personnel and Assets have taken a huge stride with many enhanced designs of rigs, controls, and systems in place.

In the recent years, we are seeing, technology taking a further leap forward with ML/ AI etc.

Using some of these new age technologies, the Drilling industry is also setting up for further development and areas to improve safety onboard – further reducing the dependency on Humans and manage Human behavior to respond to situations in ways to achieve, zero harm to people, environment and property.

Presentation will focus on the areas where the Drilling industry is working today, to use available tools/technologies to help improve safety & efficiency onboard to drilling safer, faster and productive wells.

ESG - Sustainability

Mr. Mohammad Anwar Momin- QHSE Manager, Shelf Drilling, India

Division & IADC SCA Chapter- Head HSE

The offshore drilling industry stands at the intersection of global energy demands, environmental conservation, and social responsibility. As the world grapples with the pressing need for sustainable energy sources, offshore drilling operations play a pivotal role in meeting these demands. However, sustainability in the offshore drilling industry encompasses a multifaceted approach, addressing environmental impact mitigation, energy efficiency, waste management, community engagement, research and development, and regulatory compliance.

This presentation explores the critical aspects of sustainability in offshore drilling, highlighting key strategies employed by industry players. It delves into innovative technologies aimed at reducing greenhouse gas emissions, preventing oil spills, and preserving marine biodiversity. The integration of renewable energy sources, efficient waste management practices, and community-focused initiatives are discussed as essential components of sustainable offshore operations. Additionally, the paper emphasizes the significance of research and development, including data analytics and artificial intelligence, in enhancing operational efficiency and reducing environmental impact.

Furthermore, the presentation underscores the importance of regulatory compliance and certifications in shaping sustainable practices within the industry. By adhering to stringent environmental regulations and obtaining certifications such as ISO 14001, offshore drilling companies demonstrate their commitment to responsible business practices and environmental stewardship.

The presentation emphasizes the need for collaborative efforts among industry stakeholders, governments, and environmental organizations to drive sustainable initiatives forward. By adopting these comprehensive approaches, the offshore drilling industry can pave the way for a more sustainable energy future while preserving the delicate balance of our oceans and coastal communities.

12:15 - 13:00

Market Outlook by S&P Global - Advancements in Global E&P Drilling & Energy Scenario:

Ms. Pamela Cordova, Principal Research Analyst, S&P Global

13:00 - 14:00

Lunch Break

DAY 1: SECOND SESSION

14:00 - 15:30

Driller's Round Table - Discussion on Energy future, Latest Advancements in

Drilling & Well services and Industry challenges :

Session Chairman : Mr. O P Singh, Director (T&FS), ONGC & Chairman, IADC SCA Chapter

Session Moderator : Mr. Lars Nydahl Jørgensen, Director, Europe, IADC

Panelist Members :

Mr Doug Halkett, Senior Advisor to CEO, **Vantage Drilling**

Mr Kurt Hoffman, Executive Vice President & Chief Operating Officer, **Shelf Drilling**

Mr Ahmed Abdelhady, Chief Commercial & Strategy Officer, **ADES**

Mr Utsav Seth, Managing Director, **Foresight Group**

Mr Ravi Sheth, Managing Director, **Greatship (India) Limited**

Mr P Venkataeswaran, Vice-Chairman, **Aban Offshore**

Mr Manav Kumar, President, **Dynamic Drilling**

Mr David McQuilkin, Marketing Director, **Transocean**

15:30 – 16:00

Drilling Sub Hydrostatic Reservoir of Mumbai High with Underbalanced Conditions :

Mr Rakesh Gupta, Chief General Manager-Drilling, ONGC

Over the period the Hydrocarbons in Mumbai Offshore have been extracted and exploited since 1972. Over the period there is depletion in the reservoir to the extent that the reservoir currently are sub hydrostatic. Presently drilling such sub hydrostatic reservoirs, with no losses / damage (mechanical or chemical) to the reservoir is a challenge. With the conventional drilling of these reservoirs, the activation, after completion also is either hindered or the potential rate of production is not achieved for the presence of infiltrates.

The same reservoirs, when drilled in underbalanced conditions, conduits the reservoir without any mud loss or damage to the reservoir, can evaluate the potential of the reservoir, increase the recovery factor, and the information can help in reservoir characterization. ONGC used this technology in year 2016 for 6 wells of Mumbai Offshore and now using again for 7 wells of which 4 wells have been completed in 1st phase and another 3 wells are planned to be completed by Dec 2023, in 2nd phase.

16:00 - 16:15

Tea / Coffee Break

16:15 – 16:45

K-BOS: Kinetic Blowout Stopper:

Mr Michael Shaw, Rig Manager, Transocean

K-BOS is a retrofittable, pyro-mechanical device that shears and seals in milliseconds no matter the object being sheared, with notable sheared tubulars including 9-1/2” Drill Collars, 6-5/8” Heavy Weight Landing String tool joint and an 18” Casing with 6-5/8” drill pipe inner string. The time spent with non-shearable tubulars across the BOP from around 300 hours to less than 1 hour per year; order of magnitude of reduction in risk exposure enabling longer casing strings.

With K-BOS ability to instantly shear and seal in less than one second, it enables the Emergency Disconnect Sequence (EDS) times to be significantly reduced and yields increased rig watch circles and/or feasibility of DP Rig operation in shallower water depths.

16:45 – 17:15

Collaboration Success Stories in India Marine Activities and Jackup Punch-Through:

Mr Wayne Allen, Director-Marine Operations, Shelf Drilling

Lack of collaboration between the Drilling Contractor and Oil Company can be detrimental to the success of an operation just as lack of collaboration in rig move planning and management of change (MOC) can be detrimental to the success of a Jackup rig move.

This presentation gives examples of collaboration efforts on the East and West Coast of India that resulted in positive outcomes in two separate “first-of-kind in India” marine operations. It shows that working together can provide results that may not have been achievable otherwise.

In addition, the presentation takes a deep dive into Jackup Punch-Throughs in India and other areas of the world and makes suggestions on how progress can be made in reducing these sometimes-fatal events. The purpose of this presentation is to celebrate collaboration success stories in India and to share Jackup Punch-Through lessons learned and mitigation strategies that may assist others in further protecting their personnel and assets.

17:15 – 17:45

Safety, Efficiency, Accuracy & Decarbonization (SEAD) for the future of Drilling Tech:

Ms. Shreya Singh, Business Development Lead, Schlumberger

Mr. Jyotishekhar Shukla, Drilling Engineer, Adani Welspun

As we gaze into the horizon of the next 30 to 40 years, the oil and gas industry is poised for a transformation of seismic proportions, driven by the seamless integration of automation, digitalization, and decarbonization. This trio of cutting-edge technologies holds the key to redefining drilling operations, offering the promise of unparalleled efficiency, unwavering safety, and pinpoint accuracy while simultaneously championing paramount environmental responsibility.

Safety : The integration of cutting-edge technologies ensures that safety is paramount. Automation reduces human exposure to hazardous tasks while predictive algorithms preemptively identify potential safety risks. Real-time monitoring and augmented reality guidance provide an extra layer of protection for on-site personnel, making drilling operations not only more productive but also safer.

Efficiency : Digitalization and automation have rewritten the efficiency playbook for drilling operations. Processes are streamlined with real-time data analysis, enabling rapid decision-making and reducing downtime. Drilling rigs now operate with precision and consistency, 24/7, with minimal human intervention, significantly improving overall efficiency.

Accuracy : The precision achieved through automation is unparalleled. Autonomous drilling rigs execute tasks with unwavering precision, reaching depths and intricacy levels that were once challenging. Digital twin technology creates virtual replicas of drilling assets, allowing engineers to fine-tune operations with unmatched accuracy and foresight.

Decarbonization : Embracing automation and digitalization enables a proactive stance toward decarbonization. Alternative fuels and renewable energy sources are seamlessly integrated, reducing the carbon footprint of drilling operations. Carbon capture technologies and optimized methane emissions controls work in concert to minimize environmental impact. The industry's path forward is one of responsible energy extraction, supporting global efforts to combat climate change.

In the age of digitalization and automation, oil and gas drilling operations are not just more efficient; they're safer, more accurate, and decidedly committed to reducing their environmental impact. This transformative journey towards sustainable drilling practices is paving the way for a future where energy needs and environmental responsibility coexist harmoniously.

17:45 - 19:15

Networking Session

19:15 - Onwards

Cultural Program & Gala Dinner

Friday, 27 October 2023

09:00 - 10:00 Delegates Registration

DAY 2 : FIRST SESSION

10:00 - 11:00

Diversity & Inclusivity: Breaking Barriers

Driving inclusive leadership practices

- **Real-Life Experiences of the Panel**
- **Success Strategies that worked for them**
- **Exploring the Positive Impact on Business**

Session Chairman: Ms. Sushma Rawat, Director (Exploration), ONGC

Session Moderator: Ms. Deepti Thakre, HR Lead, Weatherford.

Panelist Members:

**Dr. Subrata Gogoi, Professor & Head, Department of Petroleum Technology,
Dibrugarh University, Dibrugarh, Assam, India**

Ms. Suparna Singh, Head Corporate Strategy, Special Projects, Larsen & Tubro

Ms. Kopal Agrawal, Chief Procurement Officer, Hindalco Industries Limited

Ms. Pamela Cordova, Senior Rig Analyst, S&P Global Commodity Insights.

Ms. Purvi Shukla, Technical Solutions Lead - Production & Process, Schlumberger

11:00 - 11:30

New Generation Drilling Rigs - Enabling Transformation to High Performance Onshore Drilling with World Class Technologies : Mr Abhishek Thakur, Suptd. Engineer (Electrical), ONGC

ONGC is set on a transformational path towards a high-performance onshore drilling with better safety and efficiency with sustainability through lesser emissions. In this transition, the new generation drilling rigs equipped with state-of-the-art equipment and world class technologies are primary catalysts. The digital integration of equipment controls and automation in these rigs, are enablers for optimization and innovation now and in future.

The digital integration of instrumentation, control and software in these future ready rigs, are enablers for optimization and innovation. The centralized control through joysticks and HMIs with Drilling Control system has features such as soft pumping, auto drilling, auto reaming auto tripping, conditional monitoring system which has yielded excellent result in drilling complicated formations. These rigs are a step towards transformational digital technologies where, customized applications for process and operational automation enabled by data and controls, would result in faster, deeper and precise drilling. This would yield better outcome in terms of better reservoir placements which means better production and also increase in operational efficiency of the rig by reducing drilling complications, automation & control driven by data.

Efficient and low emission power generation technologies such as engines with Dynamic Gas Blending System with maximum gas substitution rates of up to 69%, Smart Engine Management System for automatic power management, energy efficient VFD technologies and catalytic converter to reduce carbon monoxide and other emissions. The specially designed self-contained fuel gas conditioning unit enable power generation at drilling rig using the unprocessed gas directly from well.

11:30 - 11:45

Tea / Coffee Break

DAY 2 : SECOND SESSION

11:45 - 12:15

Data Analytics and Machine Learning Applications to Improve Drilling Efficiency:

Ms Vanessa Pincay, Asia BDM Digital Drilling, Schlumberger

Drilling Operations generate a high volume of data every second coming from rig sensors. Although the data is available, in most cases we are not taking full advantage of it. Data analytics can be used to establish KPIs, benchmarking, identify Invisible Lost Time (ILT) and determine the main areas of improvement. For example, establishing benchmarks for pre connection and post connection will help to standardize practices among all crews, ensuring consistency in operations and reducing drilling time.

Another source of data is Daily Drilling Reports; however, the inputs are typically done manually which can lead to having wrong codes, not enough information on the activity description and on top of that, it takes several hours from our field engineers. So, what if we could have an automated reporting based on rig states? This would give more time to the field personnel to focus on operations, while having detailed and accurate data in our daily reports, which would be the foundation for data analytics.

12:15 - 12:45

Delivering Stakeholder Returns – HR the h-EnableR (Human Factor) :

Mr Vaibhav Mahajan, Region HR Manager – Asia Pacific, Halliburton

In the world that is changing at an exceptionally fast pace, the industry is changing, career aspirations of new generations are changing, the way we work is changing & to add to it, the biggest catalyst in this change is the technology. In this scenario how does HR visualize future and prepare the organization for years to come without compromising on delivering stakeholder returns today?

- Building organizational culture that creates winning organization
- Developing a culture of high performance
- Creating leaders who are influencers
- Creating an environment of cohesion to drive in one direction
- Delivering vision through future of talent
- Aligning of Vision with career aspirations
- Creating a sense of pride in delivering vision
- Returns to society – Employability Vs Employment opportunities
- Partnering with Education institutes and aligning on future of industry

12:45 – 13:30

Valedictory Session and Closing Remarks

13:30 – 14:30

Lunch

CONFERENCE PARTNERS

Sapphire

VANTAGE

Diamond



Ruby



Emerald



Topaz



Crystal



Delegate Kits by



Ever-growing value. Everlasting value.



