



# NORWEP-Saudi Aramco Workshop on Upstream Oil & Gas & Energy Technologies and Digitalisation



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7-8 February 2024, Dhahran Techno Valley Centre (DTVC), Dhahran, Saudi Arabia



## Workshop Objectives

- Norwegian Energy Partners (NORWEP) companies to present “Technologies & Innovations for Upstream Oil & Gas & Energy” through their unique value proposition (UVP)
- Technology Showcasing & B2B meetings to identify potential joint business opportunities between Saudi Aramco & NORWEP companies through collaborations/partnerships to cover “Services, Projects Technologies & Innovations”.

Moderators: NORWEP, DTVC, Saudi Aramco

## Draft Agenda

Day 1, Wednesday 07 February

08:30	Arrival & Registration
<b>Plenary Session</b> (Auditorium) Moderator Sjur Bratland	
09:30	Welcoming address - Dr. Ammar Nahwi, CEO Dhahran Techno Valley Centre (DTVC)
09:40	Address - H.E. Thomas Lid Ball, Ambassador of Norway to KSA



09:50	Keynote address - Faisal Nughaimish, VP Petroleum Engineering & Chief Petroleum Engineer, Saudi Aramco
10:00	Keynote address - Sjur Bratland, Director Middle East, Norwegian Energy Partners (NORWEP)
10:30	Coffee and networking break

Technical Sessions Part 1				
	<b>Subsurface Session</b> Auditorium Moderator Mohamed Daoudi - NORWEP	<b>Surface Session</b> Room1 Moderator Abdulkareem Alnafea- Saudi Aramco	<b>Digital Support</b> Room 2 Moderator Nasrollah Gharesifard - NORWEP	<b>Tech showcasing and exhibition</b> Main Lobby E-panels (LCD Screens)/ equipment showcase
11:00  Session 1	<b>Fishbones</b>  Stimulation Technology  A game changer in stimulation and reservoir connectivity.  Technology Introduction and case histories.	<b>XSENS</b>  Efficient high water-cut crude handling separation metering (low CAPEX and footprint). Metering – nonradioactive, non-intrusive, flow and water cut using clamp-on meters.	<b>Archer Well</b>  Real-time data monitoring: adaptation of the packer management (PMS) and DARTT technologies.	<b>Scanmudring</b>  Scanmudring's success in Saudi Arabia: Ju Amayah Hot-tap project, where we excavated underneath several pipelines in very hard seabed types.



11:20 Session 2	<b>Resman</b> Reservoir intelligence: tracer technology for the understanding of flow.	<b>Stauper Watertech</b> Enhancing produced water treatment efficiency and capacity: Through innovative oil and gas coalescence technology.	<b>Kongsberg Ferrotech</b> Robotic IMR systems for maintenance.	<b>Tomax</b> Tomax supplies a market-leading drilling regulator. Numerous benefits include increased ROP, reduced S&V and longer bit runs.
11:40 Session 3	<b>Tomax Drilling Technology</b> Drilling performance optimisation.	<b>Nicoustic</b> Non-intrusive and non-radioactive sensors for multiphase level measurement in process separators and other vessels.	<b>FutureOn</b> A combined visual design tool and secure data platform for off-shore-, subsea- and onshore field development projects	<b>CSUB</b> Free span correction tool developed together with Saudi Aramco.
12:00 Session 4	<b>InflowControl</b> Autonomous Inflow Control Valve AICV well completion.	<b>Framo</b> Innovative and reliable offshore pumping systems	<b>Kongsberg Ferrotech</b> Subsea robotics for IRM delivering permanent repairs through 3D-printing and fully automated solutions.	<b>Inflow Control</b> Physical demonstration of oil & gas separation equipment.
12:20	Lunch break			



Technical Sessions Part 2				
	<b>Subsurface Session</b> Auditorium	<b>Surface Session</b> Room1	<b>Digital Support</b> Room 2	<b>Tech showcasing and exhibition</b> Main Lobby E-panels (LCD Screens)/ equipment showcase
13:20  Session 5	<b>Archer Well</b>  Rigless well intervention and logging coiled tubing reach.	<b>FourPhase</b>  Effective Solids management for increased production while managing flaring, H2S and erosion challenges.	<b>Scanmudring</b>  Advanced robotics and remote-operated machines.	<b>Kongsberg Ferrotech</b> Subsea robotics for IRM delivering permanent repairs through 3D-printing and fully automated solutions.  <b>HMH</b> Drilling tools & equipment & digital solutions.
13:40  Session 6	<b>Toolserv</b>  Well, completion: screen saver valve (SSV) for mud control & well integrity.	<b>Soiltech</b>  Water & soil treatment.	<b>Kairostech</b>  Unlocking Control Room Efficiency: Introducing Control Room Assistant - Your Real-Time Insights and Decision Support Tool for Enhanced Situational Awareness and Informed Decision	



<p>14:00 Session 7</p>	<p><b>European Mud Company (EMC)</b> Drilling fluid additives for wellbore Strengthening and Reservoir Protection.</p>	<p><b>Acher well</b> Waste management: SS1000 swarf handling, EZ-CLEAN ditch magnets and tornar BOP cleaner tools.</p>	<p><b>Resman</b> Reservoir tracer technology digital workflows to enhance the value of Interwell tracers and improve reservoir mapping.</p>	<p><b>Resman</b> Reservoir tracer technology digital workflows to enhance value of i Interwell tracers and improve reservoir mapping.</p> <p><b>Marwell Extender</b> Composite tubular use in wells.</p>
<p>14:20-14:50</p>	<p>Coffee break</p>			<p>Lightweight and corrosion-free carbon fiber tubular for downhole use application.</p>
<p>14:50 Session 8</p>	<p><b>Toolserv</b> Well, completion: The F-1 cable clamp for the reduction of non-productive time (NPT).</p>	<p><b>Autronica</b> Integrated fire and gas safety system.</p>	<p><b>Wellsoft</b> Integration of AI solutions for the drilling process. Improved modeling of formation damage in conventional drilling. How to increase production and total recovery by reducing near-well wellbore.</p>	
<p>15:10 Session 9</p>	<p><b>VitriTech</b> Glass-based technology for Curing Major Losses and Repairing Cement Barriers in Oil and Gas, and CCS applications.</p>	<p><b>Fire Security</b> Fire security - Certified Sustainable Cable Maintenance.</p>	<p><b>FourPhase</b> Solids management while monitoring and gathering data of the 4-Phases (oil, gas, water and solids) in real-time.</p>	



15:30	End day one
19:00	DTVC Networking dinner - by invitation

## Day 2, Thursday 08 February

	<b>Subsurface Session</b> Auditorium	<b>Surface Session</b> Room1	<b>Digital Support</b> Room 2	<b>Tech showcasing and exhibition</b> Main Lobby E-panels (LCD Screens)/ equipment showcase
09:00-09:30	Coffee and registration			
09:30 Session 11	<b>Interwell</b> Well construction & operations and gas lift	<b>Vipo Solutions</b> Non-metallic surface solutions for Oil and gas industry.	<b>HMH</b> Field-proven drilling achievements through digitalisation and automation.	<b>Autronica</b> Aramco success Story: <ul style="list-style-type: none"> <li>• Marjan field development</li> <li>• Zuluf field development</li> <li>• Jafurah Phase-1</li> <li>• Master gas expansion ph-1 &amp; 2</li> </ul>
09:50 Session 12	<b>ClampOn</b> Non-intrusive sensors for topside and subsea applications.	<b>Hammertech</b> Multiphase flow metering (The Aqua Field System).	<b>XSENS</b> Real-time data monitoring, connectivity, and control solutions.	<b>Hilti</b> Leveraging Offshore Operations: utilizing virtual reality, digital twins, and QR tagging tools for modular support solutions in the oil & gas sector – ensuring precision, efficiency, and streamlined



10:10 Session 13	<b>HMH</b> A Premier drilling solution provider.	<b>Hilti</b> Optimizing offshore operations: comprehensive modular solutions for multi-disciplines – from design to prefabrication, elevating productivity, safety, and sustainability.	<b>Kairostech</b> Enhancing Operational Safety: Introducing Hazop Assistant - Your Tool for Effective Safety Analysis and Risk Mitigation	maintenance from concept to construction. <b>NOV</b> Produced water treatment technology.  <b>Kairostech</b>  Transforming emissions management: experience the power of emissions radar - real-time solutions for operationalizing e missions
10:30 Session 14	<b>Scanmudring</b> Proprietary technology to perform efficient & precise seabed Intervention with minimal environmental impact.	<b>Interwell</b> Well Integrity	<b>FourPhase</b> Solids management while monitoring and gathering data of the 4-Phases (oil, gas, water and solids) in real-time.	<b>Hammertech</b> Multiphase metering & equipment
10:50 Session 15	<b>CSUB</b> Nonmetallic products to be used for offshore and subsea.	<b>Miros</b> Night & day oil spill detection. Ocean waves and current monitoring.	<b>NOV</b> Process intelligence manager of crude oil desalting applications. applying digital tools to enable management & optimization of crude oil desalters.	<b>Abbon</b> Multiphase flow metering experiences in Aramco fields.  <b>Interwell</b> Well construction & Operations.  <b>Fishbones</b>
11:10 Session 16	<b>Marwell Extender</b> Composite tubular use in wells. Lightweight and	<b>Abbon</b> Continuous real-time measurement of volume flow rate of oil, water and gas produced from oil wells.	<b>Trisense</b> Innovative sensor technology.	Stimulation Technology A game changer in stimulation and reservoir connectivity.





	corrosion-free carbon fiber tubular for downhole use application			Technology Introduction and case histories.
11:30 Session 17		<b>NOV</b> Produced water treatment technology. Managing Produced Water in New & Maturing Fields		
12:00	Lunch Break			
13:00	Networking & B2B Session			
15:00	Closure Saudi Aramco, NORWEP/DTVC Auditorium			

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