Updated Brochure



Beach Rotana Hotel

Abu Dhabi Live in-Person

SOME OF THE TOPICS TO BE DISCUSSED AT SOGAT 2022

- Low Carbon Solutions in Gas Processing takes centre stage at SOGAT 2022
- Novel Means of Capturing CO2 in Natural Gas Plants
- Hydrogen Production from H2S
- Enhancing HSE Practices in Sour Hydrocarbon Management through Digitisation
- Digitisation Benefits in Sour Gas Conditioning
- New Developments in Materials Managment
- New Operational & Design Procedures to Improve Sulphur Recovery Efficiency
- Technology Applications to Enhance Contamination Management

SOME OF THE ORGANISATIONS PARTICIPATING IN SOGAT 2022































Organised by:



Advisory Committee

The Organisers are indebted to the following committeeb members for the considerable and ongoing support of the SOGAT event.

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Jenny Seagraves ExxonMobil, USA Mahin Rameshni RATE, USA

Saud Mudiabegh Saudi Aramco, KSA Ruben Kranenburg DUIKER, The Netherlands

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Supporters

Given its standing, SOGAT is supported annually by many sponsoring organisations and relevant media partners. The Organisers are indebted to the following who over the years have supported SOGAT and the organizers are finalizing similar participation for SOGAT 2022



















Media Partners:













GAS PROCESSING







Organisers

For further information please refer to our website www.sogat.org or contact:

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SOGAT 2022 Overview

In the Middle East which has the world's largest sour gas reserves, the pressure of demand from expanding economies, particularly in the UAE with their daily gas consumption of 7.4 bcf and Saudi Arabia, is resulting in further exploitation of their sour gas resources. Foremost among this region's projects is the Emirate of Abu Dhabi which plans to be gas self -sufficient by 2030 and ADNOC has announced the Optimum Shah Gas Expansion (OSGE) project to be completed next year. It will increase the processing capacity of the plant by 13 per cent, from 1.28 to 1.45 billion standard cubic feet per day (SCFD). Moreover, ADNOC recently called for fresh FEED contract bids for the Ghasha scheme, and have awarded contracts for two substantial onshore and offshore packages for Dalma sour gas development, part of the huge Ghasha project which is expected to be a phased development in order to de-risk the project. ADNOC's commitment to responsible oil and gas production is reflected by the signing of a strategic agreement on gas growth, CO2 reductions and carbon capture, utilisation and storage (CCUS), trading and product supply with TOTALENERGIES and they are on track to expand their CCUS capacity five-fold by 2030. The Shah gas plant has the potential to enable 2.3 million tonnes of CO2 to be captured while the Habshan plant could enable the capture of almost 2 million tonnes of CO2. In fact ADNOC's CCUS programme reinforces their position as the least-carbon intensive oil and gas producer in the world. It is also an important enabler of their holistic 2030 sustainability goals, specifically to reduce greenhouse gas intensity by 25 per cent. Such practices will be a central theme of SOGAT 2022 with international presentations on decarbonization objectives and accomplishments in gas processing. Moreover natural gas being the cleanest of the fossil fuels, as well as one of the most suitable to be paired with CCS, makes natural gas processing a key to the energy transition and something we all need to advocate for in our communities.

Similarly Saudi Aramco's efforts to reduce CCUS costs, has their scientists developing some of the world's highest capacity CO2 capture materials for large scale applications at the time when KSA's gas demand is also rising rapidly to meet electricity production. They have turned to their standalone gas reserves, most of which are sour. The latest operational gas plant is Fadhili, which takes 2.5 billion scf/d of sour gas from the expansion of the Arabiyah - Hasbah fields. As part of their expansion plans, increased associated gas from the Zuluf field will be separated and sent to the onshore Tanajib gas plant, which is being expanded to handle an additional 2.5 billion scf/d of gas . Tanajib is expected to become operational in 2025. One of the most exciting KSA announcements is that Saudi Aramco is preparing the development of their giant unconventional Jafurah gas field in the eastern region of the country, with plans to invest about \$110 billion in the project. This largest natural gas field in the Kingdom, stretching 170 km by 100 km, is estimated to contain 200 trillion cubic feet of rich raw gas. Production is expected to begin in 2024, but will not reach its target of 2.2 billion scf/d of sales gas until 2036. When operational this project will make Saudi Aramco one of the world's largest natural gas producers and it is a significant milestone both for the commercialization of gas resources in KSA and the expansion of Aramco's integrated gas portfolio, which will provide additional feedstock to support growth of the Company's high-value chemicals business, complement its focus on low-carbon hydrogen production and help reduce emissions in the domestic power sector by providing a cleaner-burning alternative to liquid fuel.

In Oman, PDO has launched the Yibal Khuff project, adding around 20,000 bbl/d to the country's overall crude output. It will also deliver 6.1 million m³/d of sour gas to be conditioned for local power generation and Oman's numerous enhanced oil recovery (EOR) projects. Kuwait's Central Agency for Public Tenders has requested bids for two Kuwait Jurassic sour gas production facilities JPF-4 and JPF-5 and KNPC is now operating the Mina Abdullah Package2 of the Clean Fuels Project. Qatar Energy has taken the investment decision to develop the North Field East Project (NFE), the world's largest LNG project, which will raise Qatar's LNG production capacity to 110mn mt/yr. In addition to LNG, the project will produce condensate, LPG, ethane, sulphur and helium. It is expected to start production in the fourth quarter of 2025. Also Qatar Energy has begun operations at its Barzan natural gas processing plant to help meet rising domestic energy demand where the plant will produce almost 1.4 billion cubic feet of gas per day. Sanctions still play a part in Iran's sour field activities and elsewhere in the region the state-owned Basra Oil Company in Iraq is continuing with its sour gas treatment plans for its Majnoon field. It has also been reported that in Egypt all of the sulphur recovery units as part of the Zohr gas field development have been commissioned and that gas production from the field has now reached 2.7 bcf/d. The area of sour gas exploitation in Central Asia is mostly centred around the Caspian Sea region, with exploration focused in both on and offshore reserves in the North Caspian arena and onshore reserves in Turkmenistan's Galkynysh Field. PETRONAS continues with their programme of monetizing and processing acid gas fields in Malaysia and TechnipFMC and Petronas Technology Ventures Sdn Bhd (PTVSB), a subsidiary of PETRONAS, have entered into an agreement to commercialise a unique natural gas processing membrane which reduces GHG emissions. Moreover Petronas have said that carbon capture is to form part of their sour gas project Kaswali Phase 2. It will be up and running in 2025, and its second part in 2026. Kaswari 2 is being touted as the largest CCS project of its type in the world, with 4 million t/a of CO2 to be captured over the project's anticipated 20 year operating life. CO2 extracted and compressed from the project will be piped 135 km to the M1 field, where it will be re-injected into a depleted reservoir. China is also developing sour gas processing plants with the latest being in Chuandongbei. Sour gas production in North America continues to run down . However the world's first fully integrated natural gas CCUS unit for net zero operations has been announced in Canada.

The technologies involved in sour field development and production are and will continue to progress and the latest developments across the whole sour hydrocarbon management spectrum will be included in the well-respected SOGAT Conference Programme, with low-carbon solutions in gas processing taking centre stage primarily as natural gas is seeing a huge increase in demand due to its abundance, variety, and decreased carbon dioxide emissions, which is boosting the global gas processing business. In addition, the development of various novel procedures in the gas processing business will increase the technical and economic viability of the industry's operations. By reducing energy usage, these solutions will help the gas processing industry save costs and achieve significant cost reductions.

So together with the latest and new technical developments displayed in the associated SOGAT EXHIBITION, SOGAT 2022 will not only provide unique in-person opportunities to review the most recent activities for attendees to employ in their own environments, but also a venue to re-engage in business opportunities.

CONFERENCE PROGRAMME

DAY 1 - Tuesday, September 6th



07.30	REGISTRATION
08.00	WELCOME AND OPENING KEYNOTE ADDRESS, NATURAL GAS DECARBONISATION – THE WAY FORWARD H.E. Yousif Ahmed Al Ali , Assistant Undersecretary for Electricity , Water and Future Energy Affairs , Ministry of Energy & Innovation, UAE
08.15	SESSION A Chair: Mohammad Al Haji, Tecscope, KSA KEYNOTE PRESENTATION - CCUS OPPORTUNITIES IN GLOBAL ENERGY TRANSITION, Aaesha Khalfan Al Keebali , ADNOC, UAE
08.45	KEYNOTE PRESENTATION - CCUS GLOBAL STATUS AND BUSINESS MODELS Mohammad Abu Zahra , Global CCS Institute, UAE
09.20	UAE GAS OUTLOOK & THE IMPORTANCE OF SOUR GAS RESOURCES Radhika Bansal, Rystad Energy, Norway
10.00	REFRESHMENTS
10.30	CO2 STORAGE – CHALLENGES AND TECHNOLOGY Ahmed Sabry, SCHLUMBERGER, UAE
11.10	RECOVERY OF CO2 FROM SULPHUR PLANTS Nathan Smith, WORLEY, UAE
11.50	PANEL SESSION
12.15	LUNCHEON
13.30	SESSION B Chair: Nathan Smith, WORLEY, UAE REDUCING CARBON FOOTPRINT BY MONETIZING CAPTURING PROCESS WASTE ENERGIES Mohammad Al Haji, Tecscope, KSA
14.10	HYBRID MEMBRANE AND SOLVENT ACID GAS ENRICHMENT FOR ENHANCED CO2 CAPTURE Milind Vaidya, Saudi Aramco, KSA
14.50	REFRESHMENTS
15.20	A NOVEL APPROACH OF CO2 REMOVAL FROM NATURAL GAS Mahin Rameshni, RATE, and Kaaeid Lokhandwala ,MTR,USA
16.00	PANEL SESSION
16.30	END OF DAY1

CONFERENCE PROCEEDINGS
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CONFERENCE PROGRAMME

DAY 2 – Wednesday, September 7th



09.00	SESSION C Chair: Mahin Rameshni, RATE, USA SAUDI ARAMCO SIMPLIFIED SULFUR RECOVERY TECHNOLOGY Hamad Fahan, Saudi Aramco, KSA
09.40	IMMERSE AND INSIGHT: DIGITAL TOOLS TO OPTIMIZE THE OPERATION OF YOUR SULPHUR RECOVERY UNIT Steve Pollitt, COMPRIMO, UAE
10.20	REFRESHMENTS Sponsored By: ASSOCIATES Sponsored By: RAMESHNI & ASSOCIATES TECHNOLOGY & ENGINEERING LLC
10.50	A SOFT ANALYZER FOR THE CONTINUOUS ANALYSIS OF BTEX EMISSIONS FROM THE FURNACE OF SULFUR RECOVERY UNITS Abhijeet Raj Gupta, Indian Institute of Technology Delhi, India
11.30	PANEL SESSION
12.00	LUNCHEON
13.30	SESSION D Chair: Abhijeet Raj Gupta, Indian Institute of Technology Delhi, India CREEPING OUT OF THE 90'S - CREEP RESISTANT REFRACTORIES FOR THE THERMAL REACTOR, Nigel Longshaw, DSF Refractories and Minerals, UK
14.10	DIGITALISING THE SAFETY LIFECYCLE IN SOUR GAS APPLICATIONS Andrew Dennant, HIMA Middle East FZE, UAE
14.50	HOW ENHANCED REALITY TECHNOLOGY REDUCES HUMAN ERRORS THROUGH INCREASED OPERATOR COMPETENCY IN SOUR GAS OPERATIONS Ahmed Alaa, VOOVIO, UAE
15.30	PANEL SESSION
16.00	SOGAT GALA RECEPTION

CONFERENCE PROCEEDINGS
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CONFERENCE PROGRAMME

DAY 3 – Thursday, September 8th



08.00	SESSION E Chair: Saud Mudiabegh, Saudi Aramco, KSA NOVEL PROCESSES FOR LEAN ACID GAS UTILIZATION FOR SULHUR PRODUCTION WITH HIGH EFFICENCY Abhijeet Raj Gupta, Indian Institute of Technology Delhi, India
08.40	NGL QUALITY JOURNEY TOWARDS DIGITALIZATION AT SAUDI ARAMCO Taib Abang, Saudi Aramco, KSA
09.20	REFRESHMENTS Sponsored By: ASSOCIATES TECHNOLOGY & ENGINEERING LLC
09.50	RECOVERING H2S AND CO2 FROM WASTE STREAMS Mahin Rameshni, RATE, USA
10.30	GAS PRECONDITIONING ENHANCEMENT TO REDUCE CONTAMINANTS CARRYOVER Mohammed Rumaih, Saudi Aramco, KSA
11.10	COUPLING SOUR RESOURCES AND A GREEN ECONOMY: HYDROGEN FROM HYDROGEN SULFIDE Ryan Gillis, THIOZEN Inc, USA
11.40	PANEL SESSION
	أرامكو السعودية CONFERENCE PROCEEDINGS Sponsored by: saudi aramco
12.10	CLOSING SESSION
	Award For Best Paper
	Recognition of SOGAT Event Support
	Attendee Prize Draw
12.35	CONFERENCE CONCLUDES







Exhibition

The SOGAT Exhibition is a featured part of the SOGAT event and year on year sponsors and service companies return to the event given the quality and number of senior level management who attend.

SOGAT is one of the most established and important specialised events in the international oil & gas calendar with a particular focus on the Middle East.

The Exhibition, which runs on September 6th t0 8th, and will include equipment and services focusing on the themes of the event. Interested parties are requested to contact the Organisers.

Exhibition Visitors

Given the number of planned sour gas field developments in the region, the Organisers are mounting a detailed and aggressive exhibition visitor campaign to allow all interested parties to view and discuss the latest developments and expertise that the international exhibitors will be displaying during SOGAT 2022

The exhibition is free to attend for visitors who must register at www.sogat.org.

Further details on the exhibition can be obtained from nick@domeexhibitions.com.

Networking

SOGAT Refreshments

This is the perfect opportunity to meet your hosts and fellow delegates and exhibitors plus special guests in an informal setting in the exhibition area. All conference participants are invited to attend. This is an ideal chance to renew old acquaintances and a useful opportunity to interact with speakers and fellow delegates during the SOGAT Conference.

SOGAT Gala Reception

This special event offers superb networking opportunities and a unique chance to foster new business relationships.

Delegates, exhibitors and their partners are welcome to attend and dress is smart casual.

Venue & Accommodation

SOGAT 2022 will be held at the Beach Rotana Hotel, in the heart of Abu Dhabi. Ideally located in the heart of the capital's business and shopping districts, the Beach Rotana is set on its own stretch of private beach in the Tourist Club Area on the shores of the Arabian Sea in Abu Dhabi. The hotel is 30 minutes away from Abu Dhabi International Airport and 90 minutes from Dubai International Airport. Home of the prestigious Abu Dhabi Trade Centre, the hotel is directly linked by an exclusive passageway to the Abu Dhabi Mall which houses international brands, a 6 screen cinema and entertainment venues.

The registration fees for the event does not include accommodation and delegates are responsible for booking their accommodation. Hotel bedrooms have been reserved for delegates at a preferential rate at the Beach Rotana.



Beach Rotana Hotel 10th Street, Al Zahiyah Area Abu Dhabi, United Arab Emirates T: +971 2 6979000 F: +971 2 6442111 The registration fee for the event does not include accommodation and delegates are responsible for booking their accommodation. Hotel bedrooms have been reserved for delegates at a preferential rate at the Beach Rotana Hotel

There is a special online accommodation booking facility available at www.sogat.org/accommodation.

Registration

SOGAT 2022 Conference Fee

US\$ 1,375 (AED5050)

The fee includes luncheons, refreshments and the Proceedings together with attendance at the SOGAT Conference Gala reception

VAT at 5% will be added to all registration invoices

PLEASE NOTE OPERATORS MAY ATTEND FOR FREE but must register either online at www.sogat.org or by sending an email to nick@domeexhibitions.com

How to Register

- Register at www.sogat.org and complete the online Registration Form
- Tel: +971 56 100 2149 to contact Nick Coles to reserve Conference places
- Email: nick@domeexhibitions.com to reserve Conference places

How to Pay

Payment can be made, either:

- **5** by making your cheque payable to
 - Dome Exhibitions, in AED only and forwarding the cheque to Dome Exhibitions, PO Box 52641, Abu Dhabi, UAE
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Copies of bank transfer documents should be sent to the Organisers and all bank transfer charges will be the responsibility of the delegate's organisation. All delegates will receive an official attendance invoice together with their joining instructions but their participation is not confirmed until payment has been received. The Organisers will not permit delegates to enter if fees are not paid before the event.

- Cancellations: All cancellations must be received in writing. Cancellations received until August 25th are subject to a service charge of US\$350 (AED1,285). The Organisers reserve the right to retain the whole fee if cancellation is received after that date.
- Delegates may be substituted at any time.