

Mohammed Y. Al Qahtani Senior Vice President – Downstream Saudi Aramco

# Connecting Futuristic Global Pipeline Sectors

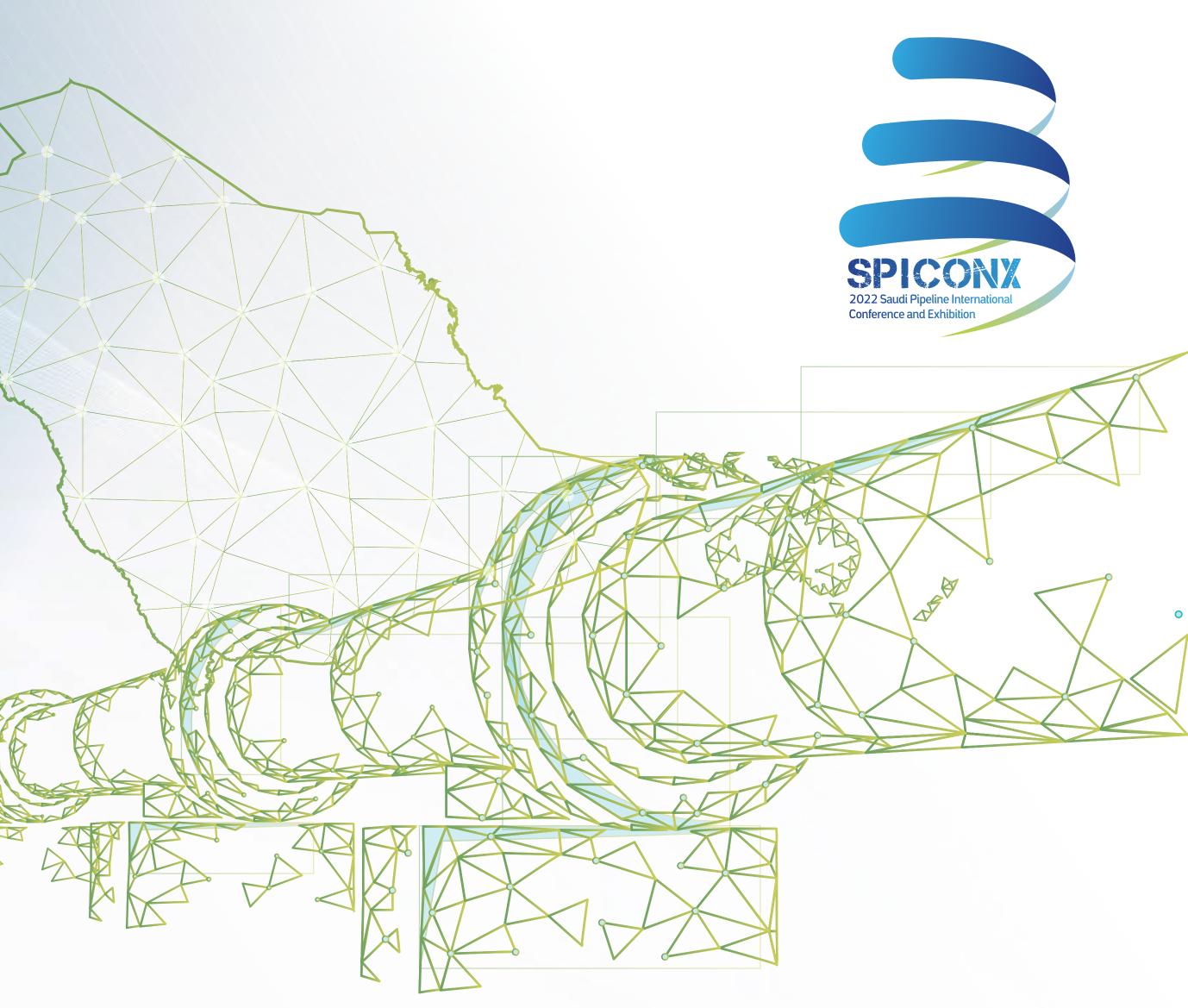


Pre-Conference Workshop 3 October 2022

> Main Conference and Exhibition 4 - 6 October 2022



Dhahran Expo Dammam, Eastern Province Kingdom of Saudi Arabia









# Special Note by SPICONX President



### Abdullah M. Al Mansour

Vice President - Pipelines Distribution & Terminals Saudi Aramco "2022 Saudi Pipeline International Conference and Exhibition (SPICONX) will demonstrate the importance of the pipeline sector, and the need for developing and implementing advanced pipeline systems to create a sophisticated network across the globe to enhance the supply and demand of the most precious commodities.

The 3 Day conference and exhibition will highlight the innovation and technology advancements in the pipeline sector, whilst providing a highly conducive platform for the industry experts and pipeline enthusiasts from across the globe to achieve "Business and Technical Acumen in the Pipeline Sector". With the vision to connect the global pipeline fraternity under one roof, this will be the perfect platform to meet, network, exchange ideas and forge new business relations".

# Welcome Note by SPICONX Chairman



# Mohammad A. Al-Hatlani General Manager - Pipelines Saudi Aramco

I look forward to welcoming you in person in the Saudi Pipeline International Conference and Exhibition.

On behalf of the Organizing Committee and Saudi Aramco Pipelines Organization, it is a great pleasure and honor to invite you to the 1st Saudi Pipeline International Conference and Exhibition "SPICONX", which will take place in Dhahran EXPO from 3-6 October 2022. This is the very first time. a conference dedicated to the Pipelines sector with this magnitude is ever hosted in the Middle East for the global Pipelines fraternity.

Operating under the theme "Connecting Futuristic Global Pipelines Sector" SPICONX's vision is to gather 'Pipeliners' from around the globe and establish an international platform to connect and build on the successes achieved so far and shape the future. The importance of SPICONX comes from the fact that Pipelines sector is facing critical transformation challenges and great opportunities alike to achieve Operational Excellence and sustain reliable energy supply to the world. I believe that SPICONX will allow all involved businesses in the galaxy of Pipelines sector to contribute in achieving its vision.

My sincere gratitude to all our partners and invited speakers for accepting our invitation and helping us create a world class event. I also want to express my sincere appreciation to the members of the Technical Committee and Organizing Committee for the time and energy they have devoted to provide world class event.

# Overview

The oil and gas pipelines sector is one of the main energy sectors and the largest industrial infrastructures that have been recently attracting humongous investments globally. According to the Global Energy Monitor, there were at least 2,381 operational oil and gas pipelines distributed across some 162 countries as of December 2020. The combined length of these pipeline's is more than 1.18 million km (730,000 miles) – enough to circle the Earth 30 times. Middle East, being one of the largest contributors to the global energy supply, have more than 400 active pipelines and the longest crude oil and gas pipelines network been constructed by Saudi Arabia.

With the increase in pipelines projects linking countries and continents around the world, the associated financial and busines's commitment's are huge and thus the robustness and reliability of pipelines systems are of paramount importance to societies at large. The pipelines sector is expected to register a CAGR of more than 6.5% during the forecast period, 2022 - 2027 and thus the importance of SPICONX is established.

In parallel, the rapid evolution in pipelines technologies, the introduction of new services like hydrogen and carbon dioxide to support the future of decarbonization, and the vital importance of sustaining the energy transportation via current and future pipelines necessitates the global pipelines sector to unite and lead the transformation.

The primary objective of SPICONX is to establish a professional environment which facilitates the exchange of pipelines industry best practices in order to allow attendees to exchange knowledge and expertise which can be used to optimize pipelines design and operational strategies. In addition, new models and technologies will be presented allowing participants to acquire up-to-date knowledge and awareness of industry evolution.

SPICONX will offer the greatest connection for Pipelines Operators, Maintainers, Designers, Technical Professionals, HR SME's, HSE Practitioners, Technologies Developers & Service Providers, Global Business and Strategic Thinkers, Entrepreneurs and Business Creators, Innovators, Software Developers, Economists and Finance Experts, Policy Makers, Public and Government Planners, and Universities, Researchers and Students that the region has ever seen.

We are pleased to announce the first "Saudi Pipeline International Conference and Exhibition (SPICONX)" from 3-6 October 2022 at the Dhahran EXPO. The conference and exhibition will provide a holistic life cycle view of pipelines covering the latest technologies and business transformation attempting to shaping the future beyond imagination.





# Event Highlights



**10+ Hours** of pre-scheduled one-one business meetings



50+ Speakers



**20+ Hours** of Technical Workshops





20+ Hours of Plenary/Breakout Sessions



**20+ Hours** of Networking Sessions



3000+ Visitors



1000+ Attendees





# What to Expect at SPICONX



### **Plenary Sessions**

With the conference registering over 50+ international and regional experts, the participants will get a chance to hear thought provoking presentations detailing the efficacy of advanced pipeline systems.



### **Technical Workshops**

The workshops will provide an exclusive opportunity to limited number of attendees to understand the in-depth technical elements involved in the successful operations of complex pipeline structures.



### One - One Meetings

The one-one meetings scheduled between the prospective buyers and technology providers will be conducted in a private discussion room, thus giving absolute privacy leading to formal discussions and potential business tie-ups.



### Awards

SPICONX jury will be awarding the most deserved candidates/companies in categories such as but not limited to: "Products Showcased; Plenary Presentations, Poster Sessions, Best Booth Designs".



# **Product Demonstrations**

Technologies and products revolutionizing the global pipelines industry will be presented by over 100+ exhibitors/sponsors, thus giving the participants and visitors a firsthand view into the future of pipelines.



# **Poster Presentations**

Ensuring SPICONX supports the young talents, students and academicians will stand a chance to present their technical findings through various poster sessions during the conference.



# Who should Attend

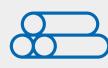




Engineering **Design Firms** 



**Pipeline and Asset Construction** Companies



Materials and Equipment **Suppliers** 



**Logistics Service** Providers



# **Delegates and Visitors**









# **Sponsors and Exhibitors**



AI and Machine Learning



IoT companies



Safety and Security Providers



Environmental **Protection Agencies** 





Other Technology Providers





# Our Technical Workshop Moderators



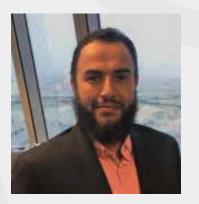
Essam A. Al-Arfaj, Valves Engineering Consultant, Saudi Aramco



Saad M. Al-Shiha, Valves Consultant, Saudi Aramco



Mousa R. Al-Harbi, Nadhir Al-Nasri, Valves Engineering Consultant, Pipelines Engineering Saudi Aramco Consultant, Saudi Aramco



Khalid S. Al-Ghamdi, Inspection Engineering Consultant. Saudi Aramco



Rafael G. Mora, Integrity Management Consultant, Saudi Aramco



Naim M. Dakwar, External Corrission Consultant, Saudi Aramco





Dr. Husain M. Al-Muslim, Pipelines Engineering Consultant, Saudi Aramco



Pablo Genta, Process Automation and Technology Consultant, Saudi Aramco



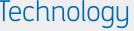
Ahmad Al-Malki, Cathodic Protection Specialist, Saudi Aramco



Dr. Qasim Saleem, Offshore Pipeline Specialist, Saudi Aramco



Dr. Feras Al-Fosail, Offshore Pipeline Specialist, Saudi Aramco





# Morning Session - Monday, 3 October 2022

	Workshop 1 - Full Day	Workshop 2 - Full Day	Workshop 3 - Full Day	Workshop 4 - Half Day
Time	Title - PIPELINE CONSTRUCTION AND PIPELINE TRENCHLESS CONSTRUCTION	Title - SUBMARINE PIPELINES DESIGN, INSTALLATION AND MAINTENANCE	Title - PIPELINE VALVES SELECTION AND ISOLATION METHODS	Title - IMPROVE PIPELINE SCRAPING OPERATIONS
08:00 - 09:30	Session 1 - Pipeline trenchless construction types and techniques	Session 1 - An overview of the design, installation and maintenance aspects of submarine pipelines and marine risers	Session 1 - An overview of the pipeline valves and the need for effective isolation valve selection	Session 1 - Adopting various practices, procedures and implementing certain benchmarks to achieve efficiency in pipeline scrapping
09:30 - 09:45	Coffee Break	Coffee Break	Coffee Break	Coffee Break
09:45 - 12:00	Session 2 - Types of pipeline installations	Session 2 - Various components in the submarine pipeline system and its benefits	Session 2 - Utilizing best practices in isolation methodologies to help in reducing the risk of releasing hazardous pipeline content during intrusive activities such as scraper handling, hot tap and sampling operations	Session 2 -Implementing success criterion and Key Performance Indicators (KPIs) to measure the efficiency and effectiveness of the scraping program
12:00 - 13:00	Prayer and Lunch Break	Prayer and Lunch Break	Prayer and Lunch Break	Prayer and Lunch Break
13:00 - 15:00	Session 3 - Pipeline installation of underground pipelines	Session 3 - Setting up efficient pipeline inspection processes and identifying new trends and technologies used in submarine pipelines	Session 3 - Presenting isolation valve type/- design selection for major applications like ZV, mainline, trap, Emergency Isolation (EIV) ro- tating equipment isolation, surge protection skids isolation, pressure reducing isolation and other major applications.	NA



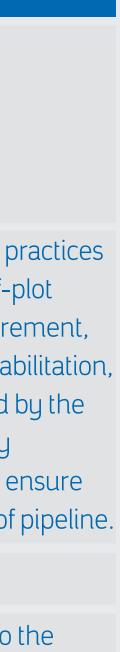
# Morning Session - Monday, 3 October 2022

	Workshop 1 - Full Day	Workshop 2 - Full Day	Workshop 3 - Full Day	Workshop 4 - Half Day
Workshop Facilitator	Nadhir Al-Nasri, Pipelines Engineering Consultant, Saudi Aramco	<ul> <li>Dr. Qasim Saleem, Offshore Pipeline Specialist, Saudi Aramco</li> <li>Dr. Feras Al-Fosail, Offshore Pipeline Specialist, Saudi Aramco</li> </ul>	<ul> <li>Saad M. Al-Shiha, Valves Consultant, Saudi Aramco</li> <li>Essam A. Al-Arfaj, Valves Engineering Consultant, Saudi Aramco</li> </ul>	<b>Dr. Husain M. Al-Muslim,</b> Pipelines Engineering Consultant, Saudi Aramco
Details	Click Here to Access his Profile	Click Here to Access their Profiles	Click Here to Access their Profiles	Click Here to Access his Profile



	Workshop 5 - Half Day	Workshop 6 - Half Day	Workshop 7- Half Day	Workshop 8 - Half Day	Workshop 9 - Half Day
Time	Title - PIPELINE VALVES MAINTENANCE, OPERATIONS & INTEGRITY	Title - PIPELINE INTEGRITY AND MACHINE LEARNING MANAGEMENT (MLM)	Title - ADVANCED PIPELINE CATHODIC PROTECTION: CONCEPTS, INSPECTION TECHNOLOGIES, MEASUREMENT TECHNIQUES AND ASSESSMENT METHODS	Title - DIGITIZING VALVES AND ACTUATORS MANAGEMENT - AN AI-BASED SOLUTION	TITLE - PIPELINES INSPECTION PRACTICES
13:00 - 14:30	Session 1 - Ensuring the continued success in pipeline integrity	Session 1 - Part I The Framework: Pipeline Integrity needs & opportunities; traditional software versus machine learning; Phenomena Behavior, Performance & Prediction; CRISP-DM & PI management systems (PIMS)	Session 1 - An overview towards external protection of buried pipelines and application of reliable coating and effective cathodic protection (CP)	Session 1 - Identifying the operational, technical problems and the cost implications due to faulty valves and actuators	<ul> <li>Session 1 – International best print in ensuring the integrity of off-print pipeline during design, procures construction, operation &amp; rehable and techniques to be followed by Inspection Team to detect any abnormalities and fix them to ensure sustainability of the integrity of print procures of the print procures of print procures of the print procures of the print procures of print procures of the print procures of print procures of the print procures of procures of print procures of print procures of print procures of print procures of procures of print procures of print procures of procures o</li></ul>
14:30 - 14:45	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
14:45 - 16:00	Session 2 Implementing specific operation schemes and maintenance techniques for valves maintenance	Session 2 - Part II The Synergy: Pipeline Integrity machine learning management (PI-mL); moving from correlation to causation; threat identification & unsupervised mL modeling; degradation & supervised modeling; pipeline nature of distance/time-series; Optimization processes	Session 2 - A detailed understanding of CP fundamentals, inspection technologies, measurement techniques and assessment methods	Session 2 - An insight into current tools available to overcome the presented challenges and achieve substantial benefits by utilizing emerging AI tools to provide end-users with solid basis for an effective decision-making	Session 2 – A detailed look into the Inspection Practices "Detections using I.R. 4.0 and its associated benefits.

# Afternoon Session - Monday, 3 October 2022



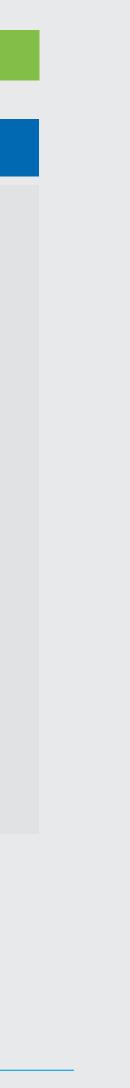
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	Workshop 5 - Half Day	Workshop 6 - Half Day
Workshop Facilitator Details	Mousa R. Al-Harbi, Valves Engineering Consultant, Saudi Aramco	Rafael G. Mora, Integrity Management Consultant Saudi Aramco
Details	Click Here to Access his Profile	Click Here to Access his Profile

# Afternoon Session - Monday, 3 October 2022

Workshop 7 - Half Day	Workshop 8 - Half Day	Workshop 9 - Half Day
<b>Naim M. Dakwar,</b> External Corrission Consultant, Saudi Aramco	<b>Pablo Genta,</b> Process Automation and Technology Consultant, Saudi Aramco	<b>Khalid Al-Ghamdi,</b> Inspection Engineering Consultant, Saudi Aramco
<b>Ahmad Al-Malki,</b> Cathodic Protection Specialist, Saudi Aramco		
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# Agenda

### Day 1 – 4 October 2022

07:00 - 08:00	Reception and Registration of Participants	
	Opening Ceremony:	
08:00 - 08:05	Conference Organizer Speech	
08:05 - 08:10	Day 1 Opening Remarks by Conference Chair	
08:10 - 08:20	Speech by the Guest of Honor	
08:20 - 08:40	Keynote Presentation	
08:40 - 09:00	Keynote Presentation	
09:00 - 09:20	Strategic Partner Presentation	
09:20 - 09:40	Felicitation of Top-Tier Sponsors	
09:40 - 11:00	Inauguration of Exhibition by the Guest of Honor and VIP's	

### Technical Tracks and Plenary Sessions

### 09:40 – 11:20: Track 1 – Green Energy Pipelines

- Green & Blue Hydrogen, Ammonia, CO2 & Other Products Transportation
- Clarity of Supply and Demand and Decarbonization Targets
- New Pipelines and Assets Design Considerations
- Conversion of Existing Pipelines Network Challenges
- Safe Operations and Handling
- Standards, Permits and Regulations for New Products
- Integrity Challenges and Solutions
- Associated Assets and Instrumentation Retrofit
- Emergency Response
- Environmental Management

#### 11:20 - 11:40 Networking Coffee Break

### 11:40 – 12:40: Track 2 – Smart Pipelines for Future

- Fourth Industrial Revolution & Digitalization
- Machine Learning, Modeling, Predictive Analytics Applications for Pipelines & Facilities
- Pipelines Management Enterprise Solutions
- Operations Research Applications on Pipelines
- Products Quality Analysis & Monitoring
- Research & Development
- Smart Materials Applications
- Robotics Application for O&M

12:40 - 14:00 Prayer, Lunch and Networking Break

14:00 - 15:00 Continuation of Session 2

### 15:00 – 16:30: Track 3 – Strategic Planning & Economics

- Pipelines Planning & Urban Development
- Pipelines Role in National Economics
- Pipelines Financial Evaluations & Models
- Cross-Countries Borders Pipelines Importance & Economics
- Socioeconomics Studies, Community Involvement, and Permitting Strategies
- Operating Companies and Originations Interface Management
- Lands & Corridors Reservations, Permits & Management

#### Closing Remarks by Conference Chair and End of Day 1 Conference 16:30:



# Agenda

# Day 2 – 5 October 2022

- 07:00 08:10 Reception and Registration of Participants
- 08:10 08:20 Day 2 Opening Remarks by Conference Chair

### 08:20 – 10:45: Track 4 - Design, Manufacturing, Construction & Project Management

- On-Shore & Off-Shore Pipelines Design
- Pipelines Pump Stations, Compressors Stations, Tanks, Vessels and Support Systems Design
- Pipelines Scraper Traps & Valves Design
- Pipelines Manufacturing Methodologies & Technologies
- 3D Printing and Latest Manufacturing Technologies
- Non-Metallic Applications
- Measurement Systems
- Hydraulic Simulations and Flow Assurance
- Pipelines Project Management & Execution Strategies
- Pipelines Project Commissioning Best Practices
- Construction Equipment, and Machines

#### 10:45 - 11:15 Networking Coffee Break

### 11:15 – 12:40: Track 5 - Operations, Inspections, Maintenance & Integrity Management

- On-Shore & Off-Shore Pipelines Operations and Integrity Managment
- Operations' Planning, Scheduling and Challenges
- Pipelines Network Operations & Optimizations
- Maintainability, Availability & Reliability Studies, Programs & Systems
- Maintenance & Repair Programs, Technologies and Best Practices/Methods
- O&M Equipment, Machines and Tools
- Testing & Inspection Programs Technologies
- Pipelines Monitoring & Control Centers
- Pipelines Facilities Integrity Management & Systems
- Corrosion & Cracks Management Monitoring, Evaluations, Modeling and Predictions
- Defects & Conditions Assessments & Management
- Data Management Systems and GIS
- Cleaning, ILI Programs Operations, Assessment, Logistics & New Technologies
- Flow Assurance Improvements
- Products Quality Measurements Sampling Systems, and Analysis
- Pipelines Surveillance Technologies
- Pipelines Rehabilitation Programs
- Operational Excellence Programs and Compliance

12:40 - 14:00 Prayer, Lunch and Networking Break

14:00 - 15:00 Continuation of Session 5





# Agenda

### 15:00 – 16:30: Track 6 - Safety, Security, Health & Environmental Management

- Safety Management System
- Pipelines Security Management and Technologies
- Pipelines and Facilities Surveillance, Corridors Riding and Monitoring
- Environmental Management System
- Ground Water Protection and Water Preservation
- NORM Contamination (Control, Storage, Handling & Monitoring)
- Flaring Minimization Technologies and Systems
- Fugitive Emissions / LDAR
- New Technologies and Innovations

#### 16:30 Closing Remarks by Conference Chair and End of Day 2 Conference

### Day 3 – 6 October 2022

07:00 - 08:10	Reception and Registration of Participants
08:10 - 08:20	Day 3 Opening Remarks by Conference Chair
08:10 - 08:20	Day 3 Opening Remarks by Conference Chair

### 08:20 – 10:00: Track 7 – Risk Assessment & Management

- Hazards Identification
- Risk Analysis, Assessment & Evaluation
- Risk Assessment Methodologies & Implementation Strategies
- Risk Management System
- HAZOP Studies, Emergency Response and Contingency Planning

#### 10:00 - 10:40 Networking Coffee Break

### 10:00 – 11:20: Track 8 - Human Resources Development for Pipeliners

- Continuous Learning
- Professionals and Industrial Workforce Development
- Leadership Development
- Learning Technologies for Expediting Growth
- Pipelines Organizations' Design & Manpower Planning
- Preparing Workforce and HRM Challenges
- Virtual Reality and New Learning Technologies

### 11:20 – 13:00: Track 9 – Pipelines Facilities Instrumentation & Logistics

- Power and Communications Infrastructure Planning, Design & Optimization
- Pipelines Remote Considerations & Solutions
- Wireless Communications and Power
- Control Systems and Instrumentations
- Compression and Pump Stations Operations and Automation
- Wind Turbines and Fuel Cells for Power Supply
- Logistics Support During Normal and Emergency Operations

#### Final Remarks by Conference Chair, followed by Networking Lunch 13:00



# Sponsorship Opportunities

Being the first and only one of its kind in the Kingdom of Saudi Arabia, the "Saudi Pipeline International Conference & Exhibition" is a must attend for companies looking to:

**1. Capitalize Market Opportunities -** Unlock doors to a new world of business opportunities by hearing from the key stakeholders about the latest and upcoming pipeline projects in Kingdom. Find out their challenges and gain a competitive edge by customizing your sales pitch to fit their requirements.

2. Attend Pre-Scheduled one - one business

**meetings** - Grab a chance to cherry pick and meet high-profile prospects of your choice! A week preceding the event, we will send you the final list of confirmed delegates, and based on your preference we will arrange 1-1 meetings with them at your dedicated networking area.

3. Meet High Profile Representatives -Every attendee in the summit will be scrutinized so that we only get on board the decision makers or an influencer, hence amplifying your ROI.

**4. Receive Delegate Directory -** We understand that it's nearly impossible to meet and exchange business cards with all delegates over the two days and we also know every data counts, so, we are here to rescue! Post the event we will share the contact coordinates of all the participants and help you build a robust database.

**5. Invite potential clients -** Have a special client in mind and finding hard to meet? We have got you covered again. Just let us know the list comprising of company name, person name or job titles and we will get them on board.





# How can you participate?

all the below options in their packages:

# **Thought Leadership:**

Position your company as a thought leader by delivering a presentation or moderating/participating is one of the Panel Discussions. If you want to present your capabilities or offerings to a room full of key decision-makers that are part of your target market, this option is for you!

# **Branding and Marketing:**

Position your brand among key decision makers even before your travel to the event. Have your company's logo listed on all marketing collaterals and digital channels, thus giving you the brand recognition your company's logo deserves.





# Each package is tailored based on your objectives and requirements, however most companies participating opt for one or

# **Networking/Exhibition Booths:**

Utilize the space provided to display your solutions whilst engaging your prospects in one-to-one meetings







**Pre-Conference** Workshop **3 October 2022** 

Main Conference and Exhibition **4 - 6 October 2022** 



# For Speaker Opportunities:

speakers@spiconx.sa

Opportunities :

sales@spiconx.sa



# For Sponsorship/Exhibition

# Organized by:

