





# Conference Topics - Rio Pipeline & Logistics 2025

#### **Technical Tracks**

# Control Room & Automation

E.g.: Cyber Security. Control Room Management. Supervisory Systems. Measurement and Metering. Sensoring Technologies. Automation and Instrumentation. Leak Detection.

### Subsea Systems

E.g.: Rigid pipelines and risers. Flexibles and umbilicals. Ultra deep-water challenges. Flow Assurance. Sensoring technologies and monitoring systems. Design. Installation. Pre-commissioning. Decommissioning. Welding processes. CFD. Fracture, fatigue, collapse. VIV. On bottom stability and pipe soil interaction. Operational experiences and lessons learned. Submarine drones.

### **Logistics and Operation**

E.g.: Operational Excellence. Optimization of Pipeline Systems and Networks. Capacity expansion and cost reductions studies. Operation Management Systems and Technologies. Hydraulic Simulations. De-bottlenecking. Reduction of interfaces in multi-products pipelines. Management Systems and Technologies for Pipeline Operation. Certification. Multimodal transport. Ship demurring. Machine Learning.

## Risk & Reliability

E.g.: Reliability Engineering. Risk Based Inspection and Maintenance Planning. Human Reliability. Business Continuity and Crisis Management. Contingency Plans. Failure Data Analysis. Failure Consequence Analysis. Risk Assessment and ALARP Demonstration. Risk Tolerance Criteria. Process Safety and Operational Risk Management. Safety and Security Barrier Management. Cyber-Risk Analysis.

### Structural Integrity

E.g.: PIMS (Pipeline Integrity Management Systems). Conditional State Prediction. Defect Assessment. Failure Modes and Mechanisms. Pipeline

Ageing. Hydrotesting. MOP validation. Life-extensions and re-purposings. Failure Analysis.

## **Corrosion & Cracking**

E.g.: SCC. Environmentally Assisted Cracking. Crack Threat Assessment. Corrosion Prevention. Corrosion Inhibitors. Corrosion Monitoring. Microbiological Corrosion. Erosion. Corrosion under insulation.

## **Inspection Technologies**

E.g.: ILI tools. Inspection of unpiggable lines. Technologies for in situ, non-destructive testing. Detection of coating defects. Detection of cracks, metal loss, geometric, manufacture and/or welding defects. Inertial Inspections. Material Inspections. Circumferential defects. Data Validation.

# Design, Construction, Materials & Pipeline Routing

E.g.: Route engineering. Pipes and accessories specification. Pumps and compressors specification. Crossings. Horizontal drilling and micro tunneling technologies. Construction and fabrication equipment. New construction procedures. New metallic and non-metallic materials. Thermo hydraulic simulations. Thermo mechanical simulations.

### Right of Way, Geohazards and GIS Mapping

E.g.: Geographic information systems. Pipeline and right of way mapping. Pipeline location and geopositioning. Satellite imagining. Geomatics. Geotechnical and hydrotechnical inspections, monitoring, assessments and interventions. Landslides and mass movement. Geotechnical sensoring. Erosion and upheaval displacement. Right of way inspections. Aerial drones. Class Location Assessment.

## Pipeline Maintenance and Repair

E.g.: Maintenance management technologies. Maintenance planning. Reliability centered maintenance. Hot tapping. Qualification of pipeline repair services and materials. Special procedures.

#### Ports & Terminals

E.g.: Operational Management of Ports & Terminals (safety, operational efficiency, interface with maritime operations). Cargo inland transportation modes from water terminals (long pipelines vs. railroads vs. highways). Pipeline operations from ports (excessive pipelines on the pier vs.

optimization of pier pipelines). Handling of liquid bulk in ISPS Code and customs clearance. Regulatory aspects. ESG Best Practices.

# **Slurry Pipelines**

E.g.: Application Scenarios in Brazil and Around the World. Design, Construction, Assembly, and Commissioning. Operation. Integrity Inspection, and Maintenance. Simulation, Hydraulics, and Testing.

# **Distribution Pipelines**

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## Digital Transformation (Al and New Technologies)

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## **Strategic Tracks**

### ESG & Environmental License

E.g.: Environmental Management. Safety Management. Impact mitigation. Compensatory measures. Public Perception Management. Engagement with right away communities. Governance indicators. Data Governance on Pipeline Operations. Diversity.

### **Business Environment**

E.g.: Energy Security. LNG Market. Regulation. Public Perception. Investor confidence. Independent Operators. Commodity Pricing. Regional and International Market Outlooks. Geopolitical and Trading shifts.

## Energy Transition, Biofuels & Decarbonization

E.g.: Energy Transition Outlooks. Hydrogen Master Planning. Strategies and technologies for decarbonization. Projects, resources, and knowledge sharing on ethanol, ammonia, hydrogen, and CO2 pipelines.

# **Human Capital**

E.g.: Talent Acquisition. Competence Development Programs. Competence Diagnostic. Distance learning programs. R&D workforces. Technical associations supporting initiatives. Diversity.

## Multimodal Integration

E.g.: Rail. Waterborne. Road. Air.