### **EVENING TECHNICAL MEETING**

Society for Underwater Technology

17 February 2021 5.30pm - 8.30pm Parmelia Hilton, Mill Street, Perth 6000

# ADVANCEMENTS AND INNOVATIONS IN SUBSEA PIPELINE DESIGN, OPERATION & MAINTENANCE

## Corrosion Resistant Alloy (CRA) Pipeline Repair. Learnings & outcomes from recent hyperbaric CRA welding trials. Sophie Yin - Woodside

Woodside currently operates over 100km of Corrosion Resistant Alloy (CRA) clad or lined pipelines for which there is limited means of repairing a severely damaged section.

While hyperbaric welding is an established repair method for carbon steel pipelines, global capability is limited for CRA lined or clad pipelines being such a specialised application. However hyperbaric welding is considered a favourable method of pipeline repair as it is the only method which returns a pipeline to near its original configuration and integrity, and there are no seals or clamping components that can fail.

This presentation will outline the learnings and outcomes of two the hyperbaric CRA welding trials Woodside has recently conducted with Subsea 7 to investigate this method of pipeline repair.

#### Actively Heated Flexible Pipe Henri Morand - Technip FMC

Flowlines in deepwater bring many challenges, none more so than long tie-back distances, in low seawater temperatures, leading to increased heat loss and therefore flow assurance challenges (wax and hydrate build up, etc).

ETH-HCRAWTM (Electrically Trace Heated - Heating Cables Replacing Armour Wires) is a TechnipFMC proprietary solution to meet these demands. This presentation walks through the technology and will demonstrate its application through Case Study.

#### LGS-VIV Suppression without the Drag. Christian Wiebe - Matrix Composites & Engineering

Inspired by nature, Matrix's Longitudinal Groove System (LGS®) offers an alternative VIV suppression solution that overcomes the need to compromise between VIV suppression and drag loading. Originally developed for use on drilling risers, to allow operation to continue in more severe weather conditions, Matrix have adapted the technology for use on SURF applications, including retrofit solutions using ROVs.

The presentation will provide an overview of the qualification and performance testing that demonstrates LGS's VIV suppression capabilities while maintaining a drag coefficient of less than 0.7. This is followed by a case study of how LGS was used to mitigate the effects of VIV on long pipeline spans and worked studies for other applications, including rigid jumpers and SLWRs.

#### REGISTER NOW: https://sutetm17feb21.eventbrite.com.au

Registration Cost	Early Bird (ends 10 Feb)	Regular (from 11 Feb)	Onsite
Member: Student/Individual/Corporate	\$30	\$40	\$45
Non-Members	\$50	\$60	\$65
5 Ticket Member Pass	\$125	\$200	\$225
5 Ticket Non-Member Pass	\$225	\$300	\$325

