



Society for
Underwater
Technology

Aberdeen Evening Meeting Power Generation

Tuesday 19 November 2019

The Sir Ian Wood Building, RGU, Garthdee, AB10 7QB

Registration 17:30, Start 18:00 Refreshments and Networking to follow

Registration Fees

SUT Member £15; Non-Member £25; SUT Student Member £7.50

Register online at www.sut.org/events

A Certificate of Attendance to contribute towards your CPD is available, please select this option during booking.

Energy Harvesting for Sustainable Long Tie-Back Development

Presented by Vincent Boulliat, Field Development Study Lead, Subsea 7

Subsea tiebacks have become a major factor in the development of new oil and gas reserves. Oil companies are pushing forward the technology of subsea tiebacks to produce more oil and gas at lower cost, over longer distances and in deeper waters. However the umbilical exhibits a significant part of the development cost for such long tie-back as the umbilical price per meter increases with the step out. In addition power is usually required as boosting and/or heating are typically needed to produce over long distance which requires power cables to be incorporated in already challenging umbilical.

Overview of the self-sustaining intelligent monitoring buoy

Presented by Paul Watson, Director UK & Europe Business Development – OPT Ltd

OPT will present an overview of the PowerBuoy® PB3 project currently deployed in the Central North Sea as a self-sustaining intelligent platform to provide communications and remote monitoring services. The initial phase of the OGTC and Premier Oil supported project will explore the PowerBuoy® capabilities and its ability to monitor the local environment and alert shipping of its position. The project represents the first time that a wave power device is being deployed on the UKCS on an oil and gas development. The system is providing monitoring to safeguard subsea safety zones and generating power with a view to operating subsea assets, meaning it fits well with the focus on reducing the cost of decommissioning and unlocking small pools while contributing to the “net carbon zero” aim of the industry.

Power System for Tether Back-up and Resident ROVs

Presentation by Dr Thomas Valdez, Manager, Chemical Engineering Group, Teledyne Energy Systems inc

Teledyne Energy Systems Incorporated (TESI) will present on the recent fielding of a fuel cell-based subsea power node. It is envisioned that this subsea power node will provide back-up power to subsea tethers, resident ROVs, and subsea sensor networks. To date, batteries have been the only option to provide this functionality. We will review the recent fielding of a TESI Subsea Power Node that was used to power a resident ROV through ship husbandry exercises. During the ship husbandry exercises, an ROV would traverse a dock and then inspect a simulated ship hull; the TESI Subsea Power Node delivered all the power required for operation. The Teledyne Subsea Power Node was able to be fueled dockside and performed a dockside deployment, recovery, and redeployment activity.

