



The Cyprus SPE Section/AAPG/SPE Student Chapter cordially invites you to the following event:

## Shallow & Deep Water Mechanical Pipeline Repairs

### Abstract

The offshore transport of hydrocarbons has always been handled mostly through the use of subsea rigid pipelines. Although over the years the technologies available to perform routine inspection and maintenance of subsea pipelines have evolved, there is still a great need to execute emergency repairs to several subsea pipelines worldwide on a regular basis, mostly in shallow water depths but also in deep waters (beyond diver attainable limits).

Subsea pipelines are carefully designed based on their projected service life and continuously monitored with various methods. However, several reasons contribute towards the need to have a comprehensive repair system available to affect both, minor and major repairs in a timely fashion so that flow assurance is maintained with the least amount of interruption to production. Several reasons contribute towards the damage of subsea rigid pipelines, such as corrosion (internal or external), failure of pipeline weld seams (horizontal or vertical), material failure issues, external and unforeseen events such as dropped objects, anchor drags, fishing nets, troll lines, or even intentional human atrocities. These repairs could be classified as “minor” or “major” based on the type and extend of the damage. “Minor” repairs could be executed without the need to stop production to cut and replace damaged pipeline sections. “Major” repairs require the need to replace short or very long sections of pipeline. Both types of failures could be accommodated through the use of mechanical means and without the need of any welding or hot work.

The industry has developed Mechanical Pipe End Connectors and Mechanical Clamps that offer the same result as welded repair solutions but within the fraction of time and cost of welded repair methods. This presentation will focus on the technical description of the various pipeline repair systems developed by Oceaneering for both shallow and deep water applications.

### Speaker's bio:



John Charalambides has been employed by Oceaneering for 26 years and he now serves as the Director of International Business Development of Oceaneering, currently based in the UAE, covering clients worldwide with emphasis in the Middle East, North Africa, Mediterranean and European regions, and across all of the company's offshore subsea service and product lines. Prior to this role, John was the Director of Business Development of Oceaneering's Pipeline Connection & Repair Systems group in Houston. Before that, John served as the General Manager of Oceaneering's Pipeline Connection & Repair Systems (PCRS) group in Houston, Texas for over twenty two years. He began his career as a Subsea Design & Project Engineer and Project Manager at Oceaneering, and worked for other companies, including the American Bureau of Shipping (ABS), before he joined Oceaneering in 1994. John holds a Higher National Diploma in Mechanical Engineering (HTI - Cyprus), and Bachelor's and Master's of Engineering degrees, both in Mechanical Engineering (Solid Dynamics & Machine Design) from the City University of New York (CCNY).

The talk is open to the public. Light refreshments to be served after the talk. Please save the date:

**Date: Mon. 9<sup>th</sup> Mar., 2020**

**Venue/Time: Research & Tech Bld, University of Nicosia; RT-142, 16:30-17:30**