

## MARITIME APPLICATIONS THURSDAY, NOVEMBER 7 - ROOM 103-A/B, 4:00 PM - 5:30 PM

- Fuel Cell Solution for Marine Applications Nicolas Pocard, Ballard Power Systems
  - > This presentation will include the value proposition of having a fuel cell power generator on board of an electric ship & vessel including high efficiency, scalability; flexibility and quiet operation.
- **SOFC APU for Maritime Applications** Dr. Pedro Nehter, thyssenkrupp Marine Systems GmbH
  - A fuel cell system for seagoing vessels was developed during the project "SchIBZ-ShipIntegration Fuel Cell" within the framework of the German National Innovation Program Hydrogen and Fuel Cell Technology NIP.
- Development of a PEMFC Power System for a Long Range Autonomous Underwater Vehicle - James Sisco, Ballard Unmanned Systems
  - > This presentation will describe the development of a prototype PEMFC power system for the Cellula Robotics, Ltd. SOLUS-LR AUV. The PEMFC serves as the core component of a hybrid power system.
- Power Systems for Resident ROVs, UUVs, and Umbilical Back-up Bob Wynne, Teledyne Energy Systems, Inc.
  - The objective of this presentation is to inform the autonomous subsea robotic community of a recently fielded fuel cell-based large-scale energy storage system developed by Teledyne Energy Systems, Incorporated (TESI). This presentation will review the field-testing of a TSS prototype.
- H2Ports Implementing Fuel Cells and Hydrogen Technologies in Ports Dr. Viviana Cigolotti, ENEA - Italian National Agency for New Technologies, Energy and Sustainable Economic Development
  - > The H2Ports project introduces hydrogen as an alternative fuel in the port industry with the aim of providing efficient solutions to facilitate a fast evolution from a fossil fuel based industry towards a low carbon and zero-emission sector.