

# ACO 2016

A connected ocean

The challenge of  
observation data integration

11-13 Oct 2016 - Brest, France

an international conference in the framework of the  
10<sup>th</sup> edition of

**SEA** BREST-FRANCE

**TECH WEEK**



The ocean plays a major role in the earth climate, storing heat and carbon dioxide. Human activities put marine ecosystems under a growing pressure: ocean acidification and deoxygenation resulting from greenhouse gases in the atmosphere, marine pollution, or increased pressure by fishing. In order to build scenarios for the future and better manage our oceans, more accurate, complete, and integrated ocean observing systems are necessary. Ocean observation products have considerably increased in the past decades, in quality, quantity, and diversity. As new technologies and data processing tools are reshaping our knowledge of the ocean, integrating the data from observations into a coherent and standard managing system remains a huge challenge in our digital era.

At an international level there is already such “current efforts of scientists and engineers to design tools and methods to explore the «blue economy» of the ocean’s depths and understand its critical interactions with the earth’s ecosystem”. For instance, the EU promotes projects around an Integrated Atlantic Ocean Observing System.

The challenge for future ocean knowledge and data integration sets the stage for this conference. Five sessions are planned:

- New autonomous approaches to the measurement of biogeochemical rates
- Interoperability standards for the marine environment
- Multimodal synergies in ocean studies
- Big Data infrastructure and analytics in ocean science
- Integrated observations of upwelling systems

Each session will bring together experts in three scientific fields: physical and biogeochemical ocean processes; new technologies and sensors for ocean observations; applied mathematics, computer science and data processing.

Sessions will be organised in an oral sequence with invited talks and short contributed orals, and a poster session. Additionally, a few round tables will allow discussion of cross-cutting topics.

## Conveners

Eric Desmond Barton, Instituto Investigaciones Marinas (CSIC), Vigo, Spain

Eric Delory, Plataforma Oceánica de Canarias (PLOCAN), Gran Canaria, Spain

Ronan Fablet, Telecom Bretagne, Brest, France

Kenneth G. Foote, Woods Hole Oceanographic Institution (WHOI), Woods Hole, USA

José Joaquín Hernández-Brito, Plataforma Oceánica de Canarias (PLOCAN), Gran Canaria, Spain

Sven Jullien, Telecom Bretagne, Brest, France

Richard Lampitt, National Oceanography Centre, Southampton, UK

Pascale Lherminier, Ifremer, Brest, France

Stan Matwin, Dalhousie University, Halifax, Canada

Tom O’Reilly, Monterey Bay Aquarium research Institute (MBARI), Moss Landing, USA

Antonio Turiel, Institut de Ciències del Mar, Barcelona, Spain

Christoph Waldmann, Center for marine Environmental Sciences (MARUM), Bremen, Germany

Dead line for submitting your abstracts

**May 6<sup>th</sup> 2016**

<http://aconnectedocean.sciencesconf.org/>