



Conference Structure

The conference will take place over 4 days. Each day will begin with an invited plenary address followed by two parallel sessions. On the afternoon of Day 2 and Day 4 there will be workshop breakout sessions, predominantly addressing career advice for research scientists (e.g. proposal writing, communication, attracting funding) and the development of new collaborations. Several outing activities are planned to promote informal discussion among participants and explore the atmosphere and landscape of the island.

Participation and Eligibility Criteria

Marine scientists who would like to participate must apply for an invitation from the Scientific Steering Committee (SSC). Applicants should be under 35 years of age or have completed a PhD after 2007. Scientists from developing countries are especially encouraged to apply.

Application by Abstract Submission

Abstracts must be submitted via the online application system. A CV must accompany the abstract. More information is available on the Conference Website.

Deadlines and Important Dates

Call for abstracts deadline 31 October 2011
Application for financial assistance deadline 31 October 2011
Applicants notified of decisions December 2011
Invitees to confirm participation January 2012

Venue

The conference will be held 24–27 April 2012 at Son Caliu Hotel Spa Oasis (Calvià, Majorca, Spain), close to Palma city, the capital of the Balearic Islands. The host is the Mediterranean Institute for Advanced Studies (IMEDEA, CSIC/UIB).

Registration Fee

There is no registration fee.

Financial Assistance for Travel

Room and board will be provided to all elected candidates, but travel expenses can be covered for only some of the attendees. Candidates will be evaluated according to their financial need and scientific potential.

Conference Website

www.ices.dk/marineworld/oceans/index.asp

Scientific Steering Committee

Bryan Black (USA)
Ignacio Catalán (Spain)
Helen Findlay (UK)
Hanna Na (Korea)
Nina Overgaard Therkildsen (Denmark)
Marta Varela (Spain)
Naoki Yoshie (Japan)

Advisors

Sukyung Kang (Korea)
Julie Keister (USA)
Franz J. Mueter (USA)
Elizabeth W. North (USA)

Conveners

Adi Kellermann (ICES), Skip McKinnell (PICES)

Local Host



Sponsors



ICES/PICES Conference for Early Career Scientists

Oceans of Change

24–27 April 2012

Calvià, Majorca, Spain





Background and Objectives

To encourage the participation of early career scientists in international scientific investigations and to promote their involvement in the management of the marine environment, the International Council for the Exploration of the Sea (ICES) and the North Pacific Marine Science Organization (PICES) have invited a group of early career marine scientists to form the Scientific Steering Committee (SSC) to plan and organize an international symposium for their peers on a marine topic of their own choosing. It will be held on Majorca Island, Spain, from 24–27 April, 2012.

Scientific Themes and Sessions

The *Oceans of Change* Early Career Scientists Conference will broadly address the interactions among the physics, chemistry, and biology of the world's oceans in the context of a dynamic system. Particular emphasis will be placed on the role of human activities on ocean processes, the future of ecological and economic ocean services, and management implications. Contributions should address one of the following sessions, details displayed on the conference website:

1 Impact of Change on Marine Ecosystems

Understanding physical processes, biogeochemical cycling, and organism responses to the environment either at a physiological, individual, or population level is critical to managing and forecasting successfully in a changing ocean.

1.1 Climate and Ocean-Basin Teleconnections

How have models, and knowledge of the climate, improved in recent years? Priority will be given to contributions focusing on ocean-basin teleconnections, studies investigating climate variability, and ocean-climate feedbacks.

1.2 Environmental Effects on Marine Ecosystems

The topic is quite broad and will include ecophysiology, all aspects of life history, behavioural responses, invasive species, and adaptation either from experimental or modelling perspectives. Particular focus will be placed on integrated experimental, observational, and/or modelling results which provide a more holistic understanding of ecosystem responses to changes in environmental conditions.

1.3 Trends and Functioning in a Changing Ocean

This topic will embrace observational and modelling studies that investigate seasonal, interannual, and/or decadal scale variability in the oceans. We welcome long-term studies of trends in physical, chemical, or biological data; particularly those that demonstrate linkages between climate and biology.

2 Human Interactions with the Marine Environment

A multitude of human activities directly affect the world's oceans and with continued population growth, our use of the marine environment is likely to intensify in the future. The purpose of this session is to analyse human impacts on coastal, open-ocean and deep-sea environments through such activities as fishing, mariculture, natural resource extraction, renewable energy production, spread of invasive species, and pollution. We will explore both the nature and magnitude of such impacts and the management and regulation strategies that best mitigate them.

2.1 Assessing Impacts of Anthropogenic Activities

This topic will embrace studies of the direct and indirect effects of human activities on the marine environment.

2.2 Interfacing Science and Management

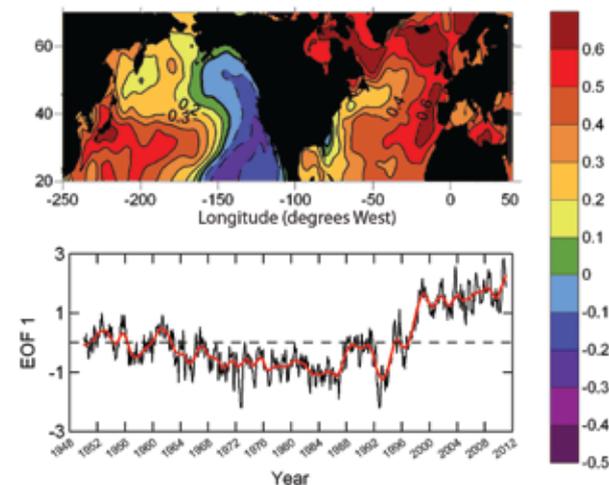
What are the most critical science inputs needed for future management practices? The aim of this topic is to highlight how science will contribute to better management in the future, and how science and policy must interact to optimize the knowledge base available for decision-making.

2.3 Prospects and Challenges for Mariculture

This topic opens for contributions exploring the current status and potential developments in mariculture globally.



PICES - ICES SST Covariation



3 New Tools and Views in a Changing Ocean

To address the prospect of a changing ocean, together with increasing anthropogenic pressure, new techniques are emerging by which to quantify historical ranges of variability in marine environments, assess the current state of the world's oceans, and forecast changes and their ecological impacts into the future.

3.1 Observations of Change: Going Operational

This topic will focus on the capabilities and coordination of ocean-observing systems, including surface and subsurface buoys, ship surveys, gliders, and satellite-based measurements, as well as examples where physical, biogeochemical, or biological ocean observation data have been used in forecasting, management, or other operational products.

3.2 Downscaling Global Change for Regional Oceans

This session will focus on the development, calibration, and application of downscaled models and their use in forecasting physical and biological change in marine systems in an attempt to capture increasingly fine-scale patterns of ocean variability.

3.3 Emerging Molecular Techniques

This session will address molecular techniques used to evaluate climate-driven changes in the genetic, metabolic, and biochemical properties of populations, species, and communities of marine organisms.