

Conference provisional programme

New venue for Monday – please see Detailed programme

Programme at-a-glance

Monday May 13	Tuesday May 14	Wednesday May 15	Thursday May 16	Friday May 17
	8.30 – 9.15 Registration	9.00 – 19.30 Douro Valley tour	9.00 – 10.00 Challenges: Science and technology	9.00 – 10.15 Multidisciplinary challenges
	9.15 – 9.30 Opening session		10.00 – 10.40 Keynote 2	10.15 – 10.30 Atlantic area transnational program
	9.30 – 11.10 Portuguese challenges		10.40 – 11.00 Coffee break	10.30 – 11.00 Coffee break
	11.10 – 11.30 Coffee break		11.00 – 12.30 Trends: Vehicle systems	11.00 – 12.30 Conclusions
	11.30 – 13.10 Challenges: Science		12.30 – 14.00 Lunch break	12.30 – 13.00 Closing session
	13.10 – 14.30 Lunch break		14.00 – 15.20 Trends: Communications and sensors	
15.00 – 16.00 Tutorial 1	14.30 – 16.10 Challenges: Science, security, and incidents		15.20 – 15.40 Coffee break	
16.00 – 17.00 Tutorial 2	16.10 – 16.30 Coffee break		15.40 – 17.00 Networking systems	
17.00 – 18.00 Tutorial 3	16.30 – 17.30 Challenges: Security and management of MPAs		17.00 – 17.30 Keynote 3	
	17.30 – 18.15 Keynote 1		17.30 – 18.15 Discussions	
	18.15 – 19.00 Reception		18.15 – 18.30 Bus to hotel	
	19.00 – 19.15 Bus to hotels		19.30 – 22.00 Banquet	



GOALS AND OBJECTIVES

This conference will advance the concerns of the UN Oceans Compact: Healthy Oceans for Prosperity to “build a society that uses ocean resources wisely and is less vulnerable to ocean-related hazards” and “increase cross sectorial coordination and cooperation at the national, regional and global levels.” The conference will also address issues relating to European Union “Ocean of Tomorrow” concerns for monitoring the marine environment and human use of the ocean, and the European Commission Maritime Affairs goal of fostering synergies among ocean stakeholders to boost the sustainable development of the European maritime economy. The result of this conference will extend in space and time the capabilities of spatially discrete observatories of the EMSO (European Multidisciplinary Seafloor Observatory), EuroSITES and OceanSITES projects, and coordinate efforts to provide new data for ocean modeling projects such as NEMO (the Nucleus for European Modeling of the Ocean). Results of the conference are also intended to support the World Bank “Global Partnership for the Oceans” to develop “Blue Growth” maritime development by identifying ocean governance reforms and areas for investment in innovative best practices for marine resource management.

The conference has three aims:

- First, to bring together specialists in climate change, ocean acidification, marine pollution, shipping, maritime security, non-renewable and renewable ocean resources, including fisheries, as well as experts in the assessment of loss of habitats and biodiversity, to discuss technological and organizational challenges for global ocean sustainability and stewardship.
- Second, to bring together scientists and technology developers to discuss harnessing trends in the interoperability and standardization of networked robotic sensor and communication systems, as well as data processing, analysis and storage, for ocean applications.
- Third, to provide a forum for informal networking and discussions about future research agendas and development, as well as business models for advances in technology and organizational capabilities that can contribute to ocean sustainability and stewardship concurrent with maritime economic development.

Detailed programme

Technical Program for Monday, May 13, 2013

NEW VENUE – THERE WILL BE SIGNS AT THE ENTRANCE

Faculdade de Engenharia da Universidade do Porto

Rua Dr. Roberto Frias

s/n 4200-465 Porto

PORTUGAL

15.00 – 16.00	Tutorial 1, Centro de Formação (video conference)
Andrew Maffei	Woods Hole Oceanographic Institution (WHOI), US US Rolling Deck to Repository Program and the R2R Eventlogger
16.00 – 17.00	Tutorial 2, Centro de Formação (video conference)
Kurt Schwehr	Google, US Google Oceans
17.00 – 18.00	Tutorial 3, Centro de Formação (video conference)
Webb Pinner	Capable Solutions, US Implementing Telepresence for Oceanographic Research



Technical Program for
Tuesday May 14, 2013

9.15 – 9.30	Opening session, Room: Auditório Infante D. Henrique
João Fonseca Ribeiro	Director-General Maritime Policy Ministry of Agriculture, Sea, Environment and Spatial Planning, PO
Jorge Gonçalves	Vice-rector Porto University, PO
Charles Buchanan	Vice President, Fundação Luso America para o Desenvolvimento, PO
Emílio Brogueira Dias	Member of the Board, APDL – Administração dos Portos do Douro e Leixões
João Tasso de Figueiredo Borges de Sousa	Electrical and Computer Engineering Department Porto University, PO

9.30 – 11.10	Portuguese challenges, Room: Auditório Infante D. Henrique Chair: Kanna Rajan, Monterey Bay Aquarium Research Institute (MBARI), US
9.30 – 10.00	Portuguese Maritime Policy
João Fonseca Ribeiro	Director-General, Maritime Policy Ministry of Agriculture, Sea, Environment and Spatial Planning, PO
10.00 – 10.10	Extension of the continental shelf
Miguel Sequeira	Director, Portuguese Task Group for the Extension of the Continental Shelf, PO
10.10 – 10.20	Ocean and atmosphere
Miguel Miranda	President, Instituto Português do Mar e da Atmosfera, PO
10.20 – 10.30	Portuguese Navy
Francisco Calisto de Almeida	Instituto Hidrográfico, PO
10.30 – 10.40	Hydrographic Institute
Francisco Calisto de Almeida	Instituto Hidrográfico, PO
10.40 – 11.50	Portuguese Air Force : Challenges in maritime air surveillance
José Passos Morgado	Academia da Força Aérea Portuguesa, PO
10.50 – 11.10	Discussion



11.30 – 13.10	Challenges: Science, Room: Auditório Infante D. Henrique Chair: Philip McGillivray, United States Coast Guard, US
11.30 – 11.50	Satellite oceanography of fronts
Igor Belkin	University of Rhode Island, US
11.50 – 12.10	Addressing observational challenges for the Atlantic Ocean employing new collaborative frameworks - the COOPEUS project
Christoph Waldmann	Marum, DE
12.10 – 12.25	Environmental coastal ocean challenges
Javier Gilabert	University of Cartagena, ES
12.25 – 12.40	Island Wakes - research challenges & opportunities
Rui Caldeira	CIIMAR, Universidade do Porto, PO
12.40 – 12.55	Marine geology (title to be confirmed)
Fernando Barriga	Lisbon University, PO
12.55 – 13.10	Science and riches in the last frontier
Amílcar Soares	Instituto Superior Técnico, PO

14.30 – 16.00	Challenges: Science, security and incidents, Room: Auditório Infante D. Henrique Chair: Christoph Waldmann, Marum, DE
14.30 – 14.50	Meeting Coast Guard mission challenges with technology
Philip McGillivray	US Coast Guard, US
14.50 – 15.10	Challenges and opportunities related with maritime transport accidents
Michel Girin	MG Concepts, FR
15.10 – 15.25	10 years of met-ocean measurements for offshore wind farms at the research platform FINO1
Tom Neumann	DEWI GmbH, DE
15.25 – 15.40	Marine renewable energy: synergies and conflicts with other ocean activities
António Sarmento	Instituto Superior Técnico, PO
15.30 – 15.40	Recent challenges in blue biotechnology (at CIIMAR): from aquaculture to pharmacological and antifouling applications
Vitor Vasconcelos	CIIMAR, Universidade do Porto, PO
15.50 – 16.00	Valuing Portuguese marine ecosystem services: a new challenge
Gonçalo Calado	Gulbenkian, PO



16.00 – 16.10	Horizon 2020: Space challenges, Room: Auditório Infante D. Henrique Chair: Christoph Waldmann, Marum, DE
João Romana	National contact point GMES User Forum/Space, FCT, PO

16.30 – 17.30	Challenges: Security and management of marine protected areas, Room: Auditório Infante D. Henrique Chair: Maarja Kruusmaa, EE
16.30 – 16.50	Future sea security
Margo Edwards	University of Hawaii, Manoa, US
16.50 – 17.00	Towards a persistent presence in the ocean
Francois Leroy	Liquid Robotics, US
17.00 – 17.10	Marine protected areas: the Portuguese case study
Marta Chantal Ribeiro	Universidade do Porto, PO
17.10 – 17.30	Sargasso Sea Marine protected area (video conference)
David Freestone	Sargasso Sea Alliance, Bermuda

17.30 – 18.15	Keynote 1, Room: Auditório Infante D. Henrique (video conference)
John Delaney	University of Washington, US Understanding the Planetary Life Support System: Next Generation Science in the Ocean Basins



11.00 – 12.30	Trends: Vehicle systems, Room: Auditório Infante D. Henrique Chair: Massimo Caccia, CNRC, IT
11.00 – 11.10	Cooperative motion planning, navigation, and control
António Pascoal	ISR – Instituto Superior Técnico, PO
11.10 – 11.20	Autonomous marine robots assisting drivers (title to be confirmed)
Zoran Vukic	University of Zagreb, CR
11.20 – 11.30	Overview of the Marine Autonomous Robotic Systems Group
Mário Brito	National Oceanography Centre, UK
11.30 – 11.40	Sea and air vehicles
João Sousa Kanna Rajan	LSTS - FEUP, Universidade do Porto, PO MBARI, USA
11.40 – 11.50	Remotely operated vehicles (title to be confirmed)
Daniel Toal	University of Limerick, IE
11.50 – 12.00	Biomimetic underwater robots
Maarja Kruusmaa	Tallin University of Technology, EE
12.00 – 12.10	Intervention vehicles (title to be confirmed)
Massimo Caccia	CNRC, IT
12.10 – 12.20	Multipurpose hovering AUVs: mapping and intervention.
Marc Carreras	University of Girona, ES
12.20 – 12.30	Discussions

14.00 – 15.20	Trends: Communications and sensors, Room: Auditório Infante D. Henrique Chair: António Pascoal, ISR – Instituto Superior Técnico, PO
14.00 – 14.10	Underwater communications: state of the art developments and new uses
Francisco Bustamante	EvoLogics GmbH, DE
14.10 – 14.20	The wireless harbor
João Barros	IT – Universidade do Porto, PO
14.20 – 14.30	Ask not (only) what network coding can do for you
Daniel Lucani	Aalborg University, DK
14.30 – 14.40	Underwater communications (TBC)
Sérgio Jesus	Universidade do Algarve, PO



14.40 – 14.50	Disruptive tolerant networking protocols
Ricardo Martins	LSTS - Universidade do Porto, PO
14.50 – 15.00	The role of GNSS for understanding ocean and coastal dynamics
Luísa Bastos	CIIMAR, Universidade do Porto, PO
15.00 – 15.20	Sensor technologies (video conference)
Mattwen Mowlen	National Oceanography Centre, UK

15.40 – 17.00	Trends: Networking systems, Room: Auditório Infante D. Henrique Chair: Margo Edwards, University of Hawaii, Manoa, US
15.40 – 16.00	Google Oceans
Kurt Schwehr	Google, US
16.00 – 16.20	Promoting Standards: Interoperability, Collaboration and Cooperation in Marine S&T
João Alves	CMRE, NATO
16.20 – 16.40	From manned submersibles to autonomous and hybrid systems. The ways from research to operational Uses: Criteria, Trends, and Perspectives (title to be confirmed)
Vincent Rigaud	Ifremer, FR
16.40 – 17.00	3D visual mapping from AUVs
Clay Kunz	WHOI, US

17.00 – 17.30	Keynote 3, Room: Auditório Infante D. Henrique (video conference)
Kate Moran	UVIC, CA Neptune Program

17.30 – 18.15	General discussion, Room: Auditório Infante D. Henrique Chair: Kanna Rajan, MBARI, US
All	



Technical Program for Friday May 17, 2013

9.00 – 10.00	Multidisciplinary challenges, Room: Auditório Infante D. Henrique Chair: Fernando Lobo Pereira, ISR - FEUP, Universidade do Porto, PO
9.00 – 9.15	Mozambique challenges
Jorge Silva	Aurens,MZ
9.15 – 9.30	Cabo Verde: Extension of the continental shelf
António Pina	Universidade de Cabo Verde, CV
9.30 – 9.45	R3M: The 2.0 Ocean Observation Strategy for the Macaronesian region
Carlos Barrera	PLOCAN, ES
9.45 – 10.00	Centre for Autonomous Marine Operations and Systems (AMOS)
Walter Caharija	Norwegian University of Science and Technology, NO
10.45 – 10.15	(TBC)
TBC	Universidade dos Açores, PO

10.15 – 10.30	Atlantic area transnational program, Room: Auditório Infante D. Henrique Chair: Fernando Lobo Pereira, ISR - FEUP, Universidade do Porto, PO
Maria Teresa Lameiras	POCTEA/AG

11.00 – 12.30	Conclusions, Room: Auditório Infante D. Henrique Chair: Paolo Favali, Ridge, IT
Phillip McGillivray	US Coast Guard, US
Christoph Waldmann	Marum, DE
Kanna Rajan	MBARI, USA
Maarja Kruusmaa	Tallin University of Technology, EE
Carlos Barrera	PLOCAN, ES
Massimo Caccia	CNRC, IT
António Pascoal	ISR – Instituto Superior Técnico, PO
Margo Edwards	University of Hawaii, Manoa, US
Fernando Lobo Pereira	ISR – FEUP- Universidade do Porto, PO
Paolo Favali	Ridge, IT

12.30 – 13.00	Closing session, Room: Auditório Infante D. Henrique
Prof. Manuel Pinto de Abreu Prof. Sebastião Feyo de Azevedo	Secretary of state for the sea, PO Director, Faculdade de Engenharia da Universidade do Porto, PO

