



## Robotics in Marine & Maritime Environmental Monitoring

| Robotics in Marine & Maritime Environmental Monitoring<br>Piraeus Business Center - April 29, 2022 |               |   |  |
|--|---------------|---|--|
| SESSION  | TIME          | SPEAKER - AFFILIATION   | TITLE  |
| REGISTRATION   | 09:45 - 10:00 |   |  |
| OPENING<br>SESSION   | 10:00 - 10:15 | Dr. Gregory Yovanof<br>STRATEGIS Maritime ICT<br>Cluster                                | STRATEGIS - Activities in Blue<br>Robotics & the MAQUAM project                      |
| UNDERWATER<br>ROBOTICS<br>Blue RoSES Project   | 10:15 - 10:45 | Dr. Massimo Caccia<br>Director of Research, CNR-<br>INM, Italy                          | The Blue-RoSES Project   |
|  | 10:45-11:00   | Jose de la Maza,<br>IMCW Europe, Spain  | Blue-RoSES Business Case<br>& next steps   |
| MARINE<br>ROBOTICS   | 11:00 - 11:30 | Dr. Nikos B. Pronios<br>Innovate UK   | Subsea Autonomous Systems: next generation technologies & applications               |
|  | 11:20-11:40   | Dimitris Kosmidis<br>TECHNOSCAPE  | Water Quality Monitoring /<br>Inland & Coastal a reas                                |
| COFFEE BREAK   | 11:40-12:00   |   |  |
| SHIPPING &<br>MARITIME   | 12:00 - 12:10 | Bureau Veritas Classification<br>society<br>Dr. John Kokarakis,<br>Technical Director   | Regulating shipping emissions, present<br>and future                                 |
|  | 12:10 - 12:25 | ALTUS LSA<br>Manolis Batzelis   | Land – Sea – Air<br>Unmanned systems and innovative<br>solutions for shipping        |
|  | 12:25 - 12:40 | Maritime Technology<br>Innovative Solutions [MTIS]<br>G. Christakos                     | UAS Emissions Monitoring<br>Real-time ship emissions compliance<br>mea suring system |
|  | 12:40-12:55   | Prof. Nikitas Nikitakos<br>Univ. of the Aegean - Dept. of<br>Shipping Trade & Transport | Robotics and Security Issues in Marine & Maritime Environmental Monitoring           |
| ENABLING<br>TECHNOLOGIES<br>& GLOBAL<br>ISSUES   | 12:55-13:10   | N. Mentis<br>ERICSSON   | Robotics and 5G  |
|  | 13:10-13:30   | L. Perivoliotis<br>HCMR - Hellenic Centre For<br>Marine Research                        | Ocean gliders in Marine Research   |
| LUNCH  | 13:30 - 14:00 |   |  |





## **Robotics in Marine & Maritime Environmental Monitoring**

Seas and the ocean are the least-explored region of the Earth. Nonetheless, oceans cover most of the Earth's surface and host most of its biodiversity.

The UN has proclaimed a Decade of Ocean Science for Sustainable Development (2021-2030) to support efforts to reverse the cycle of decline in ocean health and gather ocean stakeholders worldwide behind a common framework. SDG 14 "Life below water", one of the 17 Sustainable Development Goals established by the United Nations in 2015 aims to "Conserve and sustainably use the oceans, seas and marine resources for sustainable development".

The efficient monitoring of the environmental conditions of the ocean, seas & inland waterbodies play a critical role in the implementation of any strategic plan for marine & maritime sustainable development. Standard monitoring technologies & operations are affected by high complexity, labor intensity, high cost, inability to operate in remote areas and under harsh environmental conditions.

Advances in blue technologies and a new generation of marine robotic systems have the potential to revolutionize the monitoring of the marine and marine environment on a global scale, offering the ability to collect and process data in unprecedented spatial and temporal resolution.

The workshop on "Robotics in Marine & Maritime Environmental Monitoring" brings together professionals and executives from research institutes, academia, industry, and the regulatory field with the aim to draw a picture of the state-of-the-art in blue robotics with applications in marine monitoring and marine environment; present cases of innovative product and service solutions; and identify opportunities for new business development in the marine and maritime sustainable development sector.

Following the workshop at the same venue there will be a presentation of the ERASMUS+ program, MaQuaM "International Qualification on Marine and Tourism for the Mediterranean Harbors." The MaQuaM training program will be delivered by Strategis Maritime Center of Excellence in collaboration with the GMC Maritime Training Center & Maritime Academy from May to Oct. 2022 to a group of 30 Greek students (free of charge).

The workshop on *"Robotics in Marine & Maritime Environmental Monitoring"* is co-organized by <u>Strategis</u> <u>Maritime ICT Cluster</u> and the EMFF project, <u>BlueRoSES</u> "Blue Robotics for Sustainable Eco-friendly Services for Innovative Marinas and leisure boats".

It is a free workshop, open to the public, but pre-registration via email is required.

Workshop: Robotics in Marine & Maritime Environmental Monitoring Place: Piraeus Business Center, Agiou Dimitriou 41, Pireas 185 46 Date: April 29, 2022. Time: 10:00 – 14:00 Registration: robotics@strategis-cluster.net (Deadline: EOB April 27, 2022)