## Aveiro Institute for Marine Science and Technology (AlMare)



Being a coastal region of Portugal in southwestern Europe, the sea has always been part of the history of Aveiro. The socio and economic development of Aveiro has always been linked to the sea. In addition, the strategy and the mission of the University of Aveiro (UA) has, since its beginning, been moulded by the regional background, highly committed with development based on innovation and scientific and technological knowledge, hence it is normal that the coastal, marine and maritime research becomes one of the main strategic topics within the UA.

The UA research distinguishes itself by its multidisciplinary nature, from basic sciences to engineering, framed by sustainability and applied to the economy and governance. Coastal, marine and maritime research is a topic developed in seven of the UA research centres, namely the CESAM - Centre for Environmental and Marine Studies, the CICECO - Centre for Research in Ceramics and Composite Materials, the IT - Telecommunications Institute, the GEOBIOTEC - GeoBioSciences, GeoTechnologies and GeoEngineering, the GOVCOPP - Governance, Competitiveness and Public Policies, the IEETA - Institute of Telematics and Electronic Engineering of Aveiro, the QOPNA - Organic Chemistry, Natural and Agro-food Products and the TEMA - Centre for Mechanical Technology and Automation.

There are numerous activities that were or are being carry out by those research centres in the scope of this topic. UA currently participates in over 20 international and 51 national research projects in the marine sciences area, being the coordinating institution of three major European projects (FP7 Lagoons, FP7 NANOMAR and Life+ Marpro). Additionally, UA contributes to several international R&D networks and initiatives in the marine and environmental sciences area as the Campus do Mar, EurOcean, MarinERA, MARBEF and I-LTER.

UA trains highly competent and motivated professionals in areas related to sea. Through CESAM, the UA participates in two Erasmus Mundus doctoral programmes in marine sciences (MARES and MACOMA), an international doctoral programme, under the scope of Campus do Mar, on science, technology and management of the sea (Do\*Mar) and an interuniversity doctoral programme in marine and environmental sciences (PROMAR), with the participation of the universities of Algarve and Porto, through the Associated Laboratory CIMAR.

Bearing this in mind, UA created, in 2013, the Aveiro Institute for Marine Science and Technology (AlMare), a unifying platform that coordinates,

integrates and fosters the wide span of scientific and technological skills and infrastructures of the University, in line with the European Strategy for Coastal, Marine and Maritime Research, strongly embedded in the experience of its scientists and professionals and supported by a sound knowledge in training, research and innovation. This virtual institute aims to foster capacity building and know-how transfer, promote synergies between academia, industry, policy-makers and society, and assert the national and international leadership of UA in coastal, marine and maritime sciences and technology.

The mission of AlMare is the coordination of the scientific competences in the UA in coastal, marine and maritime research, promoting synergies and eco-innovation, and bridging with public and private sectors of society to meet its needs and challenges and to support the socioeconomic development of the region and the country.

To achieve more ambitious goals of R&D&I in the coastal, marine and maritime areas, the synergies and complementarities between the various existing basic sciences at UA must be exploited. Taking into account the skills and capabilities of the various research centres of the UA, the AlMare will develop five strategic areas: Healthy and Sustainable Environment (HSE); Marine Biological Resources (MBR); Marine Mineral and Energy Resources (MER); Marine Technologies and Applications (MTA); and Planning and Governance of Marine and Coastal Zones (PGM).

The challenges facing the Portuguese coastal, marine and maritime zones, including its international projection and visibility, require Institutions with innovative and multidisciplinary scientific and technological skills capable of dealing with the complexity of systems and interactions. A wide integration of knowledge and research is crucial for shaping new governance approaches, promote stakeholder consensus and to establish a continuous dialogue among scientists, political decision-makers and the public and private sectors of society. By facilitating cooperation between UA researchers affiliated to the above-mentioned research centers of excellence, the investment in the new interdisciplinary facility ECOMARE (research centre for innovation and sustainability of the economy of the sea), a collaboration between the UA, the non-governmental organization SPVS, the municipality of Ílhavo and the Port of Aveiro, AlMare will increase the public perception of the importance and magnitude of the research performed in the UA within this area and will strength the position of UA in the national and international scientific arena.