

**Medida / SAICT - Projetos de IC&DT**

**Designação do projeto / ROSM: Sistema robótico de mitigação de derrame de crude**

**Acrónimo / ROSM**

**Código do projeto / NORTE-01-0145-FEDER-024055 - SAICT-POL/24055/2016**

**Região de intervenção / REGIÃO NORTE**

**Entidade beneficiária / CIIMAR**

**Data de aprovação / 10-07-2017**

**Data de início / 01-10-2017**

**Data de conclusão / 02-10-2019**

**Custo total elegível / 149.530,62 €**

**Apoio financeiro / FEDER: 127.101,03 €**

**Custo total elegível CIIMAR / 29.925,35 € €**

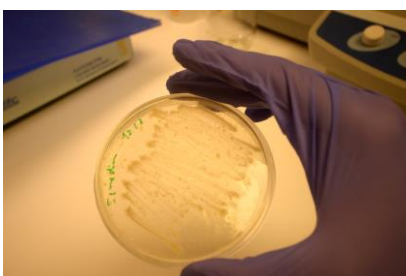
### **Project Description and Objectives**

The overall aim of the ROSM project is the implementation of innovative first-line responders to pollution incidents (in particular, oil spills). These solutions will be based on the production of native microbial consortia with bioremediation capacity, and the adaptation of unmanned and autonomous vehicles for in-situ release of autochthonous microorganisms (bioaugmentation) and nutrients (biostimulation), and their use combined with an automated autonomous systems response, that can combat pollution in a more cost-effective manner, without risking human lives. The CIIMAR contribution will be in the development of an innovative solutions aim to:

- be environment-friendly, by using native organisms to naturally degrade oil spills, and thus avoiding the introduction of additional chemical or biological additives;

The scientific strategy of the project includes a comprehensive set of tasks addressed to attain the following specific objectives:

- To produce a georeferenced microbial consortia bank at a pilot scale. The native consortia with high ability to degrade petroleum compounds will be viably preserved for future biomass production and application at the native geographic region from which the microbial consortia has been obtained;
- Specify, develop and deploy the containers and release systems for microorganisms and nutrients, which will be coupled to three different types of unmanned systems.



**ROSM** Robotic Oil  
Spill Mitigation

