MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD
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"Una manera de hacer Europa"

REPOL IN OCEANIC PROJECT FOR THE ENVIROMENTALLY SUSTAINABLE ANTIFOULING SOLUTIONS

Figure 1.3rd OCEANIC meeting in Repol, Valencia

Engineered structures operating in or near the marine environment are subject to one of the most aggressive environment for material degradation. Corrosion, erosion, thermal excursion, and biofouling. Aiming to be reliable and environmental friendly the Ocean Energy Sector need a surface protection system dealing with very hard challenges. To this aim, have born OCEANIC, a project that fuse a new antifouling technology with the established thermal spray aluminum coating to give in a one fit all protection system for long-lasting corrosion and biofouling resistance in the marine environment. This new technology will be called TSA-TSP or just OCEANIC coatings.

REPOL, who is continuously focusing in the development of new products with specific properties with the aim to offer the most suitable materials for their clients, is involved in OCEANIC project. *Gaiker IK4*, *Marine Enviroment Team WavEC's*, *Metalock*, *Mikra Recubrimients*, *EP technical research Institute of Sweden AB*, *Azterlan-IK4* and *CorPower OceanAB* are the other partners of consortium.

REPOL is developing a new polymer as coating material that will be sprayed on an experimental test battery *(figure 2 left).* Such coating contains a specific and new antifouling molecule that will remain in the structure surface avoiding biomarine organisms stuck, giving a long lifetime antifouling protection in an economically and environmentally sustainable way.

Figure 2. Experimental test battery (left and center). Marine Energy platform (right)

The experimental test battery for the project consists of two frames, each with eight samples and it has been developed to test different coating techniques on a test panels. The panels will be sprayed with the powder polymers and the structure will be immersed in real sea water installed in the Wave Roller's buoy *(figure 2 right).* After approximately six months of immersion the structures and panels will be retrieved and marine growth and corrosion in panels will be assessed. The two test platforms are located in: *Bimep* (under IK4-Azterlan and Mikra supervision) and *Peniche* Portugal (a courtesy from WaveRoller).

The link bellow shows the video presented in the Marine Energy Week in Bilbao describing a summary of the process.

http://oceanic-project.eu/videos/