

SEAFRONT, a new European project within the Seventh Framework Programme of the European Commission started in January

Environmentally friendly coatings



SEAFRONT project group

A new European project within the Seventh Framework Programme of the European Commission started on January 16. The goal of the SEAFRONT (Synergistic Fouling Control Technologies) project is to develop environmentally friendly coatings, which prevent the undesirable accumulation of marine organisms on boats, ships, tidal power plants and other aquatic installations. The coatings will be designed to improve operational efficiency, substantially reduce CO₂ emissions and have no negative impact on the marine ecosystem. The Dutch Polymer Institute (DPI) and AkzoNobel are the main contractors of the EU project.

NEW COATINGS

The fouling control coatings to be developed within the project will not leach chemical or other harmful substances that are non-biodegradable in the marine environment. In addition, the coatings will reduce the hydrodynamic resistance of ships and boats, decreasing fuel consumption and, thus, substantially reducing CO₂ emissions. Finally, the new coatings will lead to considerable savings in operational costs by improving the efficiency of tidal power installations and reducing the frequency of maintenance and cleaning in off-shore infrastructure and aquaculture applications.

PROJECT TEAM

The SEAFRONT project will be implemented within the Seventh Framework Programme (FP7) under the Ocean of Tomorrow call. Five multinationals, seven SMEs and seven research institutes spread across eight EU Member States will work together to achieve the goals within the four-year timeframe. DPI is the project co-ordinator and International

Paint Ltd, a business unit of AkzoNobel and a world leader in the field of fouling control coatings, will bring any new coatings based on technology developed within the project to the market. In focussing on the delivery of sustainable products and solutions, the goals of this project perfectly complement the strategic ambitions of AkzoNobel. The project budget amounts to €11.2M including €8M from the European Commission.

SCOPE

In addition to the development of environmentally friendly coatings, SEAFRONT aims to significantly enhance the fundamental understanding of fouling organisms and the mechanisms of settlement and adhesion. Particular attention will be paid to a better understanding of marine biofilm or so-called marine slime. This part of the research will be led by Professor Tony Clare of Newcastle University (UK), an internationally renowned marine biologist. The insights gained in these studies will enable SEAFRONT to develop concepts and technologies for enhanced performance, the ultimate goal being a completely non-fouling surface.

Jacques Joosten, Managing Director of DPI, said of the project: "We are very pleased with the start of SEAFRONT, the third project to be co-ordinated by DPI within the Seventh Framework Programme. By initiating and co-ordinating such projects, we create added value for our current and future industrial and academic partners." David Williams, RD&I Director, AkzoNobel Marine & Protective Coatings commented: "We are both delighted and excited to be part of SEAFRONT, which provides a collaborative framework for us to innovate openly with our partners within the project." ■

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