

# Development and validation of high durability materials for application in maritime structures and crown walls vulnerable to climate change.

---

## MADAME

---

The general objective of the project is the development of a new concept of vertical breakwaters that combines the use of new construction materials, structural design and optimal construction processes to obtain elements of high structural integrity and durability to environmental agents, as well as the development of a robust instrumentation system for the monitoring of the structural and functional behavior of crown walls throughout their useful life, to increase the resilience of port infrastructures to the effects of climate change.

---

## CONSORTIUM MEMBERS

---



Fundación Agustín de Betancourt

The Project has been funded by the Ministry of Science, Innovation and Universities – State Research Agency within the program *Retos-Colaboración 2017* under the State Program of Research, Development and Innovation for Social Challenges under the framework of the State Plan for Scientific and Technical Research and Innovation 2013 – 2016, and by the European Union, with FEDER funds and project number **RTC-2017-6009-5**, with the aim of promoting technological development, innovation and quality research.

---

## MARITIME WORKS

---

<http://www.grupoacs.com/corporate-responsibility/rdi/construction/>



UNIÓN EUROPEA  
FONDO  
EUROPEO DE  
DESARROLLO  
REGIONAL

"Una manera de hacer Europa"