

R&D partnership for further testing of Shape-Memory Materials and Continuous Wave-Motion Monitoring Systems

Sector: Marine energy

Short description of the needs:

GECO develops modular marine infrastructures for wave energy harvesting and coastal protection. The company is seeking enabling technologies to increase material resilience and improve the operational reliability of these systems through the adoption of high-strength shape-memory materials and integrated monitoring solutions. The request includes the identification, selection and validation of candidate shape-memory materials capable of preserving functional response and mechanical integrity under cyclic loading, long-term fatigue, harsh marine exposure and aggressive corrosion conditions. In parallel, support is required for the development and engineering of sensor systems enabling continuous acquisition of wave-motion parameters—such as wave height, period, direction and dynamic loads—providing reliable data for both structural health monitoring and operational optimisation. GECO is looking for research and industrial partners to further advance experimental activities based on the know-how already developed, as well as specialised expertise in smart materials and robust marine sensing technologies suitable for long-duration deployments.

More info: For more information apply to eccentric@imast.it

Company: GECO – GLOBAL ENGINEERING CONSTRUCTIONS S.r.l.

Point of contact for the brief/challenge: IMAST - High Tech District on Engineering of Composite Materials and Polymers