ReSHEALience project

Rethinking coastal defence and Green-energy Service infrastructures through enhanced durability high-performance cement-based materials

In the framework of H2020 programme, the European Commission has funded the project ReSHEALience whose main goal is to develop an Ultra High Durability Concrete (UHDC) and a Durability Assessment-based Design (DAD) methodology to improve durability of structures and predict their long-term performance under Extremely Aggressive Exposures (EAE).

The project will define the composition of UHDC tailored for specific applications, upgrade experimental methods to validate its durability in service conditions, and develop a theoretical model to evaluate ageing and degradation of UHDC structures.

New design concepts will be validated through design, construction and long-term monitoring in six full-scale proofs-of-concept, selected as representative of cutting edge economy sectors, such as green energy, Blue Growth and conservation of RC heritage. The project consortium, coordinated by Politecnico di Milano, has gathered together 13 partners from 7 countries, including 6 academic institutions and 7 industrial partners, covering the whole value chain of the concrete construction industry.