



**Post-Doctoral position at MSMP laboratory/ Arts et Métiers ParisTech**  
**Title: Mechanical analysis and characterization of a synthetic rocky aggregate called « Geocorail ».**

The project will be developed in the MSMP laboratory from Arts et Métiers ParisTech, Campus in Aix-en-Provence, with a financial support from GEOCORAIL SAS, a start-up in Marseille.

The project objective is to perform an exhaustive mechanical analysis and characterization of the innovative material Geocorail® manufactured in-situ using a proprietary electrochemical process. This material is developed as a tool to fight against erosion of maritime structures and pollution.

The candidate work will include:

- Optimize “standard mechanical methods and tests” for the specific case of Geocorail® samples,
- Accurately quantify mechanical results,
- Perform the numerous tests, in the most precise and rigorous manner,
- Identify some testing problems which could occur on the different samples.
- Develop the pertinent criteria to qualify and quantify the mechanical properties of the different materials,
- Write a scientific article,
- Manage the project with all the partners in MSMP lab and at GEOCORAIL SAS.

**Expected profile:** PhD in mechanics and material science with experimental profile, knowledge in heterogeneous material and concrete will be appreciated.

**Conditions**

Duration: 13 months

Salary: 2900 € gross per month

Beginning of contract: November 6, 2017

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Figure 1 : Geocorail® growing