



## Marine biological resources

### POLY-MER

#### **NATURAL, HIGH VALUE-ADDED MOLECULES BASED ON MARINE SUGARS FOR USE IN COSMETICS AND SPECIALISED CHEMISTRY**

The aim of the POLY-MER project is to develop marine-sourced polymers for use in cosmetics and specialised chemistry – adjuvants, bioadhesives, etc. – and to respond to the chemical industry's biggest challenge, namely limiting the environmental footprint of its products.

Drawing on the latest knowledge in areas ranging from chemical processes, sustainable chemistry and industrial biotechnology to biology and glycoscience, POLY-MER will combine several processes which are eco-friendly as regards resources and as regards human beings and their environment.

Several innovative threads will be developed as part of the project:

- Researching and developing new marine polysaccharides (marine sugars) and assessing their useful functions
- Combining different technologies: fermentation, enzymatic hydrolysis, grafting using green chemistry, etc. These clean, eco-friendly processes will identify specific high-tech functions of the molecules, while keeping the costs of producing them in check (improved productivity, time saving, etc.).
- Researching effective grafting techniques, combining saccharide derivatives with peptides selected for their biological properties.

The POLY-MER project is responding to the demands of international cosmetics and agrochemical markets looking for innovation, 'naturalness' and effectiveness, by promoting the development of ingredients with a high added value resulting from sustainable processes.

#### Partners

##### Companies

Codif International, Saint-Malo / Roz-sur-Couesnon [\[Project Developer\]](#)  
Polymaris Biotechnology, Morlaix

##### Research center

CERMAV, Grenoble

#### Funders

- Fonds Unique Interministériel
- Conseil régional de Bretagne
- Conseil départemental du Finistère
- Morlaix Agglomération
- Saint-Malo Agglomération

#### Labelisation

18/11/2011

#### Overall budget

4 171 K€