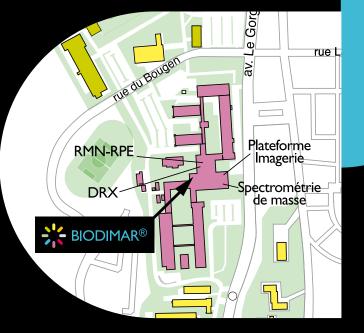
### **BIODIMAR®** is integrated into a privileged scientific and economic environment

- Enjoying UBO's complementary facilities. (map below)
- 400 researchers focused on marine sciences.
- Strong involvment in worldwilde cluster 'Pole Mer Bretagne'.



A team at the interface of biology and chemistry focused on valorisation of marine natural products.

#### BIODIMAR®

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# BIODIMAR®

Technological platform for the extraction, purification and analysis of marine biomolecules

Supporting industry and academic research



# **BIODIMAR**<sup>®</sup>

provides extensive range of services for industrial and academic research partners

### A unique maritime localization An exceptional marine biodiversity

 $\ensuremath{\textbf{BIODIMAR}}\xspace^{\ensuremath{\textbf{@}}}$  allows access to original marine organism collections :

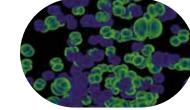
- Marine plants (algae)
- Terrestrial plants (coastal and tropical)
- Marine microorganisms (unusual ecosystems)
- Marine invertebrate





A large range of services combining dedicated scientific expertises and advanced analytical equipment







BIODIMAR

#### Sample gathering and preparation

- On-field characterization and gathering of samples.
- Freeze-drying and grinding large capacity.
- Accelerated Solvent Extraction (ASE), from 40 to 200°C, all solvent types (organic and aqueous).
- Evaporation/concentration and samples conditioning (96 wellplates...).

#### Natural products fractionation and purification

- Analytical development adapted to fractionation and purification of marine natural products.
- Solid Phase Extraction chromatography (10-50mg).
- Flash chromatography with UV detector (20mg-2g).
- High Performance Liquid Chromatography analytic and preparative with DAD and ELSD detectors (10-100mg).

## Molecule identification, structural analysis and quantification

- Structural analysis by NMR, mass spectrometry...
- Biochemical quantification
- (sugars, phenolic compounds, protein...).
- Methods of quantification development by NMR for originals compounds.





#### Screening and biological testing

- Antioxidant capacity (ORAC, DPPH, FRAP...).
- Enzyme inhibition activities (α-amylase, α-glucosidase, lipase, tyrosinase, elastase...).
- Cytotoxic activities, inflammation (proliferation, apoptosis...).

Tests developed upon request.

#### **Bibliographic studies**

Access to 177 scientific databases.

#### Quality

Facilities and all instrumentation are qualified in compliance to good control laboratory practice, ensuring full traceability.

