

MARINE RESEARCH AT THE LIÈGE UNIVERSITY: A LONG TRADITION OF OCEANOGRAPHY FAR AWAY FROM THE SEA

Grégoire Marilaure and the MARE group

MARE Interfaculty Research Centre
B6c Sart-tilman, B-4000 Liège Belgium
E-mail: mgregoire@ulg.ac.be

MARE gathers 24 laboratories of the Faculties of Science, Applied Science, Law and Veterinary Medicine. It integrates complementary disciplines of Oceanology through both pluridisciplinary field works and modeling. Major research themes of MARE are:

- 1) The detection and prediction of changes in coastal ecosystems integrating data collection, the development of statistical tools and 3D interdisciplinary models used conjointly with specific diagnostic tools tailored to management purposes;
- 2) The study of the CO₂ dynamics in order to budget fluxes in major coastal areas and the Southern Ocean, through data collection, satellite imagery and modeling studies;
- 3) The dynamic and diversity of the Ocean Pelagic Ecosystem;
- 4) Biodiversity and taxonomic studies in different coastal and deep-sea areas;
- 5) Study of marine trophic webs using stable carbon and nitrogen isotopes;
- 6) Ecotoxicology and Ecophysiology: study of the effects of pollutants on marine organisms including marine mammals and investigations on genetic diversity, pathology and causes of death of marine mammals and seabirds;
- 7) Ecology of macrophytes systems and of benthic algae;
- 8) Sediments studies (e.g. sediment transport, sediment structure analysis, benthic habitats characterization and diversity);
- 9) Reconstruction of paleocirculations using isotope analysis (Nd, Pb);
- 10) Study of coastal evolution and management. This includes the study of coastal geomorphology using remote sensing data and coastal engineering.

Moreover, MARE researchers have access to the research station STARESO in Corsica (<http://www.stareso.com/>), and to the Belgian *R.V. Belgica*, which operates in the North Sea and adjacent areas (<http://www.mumm.ac.be/EN/Monitoring/Belgica/>).

Finally, the MARE centre supports the extant set of second and third cycle Teachings (master in Oceanography; <http://www.ulg.ac/oceanbio/>, DEA in Oceanology, European DEA in Marine Environment Modeling) - unique in the French-speaking Community of Belgium -, of a Doctoral School, and of international Conferences and Colloquia (The International Liège Colloquium on Ocean Dynamics and associated Symposia).

The MARE Group can be contacted via:

<http://www.ulg.ac.be/oceanbio/MARE/welcome.htm>, contact: pdauby@ulg.ac.be.