### Facts and figures:

- Total staff: 100 people, among which 55 are permanent (33 researchers, 22 technicians and administrators), 35 Ph.D. students and 10 postdocs and contracts
- 80 publications per year in international journals
  International collaborations:
  - Taiwan, China, Russia, India, Canada, Brazil, Morocco, Tunisia, Algeria, USA, New Zealand, Belgium, Netherlands, Denmark, Italy, Great Britain, Germany, Greece...
  - 7 PhD. thesis under joint supervision
  - exchange of researchers and professors with **5** countries,
  - involvement in 5 European programs

## http://log.univ-littoral.fr

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## Laboratory of Oceanology and Geosciences

CNRS Research Unit (UMR) LOG 8187

Wimereux (North of France)



The themes addressed by the LOG refer to Oceanology and Geosciences in coastal and littoral areas. The LOG is mainly, but not exclusively focused on the Eastern Channel. Other research areas include French Guyana, the North Atlantic Ocean and the Mediterranean Sea.

The LOG is organized into five research teams, each having their own objectives and expertise, but also working towards common goals and projects, such as the Observation of the Littoral Environment (SOMLIT) and the Automatic Monitoring Network for the Littoral Environment (MAREL), micro-scale studies, estuarine studies and development of ecosystem indicators.

### **Research teams:**

- Plankton ecology (bacterioplankton, phytoplankton, zooplankton, biological diversity, fluxes, food webs)
- Benthic ecosystems and interface processes (shallow intertidal and subtidal zones)
- **Biodiversity and climate** (biodiversity, global change and natural fluctuations)
- Coastal morphodynamics (hydrodynamical, aerodynamical and sedimentary processes)
- Physical oceanography, transport and remote sensing (hydrodynamics, turbulence, remote sensing)



Université du Littoral Côte d'Opale, Centre National de la Recherche Scientifique, Université Lille 1









### Research activities at the LOG:

- **I** Fundamental and applied research
- Research qualifications (PhD candidates, Masters students)
- Participation in international symposia
- Participation in international networks
- Organisation of international conferences & seminars
- Reporting
- □ Support actions for the private sector & industry

### Scientific tools:

- □ Fieldwork- *in situ* sampling/measurements;
- □ Laboratory experiments; aquaculture;
- Data analysis using various methods developed by the laboratory's scientists;
- Modelling: transport models, individual-based models, stochastic models & radiative transfer models
- Theoretical developments.



### Funding agencies and programs:

- □ French Space Agency (CNES),
- □ French National Research Agency (ANR),
- Liteau (French research program for environment),
- Interreg, Continental and Onshore Biosphere program (EC2CO),
- French Research program for remote sensing (PNTS),
- Seine-Aval, Urban Planning, Construction and Architecture (PUCA)...

### **Observation networks:**

- SOMLIT Observation network
- French national network of marine stations
- MAREL network
- MARS network

### Research infrastructure:

- Sepia II oceanographic vessel (INSU) and pneumatic craft
- □ Laboratories and temperature-controlled rooms
- □ Facilities to perform chemical analysis in labo-
- ratory (CHN, HPLC, Alliance auto analyser)
- Sensors for in-situ physicochemical measurements (ADV and ADCP, oxygen probes, pH meters, temperature, salinity and PAR meters, wave sensors, fluorometers, radiometers and nephelometers...)
- Digital cameras
- Inverted microscopes, scanning electron microscope
- ROV and Multibeam echosounder



# Support actions for industry and local authorities:

- Marine and coastal environment surveys (ecological indicators)
- Biotechnology alternatives for living preys in aquaculture
- Long term monitoring and surveys: methodological analyses
- **D** Environmental and temporal data sets
- Studies on marine fauna and flora, taxonomy
- Popular science for a general audience

### **Industry Contacts:**

CNES, EDF, Lafarge, Tioxide, Gravelines' fish farm, Ports of Le Havre, Rouen, Boulogne-surmer Calais and Dunkerque, Aluminium Pechiney, GIE Aggregates Eastern Channel...



