VLIZ Research Infrastructure

Cattrijsse Andre, Thanos Gkritzalis, Wim Versteeg, Michiel T'Jampens, and Karen Rappé

Flanders Marine Institute (VLIZ), InnovOcean site, Wandelaarkaai 7, B-8400 Oostende, Belgium E-mail: andre.cattrijsse@vliz.be

The Research Infrastructure division of the Flanders Marine Institute provides logistical support to marine researchers by ensuring the management, maintenance and operational support of the research facilities and equipment. The major infrastructures offered are the research vessel Simon Stevin, the Marine Station Ostend and the unmanned underwater vehicle Genesis.

RV Simon Stevin is deployed for coastal oceanographic research in the Southern Bight of the North Sea and the eastern part of the English Channel. It meets the requirements of the different marine research disciplines in Flanders ranging from physical oceanography, fisheries research, marine biology, microbiology, chemistry, technology and archaeology to earth sciences. The vessel is equipped with standard sampling equipment as well as with high tech instruments. The presence of sophisticated technology for current measurements and bottom characterization, a dynamic positioning system and a silent diesel-electric drive make the ship one of the most modern of its category.

The Marine Station Ostend (MSO) is housed in former warehouses at the Halve Maan site on the Ostend east bank. In the MSO, multifunctional laboratories are available to marine scientists. A storage depot for research equipment houses a back-up server for all databases VLIZ maintains as well as a technical workshop for the maintenance of ROV Genesis and other equipment. In addition a space is provided for public activities. Seawater holding tanks will be installed to allow for various scientific experiments under controlled conditions. MSO can also accommodate large student groups during short term internships performing field exercises.

The Remotely Operated Vehicle (ROV) Genesis is deployed worldwide on various foreign research vessels for marine research. The ROV is mainly used for deep-sea research. It provides the opportunity to explore the largely unknown deep-ocean margins and their biodiversity. Genesis is used to film and take samples from deep-sea canyons, cold-water coral reefs, carbonate mounds, mud volcanoes, cold seeps, etc. Recently the RV Simon Stevin has successfully taken the ROV onboard proving that this offers new opportunities for local research.