



Environmental and coastal planning and development



# THE IMPACT OF PARTICULATE IRON OF HYDROTHERMAL AND SEDIMENTARY ORIGIN ON THE MARINE BIOGEOCHEMICAL CYCLE

The BIIM project aims to evaluate the process which leads to particulate iron of sedimentary and hydrothermal origin dissolving, and the impact this has on marine biogeochemistry.

This is a key issue, because iron limits marine biological productivity and carbon sequestration in over 30% of the world's oceans. Abiotic particulate iron has to date been considered to be a material which resists being dissolved in water. Recent observations call that theory into question, suggesting that this reservoir of iron may be soluble; however, few experiments have been undertaken as yet.

In the BIIM project, laboratory experiments will be designed around the needs identified by modelers: namely to use the various particles to assess their rates of dissolution in relation to environmental factors such as temperature and light levels.

## Partner

#### Research center

UBO-LEMAR, Brest [Project Developer]

#### Funder

- Agence Nationale de la Recherche

## Labelisation

19/10/2018

### Overall budget

615 K€