

**Post-doctoral position available at UMR 7144 CNRS Sorbonne Université –
Station Biologique de Roscoff (W/M)**

*Methane fluxes at marine interfaces – optimisation and deployment of an in situ
mass spectrometer in marine environments*

Job title: Postdoctoral Researcher (W/M)

Proposed starting date: as soon as possible before June 2019

Duration: 24 months

Deadline for application: until position is filled

Location: Roscoff, France

For further information about the post, please contact Cedric Boulart
on email cedric.boulart@sb-roscoff.fr

A 24-month full-time postdoctoral researcher (W/M) position in Marine Chemistry and In Situ Chemical Sensor Development is available in the Marine Chemistry Team of UMR 7144 CNRS Sorbonne Université at the Station Biologique de Roscoff, France, with a starting date before June 2019.

The appointment of the Postdoc will be made according to the guidelines of Sorbonne Université, following the general rules of French universities and the salary will be in accordance with the University salary scale.

Job description

The Marine Chemistry Team has developed a strong expertise in climate-change gases as well as in the development of in situ chemical sensor for oceanography. Our major task is to constrain air-sea exchanges of GHGs (e.g. CO₂ and CH₄) and their variability at various time and spatial levels in marine ecosystems.

The Team is currently developing a new research topic on the biogeochemical cycle of CH₄ that is complementary to the research on marine CO₂ cycle. The main goal is to evaluate the source/sinks of CH₄ at key sites and the response of CH₄ cycle to climate change.

To address the variability of the biogeochemical processes, the Team is developing new in situ chemical sensors that are deployed on various oceanographic platforms (buoys, Ferrybox, CTD-rosette, ROV). We have recently acquired a new in situ mass spectrometer that is able to measure dissolved gas concentrations at various depths in marine environments in real time.

As part of the FULMAR project, funded by the Region Bretagne, we are seeking a full-time postdoctoral researcher that will be responsible for the development and the optimisation of the in situ mass spectrometer as well as the deployment and data acquisition during oceanographic cruises. In details, the Postdoc will take in charge :

- the optimisation of the instrument (detection limits, response time, calibration...),
- the integration and the interfacing of the instrument on the oceanographic platforms (in coordination with the engineers responsible of these platforms),
- the deployment of the instrument during oceanographic cruises,
- the data acquisition and analysis.

Profile/qualifications

The candidate must hold a PhD for less than 3 years and should not have spent more than 18 months in France during the last 3 years (between June 2015 and June 2018). Ideally, the applicant should hold a PhD in marine chemistry, analytical chemistry or environmental chemistry with a significant experience in instrumental development such as in situ chemical sensors. An experience in mass spectrometry and gas chromatography will be appreciated as well as data analysis (time-series), programming and modelling (under R, Matlab or Python).

How to apply

Applicants should send via e-mail (in a single pdf file) their extended Curriculum Vitae with publications list and other scientific works, professional degrees as well as a letter of interest at: cedric.boulart@sb-roscoff.fr.

Additional reference letters would be appreciated.