Post-Doc position in biological fractionation of non-traditional isotopes

General information

Workplace: Lab of Oceanography of Villefranche-sur-Mer, France (http://www.lov.obs-vlfr.fr/)
Date of publication: 20th May 2019
Type of Contract: FTC Scientist (full time)
Contract Period: between 18 to 24 months according to experience
Expected date of employment: 1st October 2019
Remuneration: between 2500 and 3500 euros gross monthly according to experience
Desired level of education: PhD
Experience required: Indifferent
Deadline for application: 30th June 2019

Missions

The relationships between the concentrations of trace metals and marine biomass and biodiversity remain uncertain. The ISO2MET ANR project targets to apply stable isotope fractionations of trace metals in marine ecotoxicology, and to determine the relationships between isotope signatures of marine species, marine carbonates and metal levels in the ocean.

Activities

The post-doc will focus his/her activity on characterizing and quantifying biological fractionation of lithium, copper and zinc isotopes in the marine environment. The post-doc will also participate to the experimental work initiated at the cellular level, in collaboration with a laboratory located at the Faculty of Medicine in Nice. At the organism level, the candidate will perform high sensitivity isotopic measurements on plankton, plankton-feeders, fishes, bivalves and corals, collected in contrasted environments, or cultured under controlled conditions. The objective is to establish the control laws of biological isotope fractionations in the ocean and to provide new approaches in ecotoxicology, paleoenvironment and medical fields.

Skills

Candidates should hold a PhD in non-traditional isotopes in the environment and have significant skills in biology and/or paleo-environments. Experience in modeling isotopic and geochemical data would be an asset. The capacity to work in a multidisciplinary team, and the ability to communicate and write easily in English is essential. Additional expertise will be appreciated in ecotoxicology and environmental science.
Work context

LOV is a joint research unit of both the CNRS and Sorbonne University, and is a French marine station specialized in plankton ecology, ocean acidification and marine biogeochemical cycles. At LOV, the post-doc will participate to the newly formed Chemistry-Ocean-Climate (CHOC) team dynamics, that involve 8 researchers, technical staffs and several PhD students. In the context of the project, the post-doc will be part of the ANR ISO2MET team and will benefit from the interdisciplinary and numerous interactions of its members from LOV, LP2M (Nice), IAEA-Monaco, LIENSs (LaRochelle) and ENS-Lyon (https://anr.fr/Project-ANR-18-CE34-0002).

Equipped clean laboratories, ICP-OES, ICP-MS, GC and EA-IRMS are part of the CHOC and the LIENSs platforms. MC-ICP-MS are available in ENS-Lyon. Modeling is performed in collaboration with Nice University biophysicists.

Application

Send applications (CV, name of two referents, motivation letter) or questions to nathalie.vigier@obs-vlfr.fr and to isabelle.maire@obs-vlfr.fr, before 30th June 2019.