

POSTDOC PROPOSITION

Quantification of the effect of macrofauna bioturbation activity on sediment biogeochemistry and nutrient uptake for microphytobenthic primary production of the intertidal flat of the Seine Estuary

KEYWORDS: BIOGEOCHEMISTRY / BIOTURBATION / PRIMARY PRODUCTION / MICROPHYTOBENTHOS

LOCATION of the postdoc: University of Caen CAEN (UMR BOREA "Biologie des ORganismes et Ecosystèmes Aquatiques" MNHN, UPMC, UCBN, CNRS-7208, IRD-207)

NAME OF THE PROJECT: Program SA6 (Seine-Aval 6) "PHARE-SEE : Productivité microphytobenthique des HABitats intertidaux en lien avec la dynamique sédimentaire, biogéochimique et les ingénieurs d'écosystème de la faune benthique: implication pour des enjeux de modélisation et de REhabilitation des vasières de la SEine Estuarienne".

<http://www.seine-aval.fr/projet/pharesee/>

Duration of the contract: 15 months

Start of the study: 8 January 2018

Net salary: 2063.03 Euros

Application deadline: 15th November 2017.

Description: The University of Caen (UMR BOREA) and partners of the PHARESEE project (Gip Seine-Aval 6) are seeking applications for a postdoctoral position (15 months, salary: 2063.03 Euros) in marine benthic ecology including Biogeochemistry of sedimentary organic matter, microphytobenthic primary productivity (Biofilms of benthic diatoms), bioengineering processes (i.e. Bioturbation/Bioirrigation processes by tube-dwelling species and biostabilisation by microphytobenthic biofilms). The successful candidate will contribute to an ongoing national French research program of the GIP "Seine-Aval 6, namely PHARESEE. The expected work of the candidate will be :

- * The preparation of a field survey (4 campaigns in 2018) and management of analyses regarding bioturbation, PAM fluorescence (primary production), biogeochemistry, sediment granulometry, irradiance/temperature....

- * Responsible of analytic and treatment data of PAM fluorescence results, nutrient stocks, diffusive fluxes of nutrients, temperature/PAR (Photosynthetically Active Radiation), EPS (ExoPolymeric Substances), grain-size sediment and organic matter quality.

- * Interdisciplinarity: Data must be organized to couple the benthic processes: Sediment transport, Bioturbation, Biogeochemistry, Microphytobenthic primary production. The candidate must contribute to the collaboration between the different partners of the project regarding analytic treatments by being very mobile between labs (Paris, Rouen, Bordeaux, Caen).

- * Student supervising for field survey and lab analyses.

- * Leader in the process of writing Ranked-A publication(s).

The candidate will have the opportunity to work with the different researchers of the project under the coordination of Dr. Francis Orvain (UMR BOREA, University of Caen) and Dr. Arnaud Huguet (UMR METHYS - University Pierre & Marie Curie, Paris).

For more information about our research program and the postdoctoral application, please contact Dr Francis Orvain if you are interested in this position. Candidates should send a letter of interest describing their qualifications relevant to the project and past research experience, their full CVs, two relevant publications, and two names of previous supervisors for asking recommendation. The candidature must be sent to the following address (electronic submission is preferred): francis.orvain@unicaen.fr