La Rochelle, September 13, 2023

Postdoctoral position in coastal modeling at La Rochelle University (France)

The laboratory

LIENSs is an Interdisciplinary Joint Research Unit part of the French National Centre for Scientific Research (CNRS) and La Rochelle University. LIENSs expertise spreads across environmental and social sciences addressing issues on the sustainability of the coastal domain exposed to global warming. The lab hosts about 80 researchers, 29 permanent engineers and technicians, 24 postdoctoral and invited researchers, and 40 PhD students.

Job description

We invite applications to work on a very high-resolution ocean-biogeochemical model encompassing the land-to-ocean interface. The postdoctoral researcher will work together with Vincent Le Fouest (LIENSs, France), Dimitris Menemenlis (NASA-JPL, USA), and Dustin Carroll (Moss Landing Marine Laboratories, USA) to 1) set up a regional cut-out of the ECCO-Darwin model (https://www.ecco-group.org) and 2) assess how terrigenous matter and sediment biogeochemistry alter air-sea CO_2 fluxes in shallow systems. The project will focus on a semi-enclosed sea located in Bay of Biscay (Northeastern Atlantic) facing high anthropogenic pressure. The hired researcher will be involved in national and international research projects and interact with a large panel of specialists.

Key references

Bertin, C., D. Carroll, D. Menemenlis, S. Dutkiewicz, H. Zhang, A. Matsuoka, S. Tank, M. Manizza, C. E. Miller, M. Babin, A. Mangin, and V. Le Fouest (2023). Biogeochemical river runoff drives intense coastal Arctic Ocean CO_2 outgassing. Geophysical Research Letters, 50, e2022GL102377. https://doi.org/10.1029/2022GL102377

Carroll, D., D. Menemenlis, S. Dutkiewicz, J.M. Lauderdale, J.F. Adkins, K.W. Bowman, H. Brix, I. Fenty, M.M. Gierach, C. Hill, O. Jahn, P. Landschützer, M. Manizza, M.R. Mazloff, C.E. Miller, D.S. Schimel, A. Verdy, D.B. Whitt, and H. Zhang (2022). Attribution of space-time variability in global-ocean dissolved inorganic carbon. Global Biogeochemical Cycles, 36, e2021GB007162. https://doi.org/10.1029/2021GB007162

Skills and requirements

- PhD in oceanography or equivalent
- Knowledge in coastal ocean dynamics and biogeochemistry
- Strong programming skills (Fortran plus Python or Matlab orJulia)
- English proficiency and excellent communication skills

Employment

The position is a full-time fixed-term position for 24 months. Starting date expected on January 2024 at the earliest. The researcher will be hosted at LIENSs located in the coastal city of La Rochelle, France.

How to apply

Applications must include a letter of application, a curriculum vitae including a complete list of publications, and diplomas (MSc and PhD). For further information about the position, please contact Vincent Le Fouest at vincent.le_fouest@univ-lr.fr.