



MESMic : Scientific Hub Metals in Environmental Systems Microbiology



Postdoctoral position: Hg stable isotopes and speciation experimental methods to study biogeochemical pathways in aquatic environments.

Dead line for applications: September 22nd 2023 (22/09/2023)

Starting date: January-February 2024 – Duration: 12 months

Hosting institution: Université de Pau et des Pays de l'Adour and CNRS, Institute of Analytical Sciences and Physico-Chemistry for Materials and the Environment (IPREM - Environmental Chemistry and Microbiology Unit, <https://iprem.univ-pau.fr/>)

Program: Scientific Hub Metals in Environmental Systems Microbiology (MESMic), E2S/UPPA

(<https://iprem.univ-pau.fr/fr/collaborations/hub/mesmic.html>)

Supervisor: D. Amouroux (CNRS, E2S/UPPA)

Contact: david.amouroux@univ-pau.fr

Hg stable isotopes will be used to develop new investigation on parallel biotic and abiotic pathways that will be applied to decipher Hg biogeochemical pathways in the natural aquatic environments. Hg is recognized as a “non-traditional model element” for its isotopic system and analytical development over the last three decades now makes it possible to determine the isotopic composition of Hg in environmental matrices. The use of Hg isotopes has considerably improved our understanding of its cycle because they can be used as enriched compounds in multiple-spike experiments, or as natural abundance isotopes showing both significant mass-dependent (MDF) and mass-independent fractionations (MIF). This opens up a large toolbox to study the different processes and identify complex Hg biogeochemical pathways.

The Postdoctoral work will be conducted in the framework of the MeSMic Hub (Metals in System Microbiology at E2S/UPPA). In this project, the postdoctoral fellow will investigate biotic and abiotic controlled Hg transformations through the fate of Hg compounds in aquatic environmental compartments from specific terrestrial or marine systems. This Postdoc project also requires strong analytical skills, intense team-work and interdisciplinary scientific exchanges.

Applicants should have a PhD Thesis and a strong background in (bio)geochemistry and/or environmental chemistry, and more specifically in isotopic (bio)geochemistry and analysis and field and/or experimental studies.

Gross salary: 3000 Euros / month

Applicants must send their application including a CV and a motivation letter by email before September 22nd 2023 (22/09/2023) to (david.amouroux@univ-pau.fr). Applications sent after this date will not be accepted.

