

Post-doctoral position in Environmental Sciences Aix Marseille University (France)

JOB TITLE : Post-doctoral position in Environmental Sciences

RESEARCHER PROFILE

x Postdoc/R2: PhD holders

- **RESEARCH FIELD:** Environmental sciences

Main sub research field or disciplines : process engineering, analytical chemistry

- **JOB DESCRIPTION :**

The proposed position is part of a major interdisciplinary research project **PRESERVER2** : Waters of the Aix-Marseille metropolitan area (France) : Reuse, detection of emerging xenobiotics, public perception effects of mixtures on living organisms and sustainable treatment solutions ; funded by [ITEM](#) and Aix-Marseille Provence Metropolis.

This project involves multidisciplinary consortium bringing together the [LCE](#), [IMBE](#), [CEREGE](#), and [LPED](#) laboratories is collaborating to detect emerging contaminants and evaluate their toxicological impact through innovative *in vitro* and *in vivo* models.

Water treatment regulations do not take into account the toxicity of emerging pollutants or the effects of mixtures, which, although concerning, remain poorly studied in toxicology. This project will identify and quantify micropollutants such as PFAS in wastewater treatment plants effluents. It will characterize the effects of PFAS mixtures on living organisms, examine public and institutional perceptions of water pollution, and propose remediation solutions. The objectives will be achieved through an interdependent and multidisciplinary approach (environmental chemistry and biology, toxicology, process engineering, and sociology). This approach follows a One Health approach which focuses on the characterization of the exposome and considers solutions for reducing water pollution.

The project will enable a better assessment of exposures and hazards, assess the public on their engagement with water quality, and propose remediation solutions at the wastewater treatment plant outlet. This project will facilitate the development of strategies for managing and reducing environmental and health risks, as well as for the reuse of treated wastewater.

The recruited candidate will be in charge of (i) the development of analytical method to identify through a non-targeted approach PFAS present in local wastewater treatment plant effluents and (ii) the study of the removal of these compounds will be evaluated at pilot scale level (Oxidation processes and Advanced Nature Based Solutions). The identification of potential by-products produced in the studied treatment processes will be done through LC-HRMS measurements

For the first part, the results, combined to previous monitoring performed by LCE, will allow the constitution of a cocktail of micropollutants to further investigate. On the second part, several AOPs, and operational parameters will be evaluated, to identify the most effective process that minimize residual toxicity. The loss of toxicity will be assessed through a collaboration with IMBE.

TYPE OF CONTRACT : TEMPORARY

JOB STATUS : FULL TIME

APPLICATION DEADLINE: 12/02/2026

ENVISAGED STARTING DATE : 01/03/2026

ENVISAGED DURATION : 13 months

GROSS SALARY: depending on your professional background ranging from 2616€ and 3062€ /month (gross salary)

WORK LOCATION(S):

The candidate will be part of LCE in the TRAME team, located within the Arbois campus of Aix Marseille University, located near Aix-en-Provence.

WHAT WE OFFER:

The candidate will be recruited at the LCE and will benefit from a reception office for the duration of the contract. The candidate will benefit from the support of engineers of LCE. The candidate will have access to the LCE's cutting-edge equipment for analysis (Sciex LC/MS/MS 7500+ QTrap, Thermo LC-HRMS-Eclipse Orbitrap) and pilote-units (REACTISS AOP).

Additional information: The Euraxess Center of Aix-Marseille University informs foreign visiting professors, researchers, postdoc and PhD candidates about the administrative steps to be undertaken prior to arrival at AMU and the various practical formalities to be completed once in France: visas and entry requirements, insurance, help finding accommodation, support in opening a bank account, etc. More information on AMU EURAXESS Portal

○ **Qualifications, required research fields, professional skills :**

The candidate must hold at least a PhD in environmental sciences, chemical engineering or analytical chemistry. A first experience in analytical method development by LC/MS is required, and the candidate should demonstrate a proved first experience in non-target analysis. He/She should demonstrate his/her expertise in environmental sciences and/or chemical engineering, and basic knowledge in the other.

○ **Soft skills:**

As the project is interdisciplinary, the candidate must be motivated and ensure that complementary areas of expertise are integrated in a balanced manner, regularly present their progress to the team and write scientific articles in English, demonstrate organization, listening skills, dynamism and communication skills and have a minimum B2 level of English.

○ **REQUESTED DOCUMENTS OF APPLICATION, ELIGIBILITY CRITERIA, SELECTION PROCESS**

Curriculum vitae

Cover letter

Letter of recommendation (optional)

HOW TO APPLY

Email to:

anne.piram@univ-amu.fr AND nicolas.roche@univ-amu.fr