

## Postdoctoral Researcher Position in Atmospheric Physical Chemistry

Institution: Université du Littoral Côte d'Opale (ULCO), Laboratory of Physics and Chemistry for the Atmosphere (LPCA)

Location: Dunkerque, FRANCE

Contract duration: 12 months

Start date: January 1, 2026

Application deadline: September 30, 2025

Salary: €2,600 gross/month

### Project Description

Numerous studies have shown that road transport is responsible for significant emissions of fine particulate matter (PM<sub>2.5</sub>) into the atmosphere, with a proven impact on human health. These particles come not only from exhaust, but also from non-exhaust emissions, mainly from brake wear and tire/road contact. These non-exhaust particles are becoming more and more preponderant, particularly in view of the fall in tailpipe emissions and the evolution of the road vehicle fleet.

In this context, we invite applications for a postdoctoral position in the field of atmospheric physical chemistry, with a focus on **non-exhaust particles emission from heavy goods vehicles**, in order to identify levers for reducing these emissions and improving air quality in a world in transition. This study is being carried out as part of the Horechap project (Aqacia program, funded by ADEME), in collaboration with the Environnement-Aménagement Sécurité et éco-conception (EASE) laboratory at Lyon's Gustave Eiffel University, and the Centre de Recherche en Machines Thermiques (CRMT).

### Job Description

The successful candidate will:

- Analyze by automated scanning electron microscopy coupled to X-ray emission spectrometry (SEM-EDX) samples collected during field campaigns performed in 2025.
- Perform data analysis and interpretation of chemical and physical processes
- Collaborate with national and international partners
- Present results in scientific conferences and publish in peer-reviewed journals

### Candidate Profile

We are looking for a highly motivated candidate with:

- A PhD in atmospheric sciences, physical chemistry, environmental sciences, or a related field
- Strong background in aerosol chemistry and electron microscopy.
- Experience with data processing tools
- Good communication and writing skills in English
- Ability to work independently and within a team

**Working Environment**

The position is hosted at Laboratory of Physics and Chemistry for the Atmosphere (LPCA), part of Université du Littoral Côte d'Opale (ULCO). The team is active in national and international collaborations and offers access to state-of-the-art laboratory equipment (<https://lpca.univ-littoral.fr/>)

**Application Instructions**

Applications should include:

- A detailed CV including list of publications
- A motivation letter (max. 2 pages)
- Contact information for 2 academic referees

Send your application as a single PDF to [karine.deboudt@univ-littoral.fr](mailto:karine.deboudt@univ-littoral.fr) with the subject line: Postdoc Application – [Your Name]

**Additional Information**

The position is full-time, based in Dunkerque, FRANCE, and includes standard French social benefits (health insurance, pension, etc.).

This post-doctoral position is funded by the Université du Littoral Côte d'Opale and the ADEME (Aqacia program).

For more information, please contact: Pr. Karine DEBOUDT – [karine.deboudt@univ-littoral.fr](mailto:karine.deboudt@univ-littoral.fr)