

Microplastic research internship* in Paris, France



Duration: ca. 3-6 months

Start: July/August 2021

Research group: [Laboratoire Eau Environnement et Systèmes Urbains \(LEESU**\)](#) of École des Ponts ParisTech

***Laboratory for water, environment and urban systems*

Supervision: The intern will be working with the PhD students Minh-Trang NGUYEN and Cleo STRATMANN.

Internship revenue from ENPC: ca. 600€ per months

Application until: 9 July 2021

*We encourage ERASMUS internships (please see guidelines [here](#))

We offer an internship in the two projects mentioned below for several months, ideally starting in June or July 2021. You should be interested in the topic of microplastics and eager to learn about the sampling and analysis of microplastics in freshwaters. More details are given below

Project:

Two PhD projects (ESR [4](#) and [11](#)) assess the abundance and impacts of microplastics in waters of the Paris agglomeration, including the Parisian river “Seine” and the Parisian Wastewater systems since mid-2020 in the frame of [the LimnoPlast project](#) (ITN EU-funded project). LimnoPlast involves 15 PhD projects across Europe to investigate the sources, pathways and impacts of microplastics in freshwater environments

Mandatory skills required:

- Bachelor or Master student in environmental sciences, chemistry, environmental chemistry, hydrology and similar subjects
- Physically present at the working place (If you need to move, we will support you to find appropriate housing)
- Fluent english (spoken and written), minimum level B2
- A strong motivation for laboratory and field work
- Being familiar with Microsoft Excel

Additional skills which would be convenient:

- French language skills

- Driver's licence permit in France (European Union) and the motivation to drive within the Parisian agglomeration
- Able to help with physical field work
- Previous experience in the field of microplastics and/or water sampling
- Previous laboratory experiences
- Previous field work experiences

The work you will be doing with us and what you can expect to learn and experience during the internship:

You will analyse microplastics in freshwater and wastewater from sampling to laboratory analysis and data presentation, and contribute to the discussion of the results.

- Involvement in the assessment of microplastics upstream and downstream of Paris
- Involvement in the investigation of microplastics in the Parisian wastewater system
- You will learn crucial aspects of microplastic field work
- Sampling of microplastics and other related water parameters (e.g. river flow rate or suspended sediments)
- Laboratory sample processing of water and sludge samples including filtration, chemical digestion with H₂O₂, and density separation
- Analyse microplastic samples with state-of-the-art methods (ATR-FTIR and μ FTIR)
- Post-analysis identification of microplastic particles using software like siMPle.
- Please be aware that the occasional field work may be physically demanding (various weather conditions, carrying equipment, driving) and can last longer than a normal 8 - 9 h working day, due to traffic and a few hours of travel time in the region. The field work is usually very exciting and fun.

If you have any other questions, please don't hesitate to ask. You can simply send us an Email with the topic "plastic internship": cleo.stratmann@enpc.fr and minh-trang.nguyen@enpc.fr

We encourage everyone who fulfills the requirements and is interested in this project to apply. Our team welcomes everyone. **Please make sure that you fulfill the mandatory requirements stated above.*

Application:

- Curriculum Vitae (CV)
- Short motivation letter (max. 1 page) to explain your interest and skills
- Include your contact information (Full name, email-address)
- Include your availability and any other important information

To apply, please send the documents as PDF-files or Word-files, email header: "plastic internship", by Email to: cleo.stratmann@enpc.fr and minh-trang.nguyen@enpc.fr