

ASSISTANT ENGINEER POSITION IN CLERMONT-FERRAND (FRANCE)

Topic: Analysis of the microbial diversity colonizing plastic waste in mountain streams

Location : LMGE-Campus des Cézeaux, 1 Impasse Amélie Murat, TSA 60026, 63178 Aubière Cedex (France)

Starting date: September 1st, 2021

Duration: 6 months

Funding: Plasticopyr Project (Strategies for reducing plastic contamination in mountain streams). This recruitment is co-funded by the FEDER in the frame of the POCTEFA program.

Salary: 1991 € gross / month

Our objectives

Mountain tourism is concentrated in natural areas of great interest, such as natural parks and Natura 2000 areas. In these areas, rivers play a very important role in maintaining biodiversity and transporting nutrients and sediment to the more downstream sections.

The PLASTICOPYR project answer to the ecological challenge of making mountain tourism compatible with the conservation and functioning of river ecosystems. The main objective of the project is to reduce in a sustainable way the accumulation of plastics in mountain rivers and their transport to the sea. Different study sites located in the Catalan, French and Andorran Pyrenees will be analysed in order to identify the most frequent plastic waste, develop tools to assess the impact of this waste in aquatic food webs, raise citizens' awareness of the environmental impact of their plastics consumption habits and create circular economy models regarding the reuse of plastic waste.

Specifically, the candidate will carry out analysis of the microbial diversity (16S and 18S rDNA genes) in plastic waste as well as natural substrata colonized in the Capçaleres del Ter Natural Park (Girona, Spain). At the same time, the biodegradation of plastic waste will be monitored by analysing the expression of specific genes (RT-qPCR) linked to the degradation of plastic polymers.

Skills requested

The candidate must have a Master degree in aquatic microbial ecology, molecular ecology or bioinformatics. Complementary skills in cell biology will be highly appreciated. Motivated, he / she must be autonomous, but must demonstrate good communication skills between the partners of this international project. On the methodological level, knowledge of molecular biology (ADN, ARN extraction), qPCR, RT-qPCR), as well as, bioinformatics analysis of 16S and 18S sequencing data is sought. Skills in diversity analysis and multivariate statistical analyses will be appreciated.

Contact

If you are interested, please send a CV and a cover letter before June 30th, 2021 to:

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