

RESEARCH ENGINEER POSITION

12 MONTHS (CDD IR/POST-DOC)
TOULOUSE BIOTECHNOLOGY INSTITUTE
TOULOUSE, FRANCE

DEGRADATION OF POLYAMIDE PLASTICS BY MICROBIAL CONSORTIA PlastiCo

This project aims to gain knowledge on the biological determinants of polyamide plastics degradation by microbial consortia.

The selected candidate will work at TBI-Toulouse Biotechnology Institute. TBI is supported by the National Institute of Applied Sciences of Toulouse (INSA), the French National Institute for Agriculture, Food and Environment (INRAE) and the French National Council of Scientific Research (CNRS).

We are offering **12-months** position for a research engineer (Engineer degree or PhD) in the field of microbiology and bioinformatics. The successful applicant will be integrated in the research project “Polyamide plastics degradation by Microbial Consortia” PlastiCo, funded by the Carbios company, within the Collaborative Laboratory PoPLab. The goal of PlastiCo is to determine the culture conditions enabling to select microbial consortia able to degrade recalcitrant plastics and, using metagenomic approaches, to identify the microorganisms and enzymes involved in this process.

The selected candidate will enrich and select microbial consortia with enhanced capacity to degrade polymeric plastics from various natural microbiomes. When possible, isolated strains will also be obtained. Using various omics technologies, he/she will study the taxonomical and functional diversity of the selected plastic-degrading consortia/strains with the aim to identify the species and enzymes involved in polyamide degradation.

Profile:

We are looking for a highly motivated candidate with a strong background in microbiology, bioprocesses engineering, and bioinformatics (Engineering or PhD degree in Microbiology, Biological engineering, Computational biology, Biotechnology). The candidate should be highly skilled in fermentation processes (batch, fed-batch, continuous culture) and microbial ecology (bioinformatics, amplicon and shotgun sequencing, computational biology). Complementary knowledge in analytical chemistry (HPLC, GC-MS, SEC) would be appreciated. A good knowledge of spoken and written English is a highly valuable asset. A good knowledge of spoken French is also appreciated.

Applications should include a CV, a brief description of research interests and past research experience, and a cover letter describing the personal interest in this position. The candidates are encouraged to provide letters of recommendation.

Salary depends on the experience and according to the French University grid of salary (net salary around 2100€-2400€/month). Starting end-2024.

Contact:

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