



POST-DOCTORAL POSITION in molecular microbial ecotoxicology

Researchers of the LOMIC need collaborators for their activities in the frame of **Biodegradation of plastic by marine bacteria: from -OMICS to function and application**

Thanks to funding from the French Ministry of Ecological and Solidarity Transition, a scientific post-doc position is available for **15 months**, starting in the 1st of October 2017 to work on -OMICS insights on the biodegradation of plastics (conventional and “biodegradable”) by marine bacteria.

Background and tasks:

Bacteria living on plastics at Sea, called “plastisphere”, are highly diverse and active. Their ability to degrade plastics in natural conditions are not well characterized, since most of the previous studies used cultured bacteria under laboratory conditions. We are coordinating several project ([ANR-OXOMAR](#), [Ministry-MICROBEADS](#) and [BIOTIGES](#)) to give new insights on the biodegradation of conventional (PE, PP, PS) and so-called “biodegradable” (OXO, PHBV, PCL, PLA) polymers in natural conditions. Together with field campaigns, we developed aquarium devices with open circulation to the Sea to mimic environmental conditions, as followed by the observatory station in the Banyuls Bay (SOLA).

The candidate will use a large set of techniques already available in [LOMIC](#), including DNA/RNA extraction, PCR and Q-PCR, heterotrophic production and ectoenzymes activities, respirometry (O₂/CO₂ exchange), optical, atomic and confocal microscopy. Experience in transcriptomic and meta-transcriptomic data analysis, as well as DNA-stable isotope probing (¹³C-labeled polymers) would be much appreciated. The position will benefit of a large consortium with experts in physics and chemistry of the polymers, as well as biochemists and biogeochemists from academic research and industry.

Salary will be commensurate with regular French post-doctoral research stipends (for indication, net salary of 2700 € per month for 2-7 years of experience after PhD).

Requirements:

Practical experience in microbial ecology, microbial ecotoxicology and NGS data analysis is recommended, but training and support will be provided to strengthen these areas. The successful candidate will be highly motivated, creative and independent.

Deadline for application and contact:

Open until filled. Please contact Jean-François GHIGLIONE (ghiglione@obs-banyuls.fr) for informal inquiries or applications (please attach CV and describe motivation).