

ACADEMIC POSITIONS

JOB DESCRIPTION

- **JOB TITLE/PROFILE** : Postdoctoral researcher
- **RESEARCH FIELD(S)**¹: Natural sciences
- **JOB DESCRIPTION**

The Ocean Sciences Institute with A*midex is funding a 12 month Post Doctoral position to contribute to the MICROBEACH project (*MICRObial life under BEACHes: exploration of microbial diversity and ability to degrade anthropogenic organic contaminants*).

At the land-ocean interface, beaches and their subterranean aquifers are essential connectors between terrestrial and marine aquatic environments. These coastal zones provide unique habitats and are home to diverse microbial communities, involved in important ecosystem services such as depollution. They are however facing increasing threats from human activities. The ever-increasing human population around the Mediterranean coasts exacerbates this situation for Mediterranean beaches. Some beaches of Marseille located downtown are highly crowded during summer, representing occidental Mediterranean beaches under heavy human influence. Among multiple threats, chemical contaminants released directly at the beach such as sunscreens represent emerging concerns.

Through the collaboration of microbial ecologists (MIO-MEB), chemists experts in analytical chemistry (LCE) and subterranean water circulation (MIO-CEM), geography experts

¹ **Social Sciences** - Law, Education, Economics, Social Science, Psychology - **Political Science** - Political Science - **Computational Sciences** - Computer Science, Mathematics - **Engineering** - Architecture and Design, Engineering - **Natural Sciences** - Biology, Chemistry - **Physical Sciences** - Physics, Space Science - **Environmental Sciences** - Agricultural Science, Geosciences - **Humanities**

specialized in tourism and demographic changes (BABEL), with the interest and support of ESPACE lab, OHM Littoral Méditerranéen and European experts (IBF at Pisa, IMC and UAB at Barcelona), MICROBEACH aims at structuring research efforts of AMU and UTLN to (i) explore beaches subterranean potential for microbial removal of organic UV filters (octocrylene, avobenzone, oxybenzone) and (ii) evaluate and promote residents and tourists awareness to beach protection.

MICROBEACH will fund a postdoctoral fellow to conduct two on-field observational campaigns combining social sciences and scientific exploration, and in-lab experiments tackling specific processes. The fellow will investigate (i) the distribution and spread of subterranean mixing and reaction field to evaluate potential UV-filters accumulation/biodegradation hot spots, and (ii) subterranean microbes involved in UV-filters biodegradation along with biodegradation kinetics.

- **QUALIFICATIONS/SKILLS/EDUCATION & RESEARCH REQUIREMENTS**

Candidates must hold a PhD in microbial ecology and/or microbial ecotoxicology. They must be familiar with OMICS tools (from sampling to data analysis). Experience in the use of activity markers coupled with flow cytometry would be an advantage.

Experience in multidisciplinary research is required.

- **APPLICATION DEADLINE**

1st of May 2024. International candidates are encouraged to apply

- **STARTING DATE**

The position is available for 12 months, ideally starting in July 2024.

- **JOB LOCATION :**

MIO, bât R, avenue de l'université, 83130 La Garde, FRANCE

- **REQUESTED DOCUMENTS OF APPLICATION**

Letter of motivation, CV and 2 reference letters.

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○ **CONTACT TO APPLY**

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