
Postdoctoral fellow in microbial ecology

Job offer from the institut de physique du globe de Paris | CNRS UMR 7154

Researcher in	Microbial ecology/Geomicrobiology
Duration	12 months renewable 6 months
Affectation	IPGP Geomicrobiology research team
Salary	2 830 € gross monthly
Date of publication	12/09/2022
Starting date	02/01/2023
Location	IPGP, 1 rue Jussieu, 75005 Paris, France

The institut de physique du globe de Paris

A world-renowned geosciences organisation, the IPGP is associated with the CNRS and an integrated institute of the Université Paris Cité. Bringing together more than 500 people, the IPGP studies the Earth and the planets from the core to the most superficial fluid envelopes, through observation, experimentation and modelling.

The research areas are structured through 4 main unifying themes: Interiors of the Earth and Planets, Natural Hazards, Earth System and Origins.

The IPGP is in charge of labelled observation services in volcanology, seismology, magnetism, gravimetry and erosion. And the IPGP's permanent observatories monitor the four active French overseas volcanoes in Guadeloupe, Martinique, Réunion Island and Mayotte.

The IPGP hosts powerful computing resources and state-of-the-art experimental and analytical facilities and benefits from first-class technical support. The IPGP provides its students with geosciences training that combine observation, quantitative analysis and modelling, and that reflects the quality, richness and thematic diversity of the research conducted by the IPGP teams.

Team Department

The interdisciplinary Geomicrobiology team of IPGP has been involved for more than 15 years in the study of the deep biosphere and has developed innovative methods (and acquired all the corresponding equipments) for microscale imaging of life in rocks (e.g., FISH-guided laser microdissection) or of microorganism-mineral interactions (e.g., SEM/TEM, CLSM-Raman spectroscopy, FTIR microscopy, SNOM).

Missions

Implementation of the microbial ecology components of the project "AURORA: Are sUbsuRface ecOsystems Relevant Analogs for the exploration of life on rocky (exo)planets?" funded by the LabEx UniverEarthS (<https://www.univearths.fr/en/>) and integration of the microbial ecology results in mineralized environment in the petrology and thermodynamic modeling components of the project.



This project involves 6 (teachers)-researchers and research engineers from the Geomicrobiology and Physics of Natural Sites teams of the IPGP and is conducted in collaboration with the "Evolutionary Biology of the Microbial Cell" team of the Institut Pasteur.

> Position of responsibility: The postdoctoral researcher may be required to supervise the work of interns or PhD students

Activities

- Sampling and measurements in the field,
- Acquisition and processing of microbial ecology data (genomics and metagenomics),
- Acquisition and processing of microimaging data
- Integration of microbial ecology data with environmental metadata, and petrological and thermodynamic data
- Writing of scientific publications,
- Writing of progress and end of project reports and project follow-up presentations.

Expected Skills

Microbial ecology of subsurface mineralized environments (genomics and metagenomics), environmental geochemistry and mineralogy, bioinformatics for DNA sequence analysis.

The candidate should have a taste for team and interdisciplinary work and be familiar with the latest conceptual and technological developments in subsurface microbial ecology.

Obligations and risks

- > Work schedules : 35h20
- > Work attendance : none
- > Professional trips : field mission in the Italian Alps, congress

Training and experience required

- > Minimum of 3 years experience
- > Education level or diploma : PhD

How to apply

- > CV and cover letter
- > Deadlines for applications
- > Contacts (2 contacts are required for the interview)

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