

Postdoctoral Position in Experimental Geochemistry

Tracking the signature of atmospheric organic matter in the oldest geological record: an experimental benchmark

Hosting institution: Ecole Normale Supérieure de Lyon
Hosting laboratory: Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (website: https://lgltp.e.fr/en/accueil/)
Duration and period: One-year position starting in January 2025 with the possibility of up to two renewals
Supervisor/contact: Julien Alleon (CNRS researcher)
Profile of the position: carbon, early Earth, experimental geochemistry
Gross salary: 2,750 – 3,500 € per month depending on experience. Salaries include Health and Retirement benefits.

Brief description of the position:

Research will experimentally examine the morphological and geochemical signatures that may have been left in rocks by organic hazes formed in the atmosphere of the early Earth. Synthesis of analogues of Archean organic hazes will be done by cold plasma discharge experiments, in collaboration with researchers from LATMOS, Guyancourt, France. The synthesized organics will be exposed to controlled pressure-temperature conditions in diamond anvil cells and the products will be analyzed using advanced microscopy and spectroscopy techniques, at the LGL-TPE, ENS Lyon. Previous experience is required in at least one of the following fields: geochemistry, organic matter analyses, pressure-temperature experiments, Raman spectroscopy, electron microscopy. More details about the project can be found at <https://lgltp.e.fr/en/anr-atmofossil-postdoctoral-position-in-experimental-geochemistry/>.

Requirements:

- PhD in Geochemistry or a related field.
- Experience in analyzing organic matter and/or conducting pressure-temperature experiments.
- Expertise in microscopy and/or spectroscopy analyses using SEM and TEM and/or Raman spectroscopy.
- Strong collaborative skills and ability to work within an interdisciplinary team.

Application: Candidates are welcome to contact Julien Alleon (julien.alleon@ens-lyon.fr) for further information. Application forms should be sent **before October 1st, 2024**, and contain a cover letter, a CV with education history and research experiences, a list of publications, and the names and contact information of 2-3 references. ENS Lyon is committed to promoting diversity and inclusivity. We encourage applications from all qualified individuals, including those from underrepresented groups in Earth sciences.

