

## Object: Open Position in Prebiotic chemistry/Geochemistry at Institut Origines (PIIM and BIP laboratories) at Aix-Marseille University

Applications for a postdoctoral position to work on molecular evolution related to post-impact processes generated after interplanetary bodies impact of the early Earth is open, between the ASTRO' team of the PIIM laboratory and the Evolution of Bioenergetics'team of the BIP laboratory at Aix-Marseille University, Institut Origines, Marseille, France. The main task will consist in developing experiments simulating sub-surface environments, to understand how a molecular diversity as observed in some meteorites could evolve once delivered at the surface of the early Earth. Environments to simulate will concern hydrothermal alteration in subsurface allowing organic interactions with minerals and UV photons. These experiments will address the hypothesis of an exogenous supply of organic matter via interplanetary bodies on telluric planets, and its potential role in the emergence of prebiotic chemical systems. G. Danger, V. Vinogradoff (PIIM) and S. Duval (BIP) will supervise this position. Organic and mineral production will be developed at the BIP and PIIM laboratories, and sample analyses will be performed using spectroscopic technics (GC-MS, FT-IR) and in collaboration with the CINAM laboratory (expert in imaging methods). The candidate will work in an interdisciplinary environment which will give him the opportunity to extend his knowledge. This project is part of the interdisciplinary research project EXOMIOLE supported by the "Institut Origines" and funded by the A\*MIDEX Excellence program of Aix-Marseille University, and gathering several close laboratories in astrophysics (LAM), geology (CEREGE) and human sciences (CGGG).

The position is for one year, renewable for a second year upon mutual agreement. The starting date would be fall to end 2023, depending on the applicant's availability. Candidates must have a PhD in chemistry, physico-chemistry, geochemistry or in analytical chemistry by the date of appointment. Applicants should submit a cover letter, CV, list of publications, and a statement (2 pages max) explaining research interests and qualifications, and arrange for two letters of recommendation. Review of applications will begin upon receipt until the position is filled and all applications received by the deadline will receive full consideration.

Application Deadline: July 15th, 2023

Attention To: Grégoire Danger, Simon Duval and Vassilissa Vinogradoff

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