

The [Mineral Physics group at the Unité Matériaux et Transformations](#), at the [Université de Lille](#), France, invites applications for a position as

**PhD Student / Doctorant
in Mineral Physics / Materials Science**

from March 1st 2018

The fixed-term position is available for 3 years, and paid according to French standards for PhD fellowships, including all associated social benefits.

This PhD project will investigate the link between microstructures, phase transitions and seismic structures in the deep Earth mantle using a combination of advanced X-ray diffraction methods at synchrotron radiation sources, in-house experimental facilities, and collaboration with seismologists. The working language in the laboratory can be either French or English. English is required for collaborations with the others project partners.

This position is part of an ANR-DFG collaborative project, [TiMEleSS: Phase Transformations, MicrostructurEs, and their Seismic Signals from the Earth's mantle](#), between the University of Lille, the GFZ Potsdam and the University of Münster. The candidate will join a dynamic group of mineral physicists and seismologists in France and Germany, and will work in close collaboration with other PhD students within the network. The project is funded by the Agence Nationale de la Recherche in France and the Deutsche Forschungsgemeinschaft in Germany.

Prerequisites:

We seek a highly motivated individual with keen interest in experimental work and ability to work independently. The candidates should have a strong background in mineralogy/mineral physics and/or materials science and/or physics with an interest in understanding Earth and planetary processes. Experience in high pressure, diffraction, and/or synchrotron techniques is desirable but not required. Good command of English (written and spoken), computational skills and availability to travel are required. Applicants should hold a Master's degree or equivalent in Earth Sciences, Physics, Materials Science, Chemistry or a related field at the time of the appointment.

Applications:

Candidates should submit, in a single pdf file, a short statement of research experience and interests, a CV including a list of scientific productions, and the names and contact information of two or three potential referees **by January 14th 2018** to Prof. Dr. Sébastien Merkel (sebastien.merkel@univ-lille1.fr). Review of applications will start immediately and will continue until the position is filled.

Please contact Prof. Dr. Sébastien Merkel for additional information concerning the project. General information about the Mineral Physics group at the Université de Lille is available online at <http://umet.univ-lille1.fr/Mineraux/index.php?&lang=en>. The PI's homepage is at <http://merkel.texture.rocks/> and the temporary project homepage at <http://timeless.texture.rocks/>.