PhD in Geochemistry at the University of Bern

A PhD position is available at the Institute for Geological Sciences of the University of Bern on the topic “Fluid incorporation in oceanic lithosphere: a microanalytical and modeling study” led by Prof. Daniela Rubatto. The project combines petrology, thermodynamic and geochemical modeling, and geochemical analysis to investigate the uptake and release of fluids in hydrated peridotite and serpentinite from abyssal an obducted settings. A major component of the project will be oxygen isotope measurements in olivine, serpentine minerals and magnetite using the Ion Microprobe at the SwissSIMS laboratory in Lausanne, as well as trace element analyses in the LA-ICP-MS laboratory in Bern. The project includes limited field work, and a modeling component using existing software.

The project is integrated in a large research group interested in quantifying and modeling geochemical exchanges in metamorphic systems and will be carried out in close collaboration with Prof. Thomas Pettke, Prof. Jörg Hermann, Prof. Pierre Lanari and international collaborators.

The Institute of Institute for Geological Sciences at the University of Bern (https://www.geo.unibe.ch/index_eng.html) has a strong expertise in hard rock geology and geochemistry, with well-equipped analytical laboratories (e.g. SEM, Raman and FTI spectrometry, EPMS, LA-ICP-MS, MC-ICPMS), and sample preparation facilities.

The applicant should hold a Master degree (or equivalent) in Earth Sciences and have a vivid interest in geochemistry and petrology. Some experience with analytical techniques and/or ultramafic rocks is welcome. Enquiries regarding the specifics of the project should be directed to Prof. Daniela Rubatto, daniela.rubatto@geo.unibe.ch.

The application should include a full CV, transcripts of academic degrees, a statement of research interests, and the contact information of two potential referees. The application should be submitted to daniela.rubatto@geo.unibe.ch as a single pdf. Evaluation of applications will start on 20 April 2020 and continue until the position is filled. Start of the project is planned between June and September 2020 and the position is funded for 4 years.