The group of Clay Science, Applied Mineralogy of the Competence Center for Material Moisture (CMM) and the Institute of Photogrammetry and Remote Sensing (IPF) offer a position for

**PhD/PostDoc (m/f/d) (75-100%)**

**Job description**

Within the framework of the BMWi-funded Sandwich Main Project (Sandwich-HP), the hydraulic sandwich sealing system developed by KIT will be tested on a large scale in the Mont Terri Rock Laboratory (CH). The Sandwich-HP is a joint project of GRS and KIT with participation of international partners. Laboratory tests on a semi-technical scale (HTV) as well as MiniSandwich tests for the optimization of materials and parameterization for hydro-mechanical-chemical modeling accompany the in situ experiment. Within the scope of the activity, the ion exchange and transport in mineral materials as well as the effect on geotechnical properties, such as swelling pressure, have to be investigated mineralogically and geochemically. Therefore, samples from the HTV and MiniSandwich are to be analyzed as well as own experiments are to be designed and carried out.

**Personal qualification**

You have a university degree (Diplom (Uni)/Master) in geosciences, geoecology, chemistry or a comparable course of study. If applicable, you have completed an outstanding doctorate. A sound knowledge of mineralogy or chemistry as well as a very good written and spoken command of English is required. We expect a strong interest in experimental and analytical work. Documenting, presenting and publishing scientific results is your strength. Experience in the fields of geotechnics, clay mineralogy, analytics and geochemistry would be an advantage. Participation in this international project requires excellent intercultural, networking, organisational and conflict resolution skills.

**Entry date:** Immediately

**Term of contract:** Limited until June 30, 2023

**Application deadline:** Applications should be submitted by 30 April, 2020, but are accepted until the position is filled.

**Application:** Complete applications must include a curriculum vitae and contact details of two referees familiar with the academic ability of the candidate, and should be emailed to: Ms. PD Dr. K. Emmerich (katja.emmerich@kit.edu)

KIT is pursuing a gender equality policy. We would therefore particularly encourage qualified women to apply. If qualified, handicapped applicants will be preferred.