Karlsruhe Institute of Technology

We are looking for the Institute of Applied Geosciences, Division of Geothermal Research, as soon as possible, a

PhD student (75%)
Numerical Simulation of THC-processes

Contract duration is limited to three years. The salary is based upon the salary frame agreement for the German public service sector (TV-L, E 13).

The Division of Geothermal Research at KIT (http://www.agw.kit.edu/251.php) focuses on reservoir characterization, exploration and engineering in deep geothermal applications. The projects are conducted at a national and international level, with numerous partners and application fields worldwide. Key aspects of research in this domain are the development and application of numerical tools to simulate coupled non-linear thermo-hydro-mechanical-chemical (THMC) processes.

The position is aiming at the development and application of a numerical tool (MOOSE solver environment) to solve coupled thermo-hydraulic-chemical (THC) processes, considering two-phase flow (Navier-Stokes), multi component transport as well as mineral dissolution and precipitation.

In addition you must have a master degree in chemical engineering, geophysics, applied physics, fluid mechanics or similar degree with strong background in numerical modelling. We expect the candidate to be team-oriented. She / He should have a profound interest in numerical simulation - especially FEM - and good programming skills in C++, Python. Familiarity with thermodynamics, aquatic chemistry and geosystems is desirable, and should also be a domain of interest of the candidate.
In this context, we are searching for a highly motivated scientist ready to join our working group.

We offer an exciting research in an international environment with access to a state-of-the-art research laboratory complemented by wide range of career development offers.

We prefer to balance the number of female and male employees. Therefore we kindly ask female applicants to apply for this job.

If qualified, handicapped applicants will be preferred.

Please apply online (http://www.pse.kit.edu/job/1020/2018) until **15th July 2018** using the vacancy number **1020/2018**. Personnel Support is provided by Frau Brückner, Personalservice, Karlsruhe Institute of Technology (KIT), Campus Süd, Kaiserstraße 12, 76131 Karlsruhe. For further information, please contact Dr. Maziar Gholami Korzani, +49 721/608-45269.

Further details can be found on our website: www.kit.edu.