The Institute of Applied Geosciences at Graz University of Technology invites applications for a

PhD position in Mineralogy / HydroGeochemistry

for 3 years on fundamental research on the interaction of MgO and acids to form distinct and tailored designs of bondings to be applied in refractory. The PhD position is located at the Institute of Applied Geosciences at the Graz University of Technology and available at the earliest by June 1th, 2019.

The PhD student will focus on experiments from low temperature in aquatic media to high temperature in the refractory range. The study is based on the development of novel refractory materials in the overall scope of material and energy efficiency and designing advanced production and application techniques. The study will be conducted at TU Graz in close cooperation with RHI Magnesita refractory industry (Leoben).

The applicant should have a M.Sc. or equivalent in the field of mineralogy, petrology, chemistry or equivalent. Knowledge on water-mineral interaction, experimental precipitation approaches and (hydro)geochemical modelling is highly valued, in particular in respect to crystal growth mechanisms and kinetics. It is very desirable to have strong experience with geochemical and mineralogical analytical techniques, such as scanning electron microscopy, X-ray diffraction, vibrational spectroscopy (FT-IR & Raman) and computer tomography. Basic knowledge in German language is advantageous. The successful candidate will collaborate within an interdisciplinary research group and will be part of NAWI Graz Advanced School of Science. Salary will be according to the Austrian Science Fund (FWF) tariff for graduate students.

Application deadline: 30th April 2019

Your application should include a complete CV, motivation letter, publication list (if applicable), and two letters of reference. Please send the documents as a single pdf file by email to Prof. Martin Dietzel (martin.dietzel@tugraz.at). University and institution details: http://www.tugraz.at or …/institutes/iag/home/.