The Faculty for Geosciences, Geoengineering and Mining, at the Institute of Geotechnics, Chair of Soil Mechanics and Foundation Engineering, is seeking a

Research Assistant /Wissenschaftlichen Mitarbeiter (m/f/d)
Reference Number 20-E/2020

Vergütung (compensation): Entgeltgruppe 13 TV-L
Stellenumfang (full-time percentage): 1,0 FTE (full time; This job can also be carried out as a part-time position.)
Befristung (time limit): to be filled as soon as possible for a period of up to 3 years, subject to the availability of funding

Join a team of professionals from universities, research centers and companies to work on numerical simulations of large-scale coupled thermal, hydraulic and mechanical processes around generic nuclear waste repository sites in clay rock. You work with realistic geological models study the impact of different climatic scenarios to advance our knowledge on how such systems potentially evolve over long time scales.

Your tasks:
You develop geological and process models to perform numerical simulations of the coupled deformation, fluid flow and transport processes in argillaceous rock using the open-source scientific simulation software OpenGeoSys. A special emphasis will be put on the complex constitutive behaviour of the clay host rock itself. The application background of your research is the description of large-scale processes around deep geological repositories for nuclear waste disposal in response to altered boundary conditions due to glaciation and permafrost. Your work is integrated into a wider effort to study such effects in different geological settings and host rocks. You’re therefore expected to coordinate your work with the project partners. You will present your results at international conferences and publish them in relevant international journals.

What we offer:
- A family friendly work environment and flexible hours
- Guidance and support provided by experienced senior level researchers
- Opportunities for on-the-job training and professional development
- Competitive wages and attractive benefits

What we expect:
- You have a PhD in Geophysics, Geotechnics, Geosciences, Civil Engineering, Mechanical Engineering, Applied or Theoretical Physics, Computer Science or Applied Mathematics.
- You have knowledge in continuum mechanics as well as in numerical methods (especially the finite element method).
- You have a strong publication record in recognized international journals.
- Proven programming skills (preferably in C++) round off your professional profile.
- You work scientifically-methodically, problem-solution-oriented and are characterized by a high degree of commitment and personal responsibility.
- You speak and write English fluently. German skills are a major advantage.
- You are willing to present project results at national and international conferences.

For more information, please do not hesitate to contact Univ.-Prof. Dr. Nagel (thomas.nagel@ifgt.tu-freiberg.de)

Kindly send your application documents no later than 21.02.2020. Please include the reference number (20-E/2020) on your application and address it preferably by e-mail to: Dezernat.3@zuv.tu-freiberg.de (all attachments in one pdf file, max. 7 MB). The address for postal applications is:

TU Bergakademie Freiberg - Dezernat für Personalangelegenheiten - 09596 Freiberg

Please note that your application documents will not be returned; only submit copies. No expenses will be reimbursed. Furthermore, the TU Bergakademie Freiberg is seeking academic staff from several disciplines. Information available at: http://tu-freiberg.de/wirtschaft/karriere/stellenausschreibungen