The Faculty of Mechanical, Process and Energy Engineering at the Institute of Mechanics and Fluid Dynamics, offers at earliest convenience a temporary position as

Research Scientist

to work on a research project founded by the county of Saxony.

Salary: **Payment group 13 TV-L**
Limitation: **3 years (a prolongation is possible)**

Area of responsibility:
We are seeking a research scientist candidate to start immediately in the new founded young research group for multiscale modeling of materials. The group interests are in conducting theoretical and computational research in multiscale modeling ranging from atomistic up to crystal plasticity modeling. Materials of interest are iron, magnesium and semiconductors. The successful candidate will develop multiscale materials deformation predictive tools. In particular, the scientific problems are:

- Development of a simulation framework for the modeling of polycrystalline materials
- Micromechanics using Discrete Dislocation simulations coupled to a cohesive zone model.

In addition, the successful candidate will be encouraged to develop his own research project by writing proposals to solicit funding in related research areas and support the expansion of the group. The candidate will be given the opportunity to perform teaching and education duties if desired.

Qualifications required:
The candidate must have a Master/PhD in mechanical engineering, materials science, physics, or a closely related discipline, with a general background in materials modeling. A strong background in computational methods is highly desired. Candidates with knowledge in one or more of the following areas are encouraged to apply:

- Dislocation theory
- Dislocation Dynamics
- Crystal Plasticity
- Experience in the field of software development (Unix, FORTRAN or C/C++)

Canditate must be comfortable to communicate in English or French. Moreover, the candidate will assist the group leader for administrative communication in German.

Enquiries about the position can be addressed to:

Jun. Prof. Dr. Sebastien Groh, TU Bergakademie Freiberg, Institute of Mechanics and Fluid Dynamics, Lampadiusstr. 4, 09596 Freiberg, Germany, email: Sebastien.Groh@imfd.tu-freiberg.de

The applicant must fulfill the requirements for employment of scientific staff according to WissZeitVG. We particularly welcome and encourage applications from women and disabled people, recognizing they are under-represented at TU Berg-akademie Freiberg. The principles of fair and open competition apply and appointments will be made on merit.
Applications including a cover letter, curriculum vitae/resume, statement of research interest and experience should be email to:
Jun. Prof. Dr. Sebastien Groh, Sebastien.Groh@imfd.tu-freiberg.de

General information on the university and the institute are available online at

www.tu-freiberg.de and http://tu-freiberg.de/fakult4/imfd/