



At TU Bergakademie Freiberg, Faculty of Mathematics and Computer Science, Institute of Numerical Analysis and Optimization, a



**PhD candidate / Doctoral researcher – Position number 01-E/2021**

is to be filled from April 1, 2021.

**Salary:** E 13 TV-L  
**Working hours:** 1.0 FTE (part-time possible)  
**Time limit:** 3 years (extension possible)

This joint project between TU Freiberg, TU Dresden and HTW Dresden is concerned with the development of numerical simulations of biological cells by finite-element methods. The goal is to establish a deeper understanding of cell mechanical properties, which provides the potential to create novel methods in medical diagnostics.

**We expect:**

- services in research and teaching (in German or English)
- motivation to learn new numerical methods, to work independently and well organized
- development of new mathematical models, discretization and implementation
- scientific exchange and interdisciplinary collaboration with biophysicists and engineers
- participation in scientific publications and conference presentations

**What we offer:**

- an international and highly dynamic workgroup with excellent regional and international collaboration partners and openness to new approaches and ideas
- training and assistance by experienced colleagues of the AlandLab ([www.alandlab.de](http://www.alandlab.de))
- highly competitive salary including social and health care benefits, flexible working hours
- the cultural richness of a small university city with the charming surrounding in the Ore Mountains at cheap cost of living
- participation and support for research visits in attractive places world-wide

**To succeed you will need:**

- diploma or master's degree in Mathematics, Computational Engineering Science, Physics, or a related field with a competitive grade
- sound knowledge in numerical methods for differential equations, advanced programming skills
- ability to work in a team, communication skills, personal commitment
- high motivation and interest in using numerical simulations for real-world applications

**For further information please contact Prof. Dr. Sebastian Aland (supervisor)  
phone: +49 351 462 3604, E-Mail: [sebastian.aland@htw-dresden.de](mailto:sebastian.aland@htw-dresden.de)**

TU Bergakademie Freiberg is an equal opportunity employer and encourages applications from women and all others who bring additional diversity. Disabled persons with equal qualifications will be preferred.

Please send your application (incl. CV, transcript of records, academic certificates) with reference to the **position number (01/2021), until January 29, 2021** to:

**[bewerbungen@tu-freiberg.de](mailto:bewerbungen@tu-freiberg.de) or  
TU Bergakademie Freiberg - Dezernat für Personalangelegenheiten - 09596 Freiberg, Germany**

Your application documents will not be returned, therefore please send only copies. Interview costs will not be covered, but online interviews are possible. TU Bergakademie Freiberg is further looking for scientific personnel of diverse specialization. For further information: <http://tu-freiberg.de/wirtschaft/karriere/stellenausschreibungen>