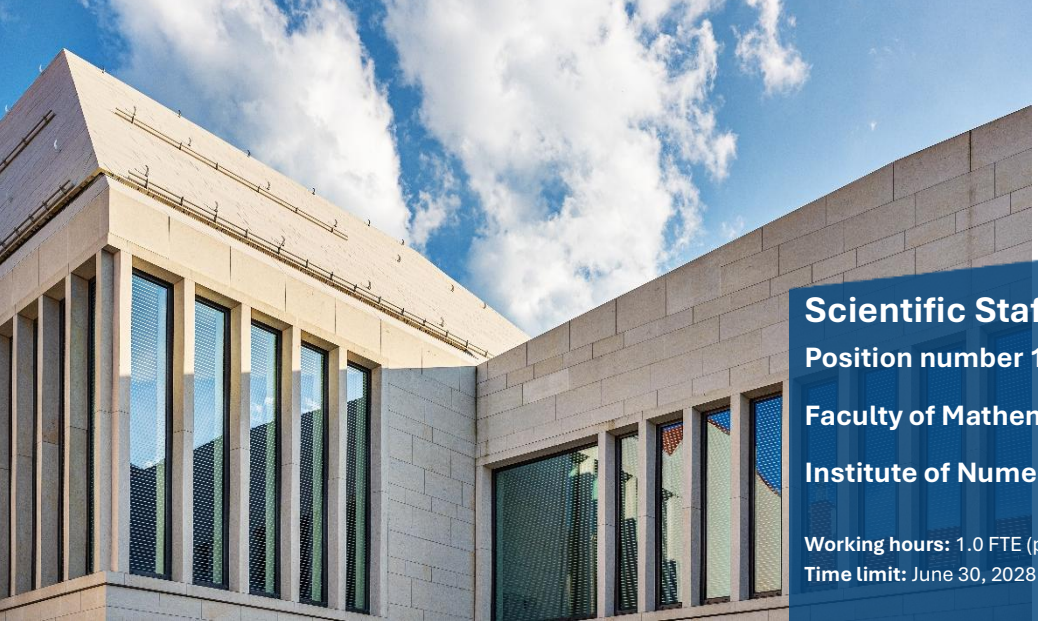

TU Bergakademie Freiberg

TUBAF
Die Ressourcenuniversität.
Seit 1765.

Scientific Staff

Position number 185-E/2025

Faculty of Mathematics and Computer Science

Institute of Numerical Analysis and Optimization

Working hours: 1.0 FTE (part-time possible)
Time limit: June 30, 2028

Salary: E13 TV-L
Beginning: 01.03.2026

You will work in the numerical mathematics group (Prof. Dr. Sebastian Aland), where we develop mathematical models for the complex interplay of fluid and elastic materials. We combine methods from mathematics, physics and high-performance computing to numerically simulate the behavior of such systems with a focus on finding fundamental principles of life.

This joint project between TU Freiberg and HTW Dresden is concerned with the development of mathematical models and numerical simulations of elastic sheets in fluid flows.

Main Tasks:

- development of new mathematical models for elastic sheets
- implementation in finite element code
- scientific exchange with collaboration partners from other disciplines
- participation in scientific publications and conference presentations

What we expect from you:

- diploma or master's degree in Mathematics, Computational Engineering Science, Physics, or a related field with a competitive grade
- sound knowledge of numerical methods for differential equations, advanced programming skills
- ideally some experience with interface tracking (e.g. ALE, IBM, level-set, or phase field)
- ability to work in a team, communication skills, personal commitment
- high motivation and interest in using numerical simulations for real-world applications

What you can expect from us:

- an international and dynamic research group 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)
- highly competitive salary including social and health care benefits, flexible working hours
- participation and support for travels to conferences and workshops

Applicants (m/f/d) must meet the employment requirements for fixed-term employment contracts in accordance with the WissZeitVG (German Academic Fixed-Term Contract Act).

Your application:

Please send your application with the usual documents, quoting the reference number **(185-E/2025)**

by January 4, 2026,
preferably by email to:

bewerbungen@tu-freiberg.de

or by post:
TU Bergakademie Freiberg
Dezernat
Personalangelegenheiten
09596 Freiberg

For further information, please contact:
Prof. Dr. Sebastian Aland
(supervisor)
phone: +49 3731 392322,
E-Mail: sebastian.aland@math.tu-freiberg.de

Severely disabled persons or persons of equal status (m/f/d) will be given preferential consideration if they have the same qualifications, performance, and abilities. Please include proof of this. The TU Bergakademie Freiberg specifically promotes the proportion of women and expressly invites qualified.

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Zertifikat seit 2023 audit familiengerechte hochschule
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