



TUBAF
Die Ressourcenuniversität.
Seit 1765.



HTW**D** Hochschule für Technik und
Wirtschaft Dresden
University of Applied Sciences

PhD Position in Numerical Simulation of Cell Biology in Freiberg or Dresden, Germany

A **Ph.D. position in numerical mathematics** is available in the research group of Prof. Sebastian Aland in Dresden or Freiberg, Germany. The group puts a strong focus on interdisciplinary collaboration and uses numerical simulations to help other disciplines understanding real-life systems in emerging branches of cell biology, materials science and nanotechnology. The collaborative research group is shared between HTW Dresden and TU Freiberg.

The project is concerned with the fluid-structure interaction of a moving elastic surface (the cell cortex) embedded in viscous fluids and aims to answer fundamental questions on the organization of life by means of mathematical modeling and simulations. The funding will run for 3 years starting at a flexible date in early 2024, with the option to be extended. The salary is according to 75% of the German E13 scale (~40.000 Euro per year). The position can be filled either in Dresden or in Freiberg.

Dresden is one of the most beautiful towns in Germany and evolved in recent years to an internationally recognized scientific center. It combines an outstanding scientific environment with a vivid cultural scene and cheap costs of living.

What we expect:

- Motivation to learn new numerical methods and to apply these to biological/medical problems
- Active participation in the research activities of the group
- Scientific exchange with collaboration partners

Required qualifications:

- diploma or master's degree in Mathematics, Computational Engineering Science, Physics, or a related field, with sound knowledge in numerical methods
- an interest in interdisciplinary collaboration
- advanced programming skills (e.g. C/C++, Python, Matlab)
- fluent English

To increase the number of women in teaching and research, qualified female scientists are particularly invited to apply and will be given preferential consideration.

We welcome applications **until December 12th, 2023**, comprising a CV, transcript of records, academic certificates, and possibly a copy of the bachelor or master thesis.

For application or further information, please contact Prof. Dr. Sebastian Aland by email or phone:

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