

### Research Assistant “Simulation of Radiation heat transfer”

We are looking for a research assistant (m/f/d) with a Dipl.-Ing. (Univ.) or M.Sc. degree in Computer science, Mechanical engineering, Physics, Mechatronics, Informatics or related field.

### About us

As a globally renowned institute in the field of brewing, beverage, and grain technology, it is our aim to always be at the forefront of scientific research. The development, implementation, and provision of innovative, forward-looking technologies and concepts in these fields are essential core aspects of our work. We believe that excellent research and lateral thinking will create innovative ideas and solutions for tomorrow's industry.

### What we offer

Creative freedom–knowledge development–industrial contacts–a young and creative team

### Research topic:

Lattice Boltzmann method (LBM) has been applied in various complex phenomena. In this research position, we will investigate a new field of application, which is to simulate the radiation effect on the Brownian motion of the particles. This model will be developed on the open-source code, waLBerla, which provides a fast framework for the simulation of fluid flow with the LBM and particle interaction with DEM. Experimental setup and results are provided to verify the model.

This position is compensated in wages according to the German salary structure for public sector employees (TV-L). The initial salary is set to 50%, and a further increase is possible, subject to the performance. TUM is an equal opportunity employer. As such, we explicitly encourage applications from women. Applications from disabled persons with essentially the same qualifications will be given preference.

### Requirements

- Ability and interest in analytical, creative, and interdisciplinary thinking
- High level of initiative and commitment
- Ability to work in a team and communication skills
- Good knowledge of C++ programming
- Knowledge of particle interaction and physics behind it
- Experience with the lattice Boltzmann method
- Completed university degree

### Application

Please send your application (when electronic, as **a single PDF** file to [verwaltung@bgt.wzw.tum.de](mailto:verwaltung@bgt.wzw.tum.de)) and include the reference “**Modeling\_Radiation**” in the subject line. For full consideration, apply by **December 27, 2020**.

### Contact

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### Note on data protection

As part of your application for a position at the Technical University of Munich (TUM), you transmit personal data. Please note our data protection information according to Art. 13 General Data Protection Regulation (GDPR) on the collection and processing of personal data in context with your application (see <http://go.tum.de/554159>). By submitting your application, you confirm that you have taken note of the TUM's data protection information.