

# Research assistant (m/f/d)

In department of foundry technology at Clausthal University of Technology, there is a position available from 1<sup>st</sup> of June 2024 as a

## **Research assistant (m/f/d)**

(provided that the requirements EG 13 TV-L are met)

initially to be filled full-time (100 %) for a period of 24 months. The position is generally suitable for part-time work. Place of work is Clausthal-Zellerfeld.

Your task is to work on the ZIM project “*CuAlMn alloys with high damping capacity*”.

### **Project Overview:**

The aim of the project is to develop and qualify CuAlMn casting alloys with outstanding damping potential and high quasi-static and cyclic strength properties. Furthermore, a process route for the energy- and resource-efficient production of die-cast CuAlMn components is to be developed. In addition, an overall concept for the design and use of the components at a defined operating temperature is to be created. The project will be carried out in collaboration with the Institute of Mechanical Engineering at Clausthal University of Technology and an industrial partner.

### **Role Overview:**

We are looking for a highly motivated Research Associate to join our multidisciplinary team. The selected candidate will primarily be responsible for:

- Determination of relevant phase transformation ranges austenite/martensite in the CuAlMn alloy system
- Construction of a measuring apparatus for recording the damping potential via acoustic signals
- Development of a prediction model for the metallurgical adjustment of maximum damping properties at the required application temperature
- Investigation and development of the casting properties
- Development of a metallurgical process route according to industry standards
- Close cooperation and coordination with the project partners.

### **Your profile:**

- Successful completion of a degree (M.Sc., diploma or equivalent) in materials science, materials engineering, foundry technology, mechanical engineering or a related field
- Independent, structured way of working and quick comprehension skills
- Enjoy working on interdisciplinary application problems and exchanging ideas with scientists and industry representatives.

**We offer:**

- Exciting topics and participation in top international research
- A family-friendly and collegial working environment in committed teams as well as varied areas of responsibility
- The opportunity to develop innovative approaches and solutions independently
- The possibility of pursuing a doctorate in engineering

The salary complies with the labour contract for the public sector (TV-L) and includes an annual special payment at the year-end. In addition, we offer separate supplementary benefits as a company pension (VBL).

TU Clausthal supports the compatibility of family and profession by means of flexible part-time work schemes within the scope of the official feasibilities and is member of the academic association "Familie in der Hochschule".

Equality with its facets of equal opportunities, diversity and family-friendliness is an important concern at Clausthal University of Technology. People with disabilities will be given priority if they are suitably qualified. Applications from people of all nationalities are welcome

**Please send your application with the usual documents by 19.04.2024** (cover letter, CV, certificates) by email (in a single PDF file) to **Prof. Dr. Babette Tonn**

Email: [babette.tonn@tu-clausthal.de](mailto:babette.tonn@tu-clausthal.de)

If you have any further inquiries, we will be happy to address them.

We look forward to seeing you!

Please note our information on data protection in the application process: <https://www.tu-clausthal.de/universitaet/karriere-ausbildung/stellenangebote/hinweise-zum-datenschutz-im-bewerbungsverfahren>.

Application costs cannot be reimbursed. The application documents will be destroyed after completion of the selection process in compliance with the legal provisions.