

Bundesanstalt für Materialforschung und -prüfung - Bundesoberbehörde



Die Bundesanstalt für Materialforschung und -prüfung (BAM) ist eine wissenschaftlich-technische Bundesoberbehörde mit Sitz in Berlin. Als Ressortforschungseinrichtung des Bundesministeriums für Wirtschaft und Energie forschen, prüfen und beraten wir zum Schutz von Menschen, Umwelt und Sachgütern. Im Fokus unserer Tätigkeiten in der Materialwissenschaft, der Werkstofftechnik und der Chemie steht dabei die technische Sicherheit von Produkten und Prozessen.

Undergraduate Assistant (m/f/d) in the field of study Engineering, Computational Science, Applied Mathematics, Physics, or a related field

City: Berlin; Starting date (earliest): 01/11/26; Duration: 10 Month; Remuneration: 15,08 Euro/ hour; Reference number: J000000266; Closing date: 24/09/26

Tasks

Concrete subjected to high strain-rate loading, such as impact or blast, exhibits complex mechanical behavior that is challenging to model accurately. The development of advanced constitutive material models requires experimental data from a wide range of dynamic and quasi-static testing methods, including split-Hopkinson pressure bar tests, uniaxial compression and tension tests, triaxial compression tests, and related experiments. The goal of this project is to build a well-structured research database containing experimental results and metadata from published literature, therefore transforming the data from human-readable to machine-readable. You will support the collection, organization, and management of scientific data while exploring modern AI-based tools and agent workflows to assist with literature screening and information extraction.

- Conduct literature research to identify publications containing relevant experimental data on concrete materials
- Use AI-assisted tools and agents to support the automated extraction of information from scientific papers
- Collect, verify, and structure experimental data, material properties, and testing conditions
- Digitize plots, graphs, and tables where necessary
- Maintain a research database linking experimental results with corresponding metadata

Requirements

Requirements for the advertised post:

- Enrolment at a German university on a degree programme in Engineering,

- Computational Science,
Applied Mathematics, Physics or a related field; at least in the 3rd semester
- Interest in developing workflows using Large Language models
 - Proficient programming skills in Python
 - General understanding of mechanics or material behavior
 - In addition, the following are optional requirements:
 - Basic knowledge of databases (e.g., SQL, SQLite, PostgreSQL, or similar)
 - Knowledge of concrete materials or construction materials

What we offer

- Attractive location in the German capital, Berlin
- Attractive and modern working environment with excellent infrastructure and state-of-the-art scientific equipment
- A diversity-oriented work environment that actively promotes equal opportunity, where different perspectives are valued and individual potential is nurtured
- A responsible, interesting, and varied job in a professional and collegial environment.
- Opportunity to actively participate in the development of quality and safety standards.
- Diverse tasks in a dynamic and future-oriented market at the interface between science, business, and politics.

Application

We welcome applications via the online application form by 24.09.2026. Alternatively, you can also send your application by post, quoting the Job-ID to:

Bundesanstalt für Materialforschung und -prüfung
Referat Z.3 - Personal
Unter den Eichen 87
12205 Berlin
GERMANY
www.bam.de

BAM promotes professional equality between women and men. We therefore particularly welcome applications from women. At the same time, we strive to reflect social diversity. Every application is therefore welcome, regardless of gender, cultural or social background, religion, ideology or sexual identity.

In addition, BAM has set itself the goal of promoting the professional participation of people with severe disabilities. The fulfillment of the job requirements is considered on an individual basis. Severely disabled persons or persons of equal status will be given preferential consideration if they are equally qualified.

The advertised position requires low level of physical aptitude.

More information at <https://stellenticket.de/207011/BEUTH/>
Offer visible until 24/09/26

