

## **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 electrical engineering, computer science, chemistry, process engineering, mechatronics, physics or a related technical field

City: Berlin; Starting Date: At the earliest possible; Duration: until 16.05.2025;  
Remuneration: Hourly wage 13,69 Euro; Reference number: 250/24-8.1; Closing date: 03/11/24

#### **Working field**

Conduct a market research on available hydrogen sensor modules and select the most suitable sensor for the detection of hydrogen in low concentration

Perform electrical and programming tasks to set up and configure the sensor for the experiment

Design experimental setups and develop a test plan to evaluate the response of the sensor under various parameters such as hydrogen concentration, time stamp, temperature and humidity

Conduct experiments in accordance with the test plan to analyze sensor performance

Apply data analysis techniques to extract key features from the hydrogen sensor transient response data

#### **Requirements**

Currently pursuing a bachelor's or master's degree in engineering (electrical engineering, computer science, chemistry, process engineering), mechatronics, physics or a related technical field

Ability to design and conduct laboratory experiments, especially gases, including developing test plans and setups to measure sensor responses under various conditions

Knowledge of or interest in is an advantage: sensor technologies, focusing on gas sensors, microcontroller programming (C/C++), and a basic understanding of data analysis and visualization tools using Python

Strong independent research skills, with analytical and problem-solving abilities to effectively execute experiments

Proficient in English and German is advantageous

## What We Offer

Attractive and modern working environment with excellent infrastructure and state-of-the-art scientific equipment (laboratories, etc.)

Open welcoming culture, a certified family-friendly working atmosphere, regular feedback meetings and competent contact persons, sustainability (e.g. subsidized job ticket)

Opportunities for internal, interdisciplinary networking and participation in team events

Good work-life balance (possibility of mobile working - up to 60% according to service agreement, flexible working hours and 30 days' vacation per year)

## Application

You are enrolled at a German university for the period of employment.

The maximum working time with a part-time job is 80 monthly hours.

Your application: We welcome applications via the online application form by **03.11.2024**. Alternatively, you can also send your application by post, quoting the reference number 250/24-8.1 to:

Bundesanstalt für Materialforschung und -prüfung  
Referat Z.3 - Personal  
Unter den Eichen 87  
12205 Berlin  
GERMANY  
[www.bam.de](http://www.bam.de)

Mr. Bartholmai will be glad to answer any specific questions you may have. Please get in touch via the telephone number +49 30 8104-1910 and/or by email to **Matthias.Bartholmai@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 a low level of physical aptitude.

More information at <https://stellenticket.de/188563/>  
Offer visible until 03/11/24

