



To strengthen our team in the department “Non-destructive Testing” in Berlin-Steglitz, starting 2019-12-01, we are looking for a

## **Ph-D student (m/f/d)**

**in the field of computer science, mathematics and civil engineering or comparable**

**Salary group E13 TVöD**

**Temporary contract until 30.11.2022**

**Full-time / suitable as part-time employment**

The Bundesanstalt für Materialforschung und -prüfung (BAM) is a materials research organization in Germany. Our mission is to ensure safety in technology and chemistry.

We perform research and testing in materials science, materials engineering and chemistry to improve the safety of products and processes.

At BAM we do research that matters. Our work covers a broad array of topics in the focus areas of energy, infrastructure, environment, materials, and analytical sciences. We offer an excellent work environment, located in Berlin, with state-of-the-art research infrastructure and special laboratories.

We are looking for talented people to join us.

### **Your responsibilities include:**

- Systematic collection and documentation of the ontological requirements in coordination with a committee of experts comprised of the responsible scientists
- Search for non-ontological resources within the BAM (databases, compendium, etc.) and websites as well as the selection and transformation of resources into ontologies
- Search for best practice approaches, e.g. through analysis and transfer of ontology design patterns
- Continuous validation with examples in cooperation with colleagues from the department
- Collection of knowledge about NDT in civil engineering, documentation of the design decision, configuration management for handling and controlling ontology versions, validation and verification of the implemented ontology and evaluation of the ontology with regard to the qualitative expectations of the users
- Preparation of publications, lectures and posters

### **Your qualifications:**

- University degree (e.g. computer science, mathematics and civil engineering or comparable)
- Knowledge of Semantic Web Technologies and Web APIs
- Knowledge of databases (SQL, RDF stores, etc.)
- Programming knowledge in Python, Java, Java Script, C, (maybe Matlab)
- Knowledge of machine learning and natural language processing is helpful
- Basic knowledge of signal analysis and evaluation is helpful
- Basic knowledge of civil engineering is helpful



- Very good language skills of spoken and written English

**We offer:**

- Interdisciplinary research at the interface between politics, economics and society
- Work in national and international networks with universities, research institutes and industrial companies
- Outstanding facilities and infrastructure
- Equal opportunities in a family friendly environment

**Your Application:**

We welcome applications per email. Please send your application to the following address: [bewerbung@bam.de](mailto:bewerbung@bam.de) by 06.10.2019, quoting the reference number 214/19-8. Please attach detailed application documents to the email as a summarised file in PDF format (max. 20 MB). Alternatively, you can also send your application by post, to:

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

Please note that all application documents will only be stored and processed for the selection procedure. Upon conclusion of the selection procedure, the documents will be deleted in compliance with regulations on data privacy.

Prof. Dr. Kruschwitz will be glad to answer any specific questions you may have. Please get in touch via the telephone number +49 30 8104-1442 and/or by email to [Sabine.Kruschwitz@bam.de](mailto:Sabine.Kruschwitz@bam.de).

BAM pursues equal opportunities. For this reason, we particularly welcome female applicants. Recognised disabled applicants with identical suitability will be selected preferentially.