To strengthen our team in department “safety of structures” in Berlin-Steglitz, starting from June 2018, we are looking for a

**Ph.D. student (f/m)**

**Salary group 13 TVöD**  
**Temporary contract for 3 years**  
**Full-time / suitable as part-time employment**

The Federal Institute for Materials Research and Testing is a senior scientific and technical federal institute which is based in Berlin. As a departmental research institute of the Federal Ministry for Economic Affairs and Energy, we conduct research and testing, and provide counselling on how to protect people, the environment and material goods. The focus on our activities in materials science, materials engineering and chemistry is the technical safety of products and processes.

Join us and be part of our motivated team.

**Your responsibilities include:**

Vehicles with new energy carriers (NET) are increasingly used to reduce the CO₂-Emissions related to global warming. The aim is to examine the safety of transport facilities taking into account the use of new energy carriers. In particular:

- Analysis of both the safety of transport facilities, taking into account the cross-border and multimodal transport of liquefied natural gas as well as the use of liquefied natural gas as fuel for heavy vehicles
- Research on mathematical and physical models (E.g. turbulence, combustion, multi-phase models) to model the substance spread and ignition processes within and outside of building structures
- Documentation and assessment of results of experimental and numerical investigations
- Publication and presentation of results and interdisciplinary exchange

**Your qualifications:**

- Successful scientific degree (Diploma/Master) specializing in civil engineering, physical engineering, process engineering or a similar discipline
- Knowledge of the structural fire protection of transport facilities
- Good knowledge in modelling multi-phase flows with CFD methods
- Knowledge in modelling the substance spread and flame propagation with CFD methods would be an advantage
- Very good knowledge of German and English language (spoken and written)
- High level of commitment and creativity, independent way of working, cooperation and teamwork
- Ability to publish and to present scientific results
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

Your Application:
We welcome applications per email. Please send your application to the following address: bewerbung@bam.de by 29th of March 2019, quoting the reference number 23/19 – 7. 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

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.

Mr Dr. Knaust will be glad to answer any specific questions you may have. Please get in touch via the telephone number +49 30 8104-4190 or E-Mail: christian.knaust@bam.de.

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