

The mission of the BAM Federal Institute for Materials Research and Testing is to deploy technology in a safe and environmentally friendly way. Our research, testing, approval, and regulation activities are intended to promote safety in engineering and chemistry. As a superior federal authority and departmental research establishment of the Federal Ministry of Economics and Technology (BMWi), with 1700 employees, we have national and international responsibilities, cooperate with university and non-university research institutions and encourage young academics.

16.06.2015

# Vacancy for a PhD position

in division 7. „Safety of Structures“,  
in Berlin-Lichterfelde, Germany

## **Salary bracket 13 TVöD with usual public sector benefits**

Fixed term contract for 18 months with an optional extension for another 18 months.

### **Scope of work:**

The project is concerned with the development of numerical methods for the simulation of materials and components. This includes the implementation of constitutive models and element formulations in the context of the Finite Element Method.

The project is part of an interdisciplinary research initiative dealing with aging infrastructures. The focus of this project is the coupled numerical analysis of transient thermal flow and mechanical loading (static and dynamic). In addition, you support the design of experimental investigations performed in other projects to obtain appropriate data for the validation of your methods.

The results of the project will be published in peer-reviewed scientific journals.

### **Profile:**

- successfully completed scientific studies at university level in either civil engineering, mechanical engineering, material science, physics, mathematics or similar fields
- advanced knowledge continuum mechanics and the development of FEM-applications
- programming experience (C++)
- experiences with coordination and documentation of experimental setups is an advantage
- very good knowledge of English, knowledge of German is an advantage
- above-average commitment, own initiative and the capability to independently carry out scientific work, good communication skills and ability to adapt to a team in an interdisciplinary surrounding

For further information, please contact:

Dr. Jörg F. Unger (phone +49 30 8104 3787, email : [joerg.unger@bam.de](mailto:joerg.unger@bam.de)).

BAM Federal Institute for Materials Research and Testing commits to equal treatment of women and men. we are striving to increase the percentage of women in the science sector. Severely disabled persons with equal qualifications will be considered preferentially within the framework of legal requirements.

Please send your application (including CV, a statement of interest and references) indicating **reference no 159/15 – 7**. to BAM Bundesanstalt fuer Materialforschung und -pruefung, Referat Z.3, Unter den Eichen 87, 12205 Berlin, Germany.

Closing date for applications is July **10<sup>th</sup> 2015**.