



Technische Universität Berlin



Technische Universität Berlin, Faculty III - Process Sciences - Institute of Materials Science and Technology invites applications for the position of a

University Professor - salary grade W3

for the chair of "**Metallic Materials**".

Faculty III

Reference number: III-695/19 (starting at the earliest possible / permanent / closing date for applications 31/10/19)

Working field: The Department for Materials Science and Technology with the Chairs of Metallic Materials, Polymer Materials and Technology, Advanced Ceramic Materials, Materials Technology and Structure and Properties of Materials carries the Bachelor and Master study programs in Materials Science.

The successful candidate should cover teaching and research of metallic materials and metal forming technology in their full width as well as contribute significantly to further development of the main research areas of the department in the Key Application Areas of the TU Berlin, e.g. "Material, Design and Manufacturing", "Energy Systems and Sustainable Resource Management", "Human Health" as well as "Infrastructure and Mobility".

In teaching, the classes in metallic materials and technology for students of Bachelor and Master programs in Materials Science and Mechanical Engineering shall be provided. The courses cover physical and chemical foundation of technology and properties of metallic materials as well as detailed aspects of forming, manufacture and application of metals and of metallic composites for the above mentioned areas. Furthermore, methods for the numerical description and development (simulation) of metallic materials and processes are part of the detailed teaching. The ability for teaching courses in German and English is expected.

In research, new experimental materials and processing concepts should be developed for a broad spectrum of applications of metallic materials and material compounds. Research should focus on the forming technology of metallic materials (extrusion), which can be treated in terms of a holistic approach along the whole process chain from the atomic level understanding to the component fabrication. Future research topics may include alloy selection, targeted adjustment of metallic microstructures through the various processing steps, and the development of required technologies, supported by the characterization of structures and properties through a variety of characterization techniques. Besides the development of new metallic materials the research should also focus on the development of new process technologies, especially regarding the transformation from operated metal forming processes to property-controlled processes.

Requirements: Candidates must fulfill the requirements for appointment for professorships in compliance with § 100 BerlHG (Berlin Higher Education Act), this includes completed university studies, pedagogical didactic qualifications, proven by a teaching portfolio (for further information, see the TUB website, quick access 144242), special aptitude for scientific work (demonstrated by the quality of a doctorate) as well as additional academic achievements (usually as a junior professorship or habilitation) or special achievements in the application or the development of scientific knowledge and methods in at least five years of professional practice, of which at least three years must have been outside the field of higher education.

The successful candidate needs to demonstrate research experience in the abovementioned fields as well as comprehensive and well-founded knowledge of the structure, processing technology, especially extrusion of metallic materials, and properties of metallic materials; aptitude in the leadership of a working group; experience in the supervision of student theses and doctorates; experience in initiating, soliciting and managing national and international third-party funded projects. In addition, competencies and experience in the field of promoting young researchers and women as well as in the area of gender mainstreaming are desirable. A good command of English is desirable.

The Technische Universität Berlin is determined to increase the proportion of women in research and teaching and therefore strongly encourages qualified female researchers to apply. Qualified individuals with disabilities will be favored. We appreciate the diversity of our members and pursue the goal of equal opportunities.

The Technische Universität Berlin is a certified family-friendly higher education institution, and our Dual Career Service offers assistance to you and your family when relocating to Berlin. Applications from abroad are explicitly welcome.

Please send your written application **until 31st October 2019** indicating the **job reference number III-695/19** and including the appropriate documentation (curriculum vitae, research concept with a maximum of 5 pages, teaching portfolio, publication list and the list of externally funded projects) preferably by e-mail as a pdf-attachment to **berufungen@fak3.tu-berlin.de**. Alternatively, applications may be submitted in writing together with a digital version (USB drive) to **Technische Universität Berlin – Der Präsident –, Dekan der Fakultät III, Prof. Dr. Aleksander Gurlo, Sekr. H 88, Straße des 17. Juni 135, D-10623 Berlin**. For any inquiries relating to the application process please contact the faculty administration via e-mail to **berufungen@fak3.tu-berlin.de**.

Please send copies only. Original documents will not be returned.

The vacancy is also available on the internet at

