Technische Universität Berlin

Technische Universität Berlin offers an open position:

Research Assistant - salary grade E 13 TV-L Berliner Hochschulen - 1st qualification phase (for doctorate)

Part-time employment may be possible

Faculty III - Institute of Materials Sciences and Technologies / Materials Engineering
Reference number: III-147/25 (starting at the earliest possible / limited for 5 years / closing date for applications 02/05/25)

Working field:

Our research group at the Chair of Metallic Materials at TU Berlin is looking for a research assistant, interested to work and teach on topics related to sustainable metallurgy and the development of novel green alloys.
The research include systematic experimental work in alloy production using arc melting, induction melting, as well as advanced skills in thermogravimetry, calorimetry, SEM, XRD, XPS, dilatometry, creep, extrusion, coatings.

Main Responsabilities:

- Teaching responsibilities and teaching administrative work in the field of metallic materials at the Bachelor and Master level (Program of study: Materials Science and Engineering)
- Management of the alloy processing and alloy preparation for thermal, structural, and microstructural characterization, including the supervision of research student assistants
- Hands-on experimental work and data analysis, in particular, thermogravimetry, calorimetry, SEM, TEM, XRD, XPS
- Writing, submitting and managing research project proposals
- Leading and/or assisting in the preparation of research articles and project reports
- Presenting research results at collaborative research meetings and international conferences
  ose collaboration with the researcher from Saarland University
- Presenting research results at consortium meetings and international conferences

Requirements:

- Successfully completed scientific university degree (Master, Diploma or equivalent) in physics, chemistry or materials science, with a strong background in physical metallurgy
- Teaching experience in metallurgy in English or German language
- Sound knowledge in the field of thermodynamics of compositionally complex metallic systems, including metallic glasses, alloys for high temperature applications or magnetic materials
- Solid and demonstrated experience in alloy preparation by means of arc melting and induction melting and characterization techniques TGA, DTA, DSC, XRD, SEM
- Experience in the field of production and characterization of alloys
- The ability to teach in German and/or in English is required; willingness to acquire the respective missing language skills

Desirable:

- Experience with TEM/TMA/XPS investigations
- Experience in the field of alloy development of inert anodes for the CO2-free production of primary aluminium or in the development of new composition hard or soft magnets that are free of critical raw materials
- Previous research in the field of Fe-based alloys
- Knowledge of corrosion science and degradation mechanisms in metallic alloys
- Knowledge of magnetism principles

Please send your application exclusively by e-mail **stating the reference number** with the usual documents (pdf document max. 5 MB) **to Prof. Dr Isabella Gallino (gallino@tu-berlin.de).**

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/ .

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

Technische Universität Berlin - Die Präsidentin - Fakultät III, Institut für Werkstoffwissenschaften und –technologien, FG Metallische Werkstoffe, Prof. Dr. Isabella Gallino, Sekr. TIB 4/1-2, Ernst-Reuter-Platz 1, 10587 Berlin

The vacancy is also available on the internet at
https://www.personalabteilung.tu-berlin.de/menue/jobs/