



Technische Universität Berlin offers an open position:

Research assistant - salary grade E13 TV-L Berliner Hochschulen

part-time employment may be possible

Faculty V - Institute of Machine Tools and Factory Management / Machine Tools and Manufacturing Technology
Reference number: V-628/24 (starting at 01/01/25 / limited until 31/08/2025 / closing date for applications 29/11/24)

Working field:

- research and development on the use of different graphite materials as tool electrodes for fine finishing and polishing in electrical discharge machining
- independent and autonomous work on a research project in the field of electrical discharge machining
- investigation of the influence of the material properties of different graphite materials on the process behavior during spark erosion finishing
- analysis of the influence of different generator parameters and discharge forms on the specific process behavior during spark erosion fine finishing and polishing with different graphite materials.
- Development of an explanatory model and application-specific strategies for the industrial use of graphite materials in electrical discharge machining
- carrying out experimental tests and systematic investigation of the usability of graphite materials in electrical discharge machining by means of statistical test planning
- independent planning, implementation and evaluation of the research content
- transfer of findings into teaching and knowledge transfer to industry
- collaboration, coordination and organization of research projects in close cooperation with industrial companies, research associations and scientific partners
- presentation of research results to industry representatives and scientists and scientists at (inter)national specialist conferences and trade fairs

Requirements:

- successfully completed scientific university studies (Diplom, Master or equivalent) in mechanical engineering or related engineering sciences
- in-depth knowledge of micro-production technology and EDM
- in-depth experience in working with machine tools
- good written and spoken German

Optional criteria:

- strong willingness to pursue a scientific doctorate
- knowledge in the field of electrical discharge machining
- prior knowledge in the field of statistical experimental design and experience in project management
- basic knowledge of data analysis and programming skills in Python, LabVIEW or Matlab
- independent, systematic and structured way of working
- good written and spoken English; willingness to acquire the missing language skills
- willingness to undertake business trips (national, international)

Please send your application, stating the **reference number exclusively by email** bundled in one PDF document to **Prof. Dr.-Ing. Uhlmann via bold@iwf.tu-berlin.de**. Please note that only applications with complete documents (letter of motivation, CV, educational qualifications, references) can be considered.

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 V, Institut für Werkzeugmaschinen und Fabrikbetrieb, FG Werkzeugmaschinen und Fertigungstechnik, Prof. Dr.-Ing. Uhlmann, Sekr. PTZ 1, Pascalstraße 8-9, 10587

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

