



Technische Universität Berlin



Technische Universität Berlin offers an open position:

Research Assistant - salary grade E13 TV-L Berliner Hochschulen

part-time employment may be possible
under the reserve that funds are granted

As part of the navisH2 project, a feasibility study is to be carried out together with Berliner Feuerwehr to prove that an environmentally friendly fireboat is possible for Berlin. The aim is a new type of ship with an innovative energy system based on hydrogen fuel cells and accumulators.

Faculty V – Institute of Land and Sea Transport Systems / Subject Area of Design and Operation of Maritime Systems

Reference number: V-633/24 (starting at 15/02/25 / until 31/10/26 / closing date for applications 13/12/24)

Working field:

- design of a new type of fireboat
- layout planning and creation of drawings (e.g. general arrangement plan, equipment plans, PIDs, single-line diagrams)
- concept development, design and integration of the energy system
 - energy supply (hydrogen and electrical energy)
 - power and energy requirements: ship propulsion, on-board power supply, hotel load, firefighting equipment
 - energy storage system
 - energy conversion, power supply
 - energy and power distribution system
- optimisation and calculations of hydrodynamics and hydrostatics/ship stability
- integration of firefighting equipment for various emergency scenarios
- scientific monitoring of the detailed design and product definition
- life cycle assessment for sustainability during construction, operation and dismantling
- documentation of the work

Requirements:

- successfully completed university degree (Master, Diplom or equivalent) in the field of Naval Architecture and Ocean Engineering or Mechanical Engineering (or comparable), in particular with knowledge in the fields of:
 - ship design, ship equipment, (novel) energy and propulsion systems as well as stability and hydrodynamics
- knowledge of working with CAD software
- good knowledge of German and/or English required; willingness to acquire the missing language skills in each case

Desirable:

- very strong ability to work in a team, commitment, flexibility, economic thinking
- ability to document technical and economic issues
- ability to conduct binding technical negotiations with project partners and authorities
- ability to manage student employees

Please submit a complete application **quoting the reference by email only** (as a single PDF document) to **Professor Dr. Gerd Holbach at sekretariat@ebms.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/ or quick access 214041.

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 Land- und Seeverkehr, FG Entwurf und Betrieb Maritimer Systeme, Prof. Dr. Holbach, Sekr. SG 6, Salzufer 17-19, 10587 Berlin.

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

