



## 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

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

Reference number: V-94/25 (starting at 01/04/25 / until 30/04/26 / closing date for applications 28/03/25)

#### Working field:

As a part of the public funded research project "DeepSea Protection". In the project, a multi-sensory monitoring system for production-accompanying environmental protection in deep-sea mining is being developed, built and tested. The work scope of the TU Berlin includes the development of an unmanned intelligent seabed network with multi-functional nodes and a suitable propulsion and maneuvering system. In addition, a sensor carrier is being developed to record environmental data periodically within the water column.

- concept development, construction/design and construction of test vehicle/devices
- · further development of the propulsion and maneuvering system for the unmanned underwater vehicle
- work/developments on energy supply, sensors and electronics
- further development of the vehicle control system
- planning, execution and postprocessing of experimental tests
- · presentation of research results
- scientific travelling (conferences, field trials, ...)

#### Requirements:

- successfully completed university degree (Diplom, Master or equivalent) with an engineering technology background, preferably in the fields of mechanical engineering, naval architecture and ocean engineering, robotics, engineering science or equivalent, in particular with knowledge in the fields of: Underwater technology, methodical design and construction, structural strength and hydrodynamics
- knowledge of working with CAD, FEM and CFD software
- good knowledge of German and/or English required; willingness to acquire the missing language skills in each case

#### Desirable:

- good knowledge in the fields of automation/programming of mechatronic systems (Matlab/ Simulink), electrical engineering and mechanics, experimental test planning and execution
- very strong ability to work in a team, commitment, flexibility, scientific thinking
- ability to document technical issues
- 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/