



**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 Fluid Mechanics and Acoustics / Fluid System Dynamics**

**Reference number:** V-13/25 (starting at the earliest possible / limited for 36 months / closing date for applications 07/02/25)

#### **Working field:**

Implementation of the "Blood Pumps" research project to develop design guidelines for blood-saving pump concepts. As part of the project, test stands must be designed and set up and the necessary measurement technology must be planned, selected and installed. Furthermore, the measurement data evaluation must be carried out using a suitable programming language. In addition, the design, construction and production of impellers are, among other things, using suitable software (SolidWorks and CFturbo) and rapid prototyping processes. Simulations are also necessary, which should be carried out using suitable CFD software (Ansys CFX). In addition, interim reports and a final report (in German) must be written,

#### **Requirements:**

- completed university degree (Master or comparable) in engineering with a focus on fluid mechanics/fluid system dynamics and fluid dynamics
- experience in the design, construction and operation of fluid mechanical test benches
- experience in the design and construction of pump impellers
- knowledge in the field of flow measurement technology
- experience in measurement data acquisition and evaluation
- knowledge of medical technology, especially a. blood damage/hemolysis and simulation of blood flow
- good knowledge of MS Office, Python, SolidWorks, CFturbo, LabView
- good knowledge of German and/or English required; Willingness to acquire the language skills that are missing

#### **Desirable:**

- communication and teamwork skills, independent working style, motivation
- knowledge and experience in the field of numerical flow simulation/CFD, Ansys CFX
- experience in rapid prototyping, especially in the area of impeller manufacturing

Please send your application with the **reference number** and the usual documents (in one PDF, max 5 MB) **by E-Mail** to Prof. Dr. Paul Uwe Thamsen via **office-k2@fsd.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 guaranty 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](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 Strömungsmechanik und Technische Akustik, FG Fluidsystemdynamik, Prof. Dr. Paul Uwe Thamsen, Sekr. FSD, Straße des 17. Juni 135, 10623 Berlin

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

