



Technische Universität Berlin



Technische Universität Berlin, Faculty IV - Electrical Engineering and Computer Science - Institute of Energy and Automation Technology, invites applications for a position of a

University Professor - salary grade W3

in the field of "**Electronic Systems of Medical Engineering**".

Faculty IV

Reference number: IV-835/19 (starting at the earliest possible / unlimited / closing date for applications 20/12/19)

Working field: Research in the area of Electronic systems of medical technology, with emphasis on at least one of the following fields:

- Application of sensor principles and development of measuring electronics for the detection of physiological variables.
- Real-time analysis of (bio-)medical signals such as electrocardiograms with modern methods of signal processing, in particular involving the methods of artificial neural networks and data science
- Bio-, Body, Vital-Sensor Networks - research and development of new patient monitoring systems and new architectures in hardware and software that can be used in the home environment, in medical research laboratories (e.g., sleep labs), or in the field of competitive or fitness sports.
- Adaptation of electronic systems to gender differences
- Model-based development of mixed-signal systems (hardware and software) for medical applications

Close cooperation with chairs in related fields, such as control systems, sensors, mixed signal circuit design, electronic measurement and data science is expected. The teaching assignment includes courses in German and English on analog and digital electronics and microprocessor technology in the Bachelor degree program Electrical Engineering and Computer Engineering as well as advanced courses in the Master degree.

The collaboration with non-university research institutes working in the field of medical technology is an essential aspect of the chair's profile. Accordingly, existing collaborations shall be strengthened and extended, in particular with Charité (e.g., Department of Anaesthesiology and Intensive Care, Interdisciplinary Medical Sleep Center, Institute of Gender in Medicine (GIM)).

Requirements:

- Candidates should fulfil the requirements for appointment at the professor level in compliance with § 100 BerlHG (Berlin Higher Education Act), including a completed academic education, qualified achievements in research (PhD), post-doctoral teaching (Habilitation) or equivalent scientific qualification (scientific papers) as well as pedagogical didactic qualifications, to be given proof of by a teaching portfolio (for more information see TUB website, quick access no. 144242) .
- proven expertise and a solid publication record in at least one of the above-mentioned technical fields as well as
- teaching experience, competence in the management of a working group, project Management
- Applicants are requested to submit a first concept of the research and teaching activities envisaged with their application.
- Experience in the acquisition of external funding above average is desired.
- The willingness to offer teaching in German as well as in English language is also a prerequisite. Very good English language skills are required. The willingness to learn German is expected from Non-German speaking applicants.

Technische Universität Berlin is determined to increase the proportion of women in research and teaching and therefore strongly encourages qualified female researchers to apply. 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.

Technische Universität Berlin is a certified family-friendly higher education institution, and our Dual Career Service offers assistance to you and your family when relocating to Berlin. Applications from abroad are explicitly welcome.

Please send your application until **20th of December 2019** indicating the **reference number** and including the appropriate documentation (CV listing publications, teaching experience etc., copies of academic degrees, as well as copies of up to five selected publications, teaching portfolio and draft of prospective teaching and research projects) **preferably by e-mail to berufungen@eecs.tu-berlin.de** or in writing to Technische Universität Berlin – Der Präsident – **Dekan der Fakultät IV, Sekr. MAR 6-1, Marchstr. 23, 10587 Berlin**.

Please send copies only. Original documents will not be returned.

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

