Brandenburg University of Technology Cottbus - Senftenberg

The Brandenburg University of Technology Cottbus-Senftenberg (BTU) bundles top-level research and transfer at an international level, thereby creating an interdisciplinary innovation network and an excellent science and technology location. Together with its renowned partners, the BTU forms the Lausitz Science Network - an alliance of research institutions that together want to further develop the strengths of the science location Cottbus-Senftenberg and increase its visibility. Through innovative research and new teaching and learning formats, the BTU is shaping the future: with scientific findings and practice-relevant solutions, it is helping to shape the major issues of the future and transformation processes. In four profile lines - "Energy Transition and Decarbonization," "Health and Life Sciences," "Global Change and Transformation Processes," and "Artificial Intelligence and Sensor Technology" - it combines its strengths in teaching and research across institutes and faculties.
At its locations in Cottbus and Senftenberg, the BTU guarantees its students a challenging education, individual support and the opportunity to learn from and with each other with curiosity and openness. The BTU stands for an inspiring atmosphere of learning and research in a dialogical, democratic cooperation of all: The diversity of our faculty and students enables innovation and progress in Lusatia.

The Faculty of Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology invites applications for a

PROFESSORSHIP (W3)
Terahertz Components and Sensors (Terahertz-Komponenten und -Sensorik)

linked to

Leadership Position for the "THz Components & Systems" at the Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik (FBH) in Berlin Adlershof

commencing at the earliest opportunity.

The subject area is assigned to the Institute of Electrical Engineering and Information Technology.

In research, the professorship is dedicated to one or more of the following areas:

- Development of broadband integrated millimeter and submillimeter wave circuits (main focus)
- Generation of low-noise THz signals
- Research into the large-signal behavior of THz power components
- Development and use of THz sources and detectors, e. g. in spectroscopy, imaging and material characterization applications (THz sensor technology)

The BTU carries the seal of quality of The German Association of University Professors and Lecturers (Deutscher Hochschulverband, in short DHV). She is thus honored for her fair and transparent negotiations on the appointment of new professors.

The Professorship (“Berlin Model”) is linked to the leadership position for the “THz Components & Systems” lab at the Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik (FBH) in Berlin Adlershof, where integrated circuits for the highest frequencies are developed, manufactured, assembled, housed and characterized, in particular on the basis of the indium phosphide semiconductor processes developed at FBH. Together with the FBH, the development of long-term perspectives for technology, components, circuits and their applications shall be pushed ahead and demonstrated on the basis of practical implementations.

The professorship should be compatible with the existing research environment at the BTU in the field of micro- and microwave electronics. Active contributions to initiatives such as the Innovation Campus Electronics and Microsensorics Cottbus (iCampus) (or subsequent initiatives) are expected in order to expand the research competence of the BTU in the field of the application of THz components and sensors.
The teaching tasks in the scope of 2 weekly semester hours include lectures, exercises and practica in the bachelor and master education for students of electrical engineering and/or micro/nanoelectronics and related study programs.

We are looking for:

A nationally and internationally recognised personality with experience in the fields of InP-circuit design and THz-systems and sensors. After several years of scientific activity, the future post holder should have an excellent national and international network, have held leadership positions in research and development, and have gained experience in the acquisition of third-party funds and in the execution of third-party-funded projects. Professional experience in industry or industry-related research is welcome.
The professorship should represent the above-mentioned areas in research and teaching in the mentioned study programs at BTU and provide teaching in the Bachelor's and Master's degree programs in German and English. If the candidate does not have sufficient knowledge of German, the willingness to learn German as soon as possible is required, in order to be able to participate in the management of the institute, the faculty, university and non-university committees, as well as in the teaching of the Bachelor's programs in German.

Your profile:

As a future professor, you can provide evidence of the following requirements in accordance with § 43 Para. 1 No. 1 to 4a Brandenburg Higher Education Act (BbgHG):

- a completed university degree (electrical engineering/microwave engineering or similar),
- pedagogical aptitude,
- a special aptitude for academic work, as a rule through the outstanding quality of a relevant doctorate and
- a habilitation or additional academic achievements as an equivalent.

Furthermore, you have experience in the acquisition of third-party funding and in the implementation of third-party funded projects (DFG, BMBF, EU).
Your university teaching experience enables excellent teaching for the subject area to be filled here. You have the ability to teach at all curricular levels from bachelor's to doctorate, to supervise theses and to support young academics.

We offer:

- fair and transparent appointment negotiations,
- attractive working conditions in a city with a high quality of life and in relative proximity to Berlin, Dresden and Leipzig,
- a dynamically developing research location,

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- support in relocating to the immediate vicinity of your place of employment,
- comprehensive advice in the dual-career service and in the area of family orientation, and
- an attractive salary with a negotiable appointment benefit.

Other duties result from the requirements set by § 44 BbgHG in conjunction with § 3 BbgHG.

For further information please contact Prof. Dr.-Ing. Matthias Rudolph (BTU), Tel. +49 335 69 41 18 / email: matthias.rudolph@b-tu.de or Prof. Dr.-Ing. Patrick Scheele (FBH) (Tel. +49 (0)30 6392-2601, E-Mail: patrick.scheele@fbh-berlin.de).

Please refer to §§ 43 paragraph 1 No 1 – 4a and 45 BbgHG for prerequisites and conditions of employment.

BTU is committed to equal opportunities and diversity and strives for a balanced gender ratio in all employee groups. Persons with a severe disability and their equals are given priority in the case of equal suitability.

As a family-oriented University, BTU offers a Dual Career Service.

Information on appointment management including the legal basis as well as the status of ongoing appointment procedures can be found at: https://www.b-tu.de/en/university/career/professional-appointment-management.

The application, including academic certificates, curriculum vitae, a list of publications, as well as proof of teaching experience, should be sent by e-mail in a single pdf file with max. 7 MB until 31.03.2025 to:

E-mail: fakultaet1+bewerbungen@b-tu.de

Dekan der Fakultät MINT - Mathematik, Informatik, Physik, Elektro- und Informationstechnik,
postal adress: BTU Cottbus - Senftenberg, Postfach 101344, 03013 Cottbus.

When sending your application by unencrypted e-mail, please be aware of the risks regarding the confidentiality and integrity of your application content and please also note the data protection information on the BTU website.

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