

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 Environment and Natural Sciences invites applications for a

# PROFESSORSHIP (W2)

## Water Treatment Technology (Technologie der Wasseraufbereitung)

commencing on October 1<sup>st</sup> 2025.

The Institute of Environmental Sciences and Technology (IUWT) of the Faculty of Environment and Natural Sciences of the Brandenburg University of Technology (BTU) Cottbus-Senftenberg is looking for a nationally and internationally recognised personality with experience in water treatment technology. The IUWT has an interdisciplinary structure and is made up of various departments that deal with current environmental problems in research and teaching.

The new professor will complement the existing expertise in water-related research in the field of environmental technology. The central topics of the professorship are the development of engineering principles for new sustainable water treatment processes and wastewater treatment plants as important elements of the bioeconomy. This aims to replace fossil raw materials with sustainable, bio-based resources and thus promote a more environmentally friendly economy. Wastewater treatment plants play an important role in this context. They convert wastewater into purified water and recover valuable resources in the process. The use of biotechnological processes in wastewater treatment plants enables the recovery of raw materials such as nitrogen and phosphorus, e. g. for agricultural use in fertilisers. These approaches not only contribute to the conservation of resources and the circular economy, but also to the reduction of greenhouse gas emissions and the promotion of a sustainable bioeconomy. The new professorship should be focussed on one or more of the following topics: Elimination of highly persistent compounds as part of the fourth purification stage, energy-efficient nitrogen elimination (e. g. ANAMMOX), energy optimisation of sewage treatment plants, purification of industrial wastewater and resource recovery at sewage treatment plants.

In the future, the supervision of the research and demonstration field for innovative water and wastewater technology at the Cottbus site is also planned. Expertise in the supervision of proto-



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types and demonstration plants that goes beyond the laboratory scale is desirable for this. Personalities with an engineering or biotechnological background and research experience in the field of water treatment are particularly welcome. Applicants must have completed a doctorate on a water treatment topic. In addition, interdisciplinary co-operation with other disciplines of Faculty 2 is desired.

#### **We are looking for:**

We are looking for a nationally and internationally recognised personality with experience in the fields of water treatment technology - proven by international specialist publications in recognised journals, experience in applying for research projects and proven stays abroad. Expertise in water treatment technology is required, particularly in relation to the topics listed above. Experience in the industrial sector is desirable. The professorship should represent the above-mentioned fields in research and teaching in the '*Umweltingenieurwesen*' and 'Environmental Resource Management' degree programmes and in other degree programmes at the BTU, as well as perform teaching duties in the Bachelor's and Master's degree programmes in German and English. If there is no sufficient knowledge of German, the willingness to learn the German language as soon as possible is required, which ensures the cooperation in the management of the institute, the faculty and in university and non-university committees as well as the teaching of the Bachelor's degree programmes 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 in the field of biotechnology, engineering or environmental sciences or related fields,
- pedagogical aptitude,
- a special aptitude for academic work, as a rule through the outstanding quality of a doctorate in the field of water treatment, 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, ideally in interdisciplinary networks, whereby experience with DFG and EU projects is particularly desirable.

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. Your knowledge and experience enable you to participate in academic self-administration and in raising the profile of the faculty.

#### **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,
- 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. habil. Christian Abendroth, Tel. +49 (0)355 691185 / email: [christian.abendroth@b-tu.de](mailto:christian.abendroth@b-tu.de).



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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 12.11.2024 to:**

**E-mail: [fakultaet2+bewerbungen@b-tu.de](mailto:fakultaet2+bewerbungen@b-tu.de)**

**Dekan der Fakultät für Umwelt und Naturwissenschaften,  
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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