

The **Brandenburg University of Technology (BTU) Cottbus-Senftenberg** is a young university that is actively helping to shape the structural change in Lusatia to phase out lignite and is providing scientific support for transformation processes in many ways. In the coming decades, the region will be one of the most exciting real laboratories in Germany, from which groundbreaking development impulses are to emanate. Employment at the BTU therefore promises more than ever participation in development processes towards a sustainable and climate-friendly future.

The **Faculty 1 MINT - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology**, together with the **Fraunhofer Institute for Ceramic Technologies and Systems (IKTS)**, invites applications for a

## **Professorship (w3) Cognitive Material Analytics (Kognitive Materialanalytik)**

in personal union

### **with the leadership of the group »Cognitive Material Diagnostics« of the Fraunhofer Institute for Ceramic Technologies and Systems IKTS**

commencing at the earliest opportunity.

With scientific expertise, the BTU develops practical solutions for the design of the major future issues and transformation processes. Interdisciplinary clusters and close cooperation with our partners in science and business enable profiling, international connectivity and successful projects.

Faculty 1 MINT - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology at the BTU Cottbus-Senftenberg and the Fraunhofer Institute for Ceramic Technologies and Systems IKTS have been cooperating since January 1st, 2019 in the field of cognitive material diagnostics. The advertised professorship is linked to the management of the "Cognitive Material Diagnostics" group at Fraunhofer IKTS, which, in addition to scientific, technical and entrepreneurial control, also ensures development within the Fraunhofer overall strategy.

Fraunhofer IKTS covers the entire field of technical ceramics, from basic preliminary research to application. In addition, Fraunhofer IKTS has decades of experience in the non-destructive testing of components and systems. With the latest measurement technologies, automation concepts and approaches to interpreting complex amounts of data, we offer solutions for quality control and condition monitoring from the sensor to the overall system adapted for the user.

In your new role, you will competently represent the department in research and teaching at the Brandenburg Technical University of Cottbus-Senftenberg. At the same time you will receive corresponding scientific and economic responsibility at Fraunhofer IKTS, where you will lead and expand the "Cognitive Material Diagnostics" working group.

The joint professorship is based on the Jülich model and includes an obligation to hold courses at the BTU in the amount of 2 LVS.

Your tasks will include the acquisition of third-party funds for research projects, the acquisition and processing of industrial orders and the maintenance of cooperative relationships with industry. In addition, we expect extensive publication activity in the field of AI methods for material diagnostics.



Die BTU trägt das Gütesiegel des Deutschen Hochschulverbandes (DHV). Sie wird damit für ihre fairen und transparenten Verhandlungen zur Berufung von neuen Professorinnen und Professoren ausgezeichnet.

Active participation in initiatives for structural change in Lausitz region is desirable.

Your professional focus is in the areas of artificial intelligence and machine learning, sensor signal processing in the context of material analytics, pattern recognition, for example in technical, biological, medical and voice data, intelligent behavior control and human-machine interaction. Experience in different application areas of AI and machine learning is desirable.

You have management experience of interdisciplinary research groups and their involvement in the strategic development of a company or research organization. In particular, this includes proven successes in the strategic planning, acquisition and implementation of research and development projects in various business areas. Proven success in raising third-party funds and in technology transfer for industrial application is required. In addition, you have the ability to teach in German and / or English in all study phases.

A variety of projects with a high level of practical relevance and a great deal of creative freedom in research await you. The BTU Cottbus-Senftenberg and the Fraunhofer-Gesellschaft pursue a family-friendly personnel policy and offer their employees flexible working hours and support services for the compatibility of work and private life.

Experience in the acquisition and realization of third-party funded projects is expected. Fields of research should be relevant for the DFG (German Research Foundation) or similar international research funding organisations.

For further information, please contact

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Other duties result from the requirements set by § 42 Brandenburgisches Hochschulgesetz (Higher Education Act of the State of Brandenburg - BbgHG) in conjunction with § 3 BbgHG. Please refer to §§ 41 paragraph 1 No 1 – 4a and 43 BbgHG for prerequisites and conditions of employment.

BTU Cottbus-Senftenberg 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 Cottbus-Senftenberg offers a Dual Career Service.

Lectures are primarily to be held in German, fluency in English is expected.

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 a max. 7 MB until **01.08.2022** to:

**Dean of the Faculty of Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology**

**BTU Cottbus - Senftenberg, Postfach 101344, 03013 Cottbus**

**Email:** [fakultaet1+bewerbungen@b-tu.de](mailto:fakultaet1+bewerbungen@b-tu.de)

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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