

TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the **Faculty of Architecture, Institute of Building Climatology**, offers, subject to the availability of resources, for the [M-ERA.NET](#) project **“2D materials for electrochemical PFAS removal from water” (2D4PFAS)** a position as

**Research Associate (m/f/x)**

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

- Research area:* **Life Cycle Assessment, Techno-economic and Socio-economic Impact Assessment, and Circular Benchmarking**
- Investigators:* Dr.-Ing. Xiaoping Xie
- Terms:* 50% of the full-time weekly hours, starting **as soon as possible** for a fixed term until 30/04/2027. The period of employment is governed by the Fixed-Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG). The position offers the chance to obtain further academic qualification (usually PhD).

**Position and Requirements:** Within this Project, the Institute of Building Climatology is focused on Life Cycle Assessment, Techno-economic and Socio-economic Impact Assessment, and Circular Benchmarking. The goal of this research is to revolutionize per- and polyfluoroalkyl substances (PFAS) removal from water, addressing global concerns by an Electro-Catch&Treat process with advanced 2D functional materials. 2D4PFAS integrates fundamental sciences, material science, and technology development, aligning with 'safe and sustainable by design' principles.

The successful candidate will be responsible for: Develop the methodological framework and research procedure of Life Cycle Assessment, Techno-economic and Socio-economic Impact Assessment, and Circular Benchmarking. We aim at attracting the best talent in the respective research fields and expect the following:

- an outstanding university degree (master/diploma degree) with an education background in architecture, civil and environmental engineering and socio-economic sciences or similar;
- previous experience in life cycle assessment, techno-economic and socio-economic analysis, circular benchmarking;
- very good interpersonal and communication skills;
- in particular, the ability to effectively work in international cross-disciplinary collaborative research efforts;

- an independent, target- and solution-driven work attitude;
- inter- and multidisciplinary thinking; strong motivation and interest to work in a world-leading consortium for supercapacitor research;
- fluency in English - written and oral;
- willingness to do a PhD.

**What we offer:** You will join a team of enthusiastic scientists who pursue creatively their individual research agenda inspired by the institute's innovative approach and support. Your research will be fostered by the IBK philosophy to promote young researchers, which includes: access to state of the art research of leading academic institutes; promotion of gender equality and family-friendly work environment.

Informal enquiries can be submitted to Dr.-Ing. Xiaoping Xie, Tel +49 (351) 463 42161; Email: [xiaoping.xie@tu-dresden.de](mailto:xiaoping.xie@tu-dresden.de).

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

**Application Procedure:** Your application (**in English only**) should include: motivation letter, CV, copy of degree certificate and proof of English language skills. Please submit your detailed application by **May 7, 2024** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal <https://securemail.tu-dresden.de> by sending it as a single pdf file quoting the **reference "2D4PFAS-2024-01"** to [bauklimatik@tu-dresden.de](mailto:bauklimatik@tu-dresden.de) or to: **TU Dresden, Fakultät Architektur, Institut für Bauklimatik, Herrn Prof. Dr.-Ing. John Grunewald, Helmholtzstr. 10, 01069 Dresden, Germany**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

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**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: <https://tu-dresden.de/karriere/datenschutzhinweis>.

### **About IBK**

*With its history of over forty-years, the Institute of Building Climatology (IBK) is one of the oldest establishments of this kind in Germany. IBK houses the chair for Building Physics, chair for Building Services and Climate Responsive Architecture, and the Green Technology in Building Group. IBK has three primary research focuses (building material research, software development and transfer of knowledge) and teaches several courses of study, especially for prospective architects and civil engineers.*