Dresden University of Technology

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, it is a globally oriented, regionally anchored top university, focusing on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. The Cluster of Excellence "Responsible Electronics in the Climate Change Era (REC²)" addresses the key challenge posed by the ubiquitous use of electronics, which leads to an enormous resource and energy consumption and the generation of electronic waste. REC² establishes the scientific foundation for the electronics of the future, including new material platforms, component concepts, and integrated systems that enable the realization of responsible electronics in an ecologically, economically, and socially sustainable manner.

In a range of research and academic programs, REC² unites the natural and engineering sciences with the humanities, social sciences, and medicine. This wide range of disciplines is a special feature not only of the Cluster, but also of TUD, facilitating interdisciplinarity and transfer of science to society. As a modern employer, TUD 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. For TUD, diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who are committed to contributing their achievements and productivity to the success of the entire institution.

At the **Faculty Environmental Sciences, Institute of Waste Management and Circular Economy,** the **Cluster of Excellence REC²** offers, subject to the availability of resources, a position as

Research Associate (m/f/x)

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

starting **as soon as possible.** The position is limited to 3 years, with a possible one-year extension and comprises 75% of the full-time weekly hours. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position aims at obtaining further academic qualification (usually PhD).

Tasks:

- The scope of responsibilities includes independent scientific research on life cycle assessment, other environmental assessment methods and recycling indicators for the project "RAP5 (Responsible Aim Program 5) – Pre-design – Predictive Device Design" as part of the Cluster of Excellence "REC²: Responsible Electronics in the Climate Change Era."
- The project focuses on the responsible handling of used and recovered materials at the end of the service life of electronic devices. The aim is to develop forward-looking design rules and design-for-recycling (D4R) principles for various electronic devices. The device architecture should take a forward-looking and proactive approach to recycling and be developed in collaboration with device development experts using innovative engineering-based life cycle assessment approaches.
- This is a temporary position. If further third-party funding projects are successfully acquired, there is the possibility of extending and increasing this position. Long-term collaboration is desired.
- Exchange and collaboration with a diverse team of scientists from the REC² cluster, particularly in the fields of sustainability/natural sciences/engineering/social sciences.

Requirements:

- a university degree (e.g. Master's) in circular economy/waste management/technology, industrial engineering, environmental engineering, corporate sustainability management, or a related field
- excellent written and spoken German and English language skills
- knowledge about environmental impact assessment using established and new methods (especially life cycle assessment, LCA) and recycling technologies is required
- we would also appreciate your willingness to get involved in the operation, construction, and conversion of test facilities

We offer: You will join a team of enthusiastic scientists who pursue creatively their individual research agenda inspired by the cluster's innovative approach and support. Your PhD research will be fostered by the REC² philosophy to promote aspiring researchers, which includes:

- access to state-of-the-art research of leading academic institutes
- possibility to apply for GreenRiskFunds to pursue your own high-risk/high-gain research ideas
- possibility of exchange with partner institutions in the Global South

- promotion of gender equality and a family-friendly work environment
- supervision via a dual supervision concept, including a structured PhD project plan, international exchange, and a dedicated Thesis Advisory Committee (TAC)
- mentorship via the REC² mentoring board

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. 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.

Please submit your detailed application (in English only) with a motivation letter, CV, copy of degree certificate, transcript of grades (i.e. the official list of coursework including your grades), and proof of English language skills by **January 8, 2026** (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 to **iak@mailbox.tu-dresden.de** or to:

TU Dresden, REC², Prof. Christina Dornack, 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.

REC² RESPONSIBLE ELECTRONICS

TUD is a founding partner in the DRESDEN-concept alliance.

DRESDEN concept

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.