

Technische Universität Dresden - Cluster of Excellence “Responsible Electronics in the Climate Change Era (REC²)



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.

Research Associate / PostDoc (m/f/x)

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 full-time project position as Research Associate / PostDoc (m/f/x) starting as soon as possible. The position is limited to 3 years, with a possibility of extension in follow-up projects. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

City: Dresden; Starting date (earliest): At the earliest possible; Duration: The position is limited to 3 years, with a possibility of extension in follow-up projects.;

Remuneration: subject to personal qualification employees are remunerated according to salary group E 13 TV-L; Reference number: w25-351; Closing date: 08/01/26

Working field

— The scope of responsibilities includes the independent scientific research including the management of RAP1 (Responsible Aim Program 1) – Assemble, Disassemble, Repeat – Materials Library for Circular Electronics within the framework of the Cluster of Excellence “REC²: Responsible Electronics in the Climate Change Era.”

— The project investigates material platforms for the electronics of the future that integrate concepts for the reuse of components in line with design for reuse. Materials are being developed that enable the implementation of these concepts. An important factor here is the consideration of ecological impacts using relevant assessment methods that serve as guidelines for further research. The results from material development will

be compiled together with the environmental performance data obtained in material libraries and made available to the entire cluster. The scientific management of RAP1 includes the coordination of the participating disciplines of chemistry, microelectronics, physics, and special sciences. In addition, scientific dialogue with the other cluster programs is part of the task.

— Exchange and collaboration with a diverse team of scientists from the REC² cluster, particularly from the fields of natural sciences/engineering/social sciences.

Requirements

— a university and a PhD degree with a focus on life cycle assessment in the field of circular economy / waste management / chemical engineering or a related field

— excellent written and spoken German and English skills

— excellent expertise in environmental assessment using established and new methods (in particular life cycle assessment, LCA) is required

What 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 Post-Doctoral 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

— mentorship via the REC² mentoring board

Application

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.

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

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>.

More information at <https://stellenticket.de/200273/TUBS/>

Offer visible until 08/01/26

