

The Karlsruhe Institute of Technology (KIT) combines as an independent corporation under public law the tasks of a university of the state of Baden-Württemberg and a national research center in the Helmholtz Association. It combines its three strategic fields of research, teaching and innovation into one mission. *With around 9,400 employees and 24,500 students, KIT is one of the major institutions for natural and engineering sciences research and education in Europe.*

Shape the future of battery technology with us! At the Institute for Applied Materials – Electrochemical Technologies (IAM-ET) we are looking for a

Research Assistant / Ph.D. Student (f/m/d) in the field of Modeling of the Safety of Lithium-Metal Batteries

Job Description:

Be part of a team of leading German and US-American scientists researching and further developing lithium-metal batteries. Within the team, you will contribute to improving the safety and stability of the batteries through model-based analysis. You will develop models that can capture the degradation processes at elevated temperatures and identify ways to prevent degradation. Interdisciplinary exchange with experimental and simulation partners, also via research stays abroad, enables the identification of the processes and the validation of the models.

As part of your work, you will publish research results in scientific journals and project reports and present them at national and international conferences.

We offer you the opportunity to pursue a PhD.

Your Profile:

You have a very good master's degree in engineering, chemistry, physics or related fields and basic knowledge in mathematical modeling and chemistry. Furthermore, you show enthusiasm for scientific and interdisciplinary problem analysis and bring a strong interest in battery modeling. Experience with simulation tools is advantageous. We expect initiative, independent work, creativity, ability to work in a team and good communication skills in written and spoken German and English.

We Offer:

Look forward to an employer who appreciates your commitment and offers you an attractive and modern workplace with access to the excellent facilities of KIT and a wide range of training opportunities. Our unique working environment offers you a diverse and responsible position with ample creative freedom for your ideas. You will work in a highly motivated, young team characterized by a supportive working atmosphere and great team spirit.

We offer you flexible working time models, a supplementary pension according to VBL, a subsidy for the Job Ticket BW and a canteen.

Salary: The salary is based on the public sector salary agreement in the salary group TV-L E13.

Contract duration: 3 years

Start date: as soon as possible, preferably from October 1, 2026

Application deadline: 30.09.2026

Contact Person for Scientific Questions:

Prof. Dr.-Ing. Ulrike Krewer, ulrike.krewer@kit.edu

M. Sc. Julian Ulrich, julian.ulrich@kit.edu

Application:

Please send your application documents including CV, B.Sc. and M.Sc. transcripts and references in electronic form by 30.09.2026 to et-applications@iam.kit.edu. We strive for equal representation of employees (f/m/d) and would therefore particularly welcome applications from women. Applicants with disabilities who are equally qualified will be given preferential consideration.