

Karlsruhe Institute of Technology (KIT) – The University in the Helmholtz Association

In close partnership with society, KIT develops solutions for urgent challenges – from climate change, energy transition and sustainable use of natural resources to artificial intelligence, sovereignty and an aging population. As The University in the Helmholtz Association, KIT unites scientific excellence from insight to application-driven research under one roof – and is thus in a unique position to drive this transformation. As a University of Excellence, KIT offers its more than 10,000 employees and 22,800 students outstanding opportunities to shape a sustainable and resilient future.

KIT – Science for Impact.

We are looking for the Institute for Applied Materials – Energy Storage Systems (IAM-ESS) for March 1, 2026, limited up to 3 years, for a

Doctoral Candidate (f/m/d)

(75 % part-time)

Job description

In the Institute for Applied Materials – Energy Storage Systems (IAM-ESS) of Karlsruhe Institute of Technology (KIT), for a 3-year PhD project, we are looking for a candidate with experience in (solid-state) NMR spectroscopy. The goal of this project is to characterize local structures but also ion dynamics in electrolyte and electrode materials for Na-ion batteries. This includes probing ion-specific transport mechanisms and interactions on liquid or solid electrolytes, elucidating desolvation/solvation mechanisms in electrodes during electrochemical cycling, and applying operando NMR to observe sodium speciation, metal plating, and dendrite growth.

Personal qualification

- A Masters degree in Physics, Chemistry, Materials Science or related fields is required. Experience with NMR spectroscopy/relaxometry/diffusometry or with battery assembly/testing is advantageous.

Become a member of staff of the only German University of Excellence that conducts large-scale research on the national level. Work under excellent working conditions in an international environment and be active in research and academic education for our future. Benefit from specific training when starting your job and from a wide range of further qualification offers. Use our flexible working time models (flexitime, work from home), our sports and leisure offers, as well as our child and holiday care services. We also pay a share of EUR 25/month in the Job Ticket Baden-Württemberg. Enjoy a large variety of dishes, snacks, and beverages at our canteens.

We prefer to balance the number of employees (f/m/d). Therefore we kindly ask female applicants to apply for this job. Recognized severely disabled persons will be preferred if they are equally qualified.

Please apply online via the **application button** on this page, using the vacancy number **12/2026** to Mr Meschar, Karlsruhe Institute of Technology (KIT), Human Resources, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany. For further information, please contact Mr. Dr. Sylvio Indris, phone +49 721 608-28508.

Processing of your personal data by Karlsruhe Institute of Technology (KIT) will be subject to this **Privacy Policy**.

You can find further information on the internet: **www.kit.edu**