

The Laboratory for Electron Microscopy (LEM) is the central facility for Electron Microscopy at Karlsruhe Institute of Technology (KIT). Starting September 1st, 2022 we seek to fill a

Research Associate (f/m/d) - PostDoc Position

as part of the BMBF funded project “WirLebenSOFC”. Your responsibilities will include the investigation of solid oxide fuel cells (SOFC) with FIB-SEM and analytical TEM. You will work together with researchers from electrical engineering and materials science to physics and chemistry to contribute to the material development and investigation of degradation mechanisms.

In particular, you will have the following tasks:

- Investigation of solid oxide fuel cells using different analytical techniques of transmission electron microscopy and scanning electron microscopy
- Three-dimensional reconstruction of SOFC by FIB-SEM tomography
- Analysis of three-dimensional FIB-SEM data and calculation of performance determining parameters
- Assessment of material quality and contributions to material development
- Correlation of microstructural features with electrochemical properties
- Close cooperation with project partners from different disciplines
- Documentation and publication of the results
- Presentation of the results at conferences
- Introduction and Co-supervision of Bachelor and Master students

The ideal candidate should hold a PhD in physics or materials science. Experience in electron microscopy is mandatory, FIB-SEM experience is appreciated. In addition, experiences in the field of materials science with respect to oxide ceramics, especially SOFC, are advantageous. Your profile: you are a good team player, enthusiastic, and willing to learn new skills. Very good writing and oral communication skills in English are required.

We offer work in an attractive multi-disciplinary project and an excellent technical infrastructure. The contract will be fixed term for 24 months. You will benefit from wide-ranging training for young scientists (f/m/d) at KIT and the possibility for extended scientific qualification. The remuneration occurs on the basis of the wage agreement of the civil service in TV-L E13, depending on the fulfillment of professional and personal requirements.

KIT prefers to balance the number of female and male employees. Therefore, we kindly ask female applicants to apply for this job.

Recognized severely disabled people will be given preference if they are equally qualified.

Please apply online (heike.stoermer@kit.edu) with a cover letter, curriculum vitae, list of publications, degree certificates, a pdf copy of your doctoral thesis and any other relevant documents by **30.7.2022**



Further information: www.lem.kit.edu.

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