

For the Institute of Physical Chemistry (IPC), we are currently seeking to recruit, starting as soon as possible, limited to three years, a

**Research associate / PhD candidate (f/m/d)**  
**Interphases at carbon-based and inorganic electrodes**  
**- part time (50%) -**

In connection with the newly established Cluster of Excellence "Energy storage beyond Lithium (POLiS)" and the „Graduate School Electrochemical Energy Storage (GS-EES)“ we seek to fill a PhD position on the study of interphases at carbon-based and inorganic electrodes with relevance to novel battery systems.

The project aims at a fundamental understanding of the ion transfer processes of, e.g., Na- and Mg-ions at inorganic and carbon based model electrodes. Electrochemical microcalorimetry at single electrodes together with standard electrochemical methods will be used to obtain thermodynamic and kinetic information about the charge transfer processes at the solid-liquid interface. Beside the ion transfer this also includes (de-)solvation and intercalation processes. In addition, side reactions like interphase formation will also contribute to the heat evolution and will thus be accessible to electrochemical microcalorimetry.

For general information, please refer to the websites of POLiS ([www.postlithiumstorage.org](http://www.postlithiumstorage.org)) and CELEST ([www.celest.de](http://www.celest.de)).

**You must have** a master's degree or university diploma in Chemistry or Physics, ideally with specialization in Electrochemistry, Physical Chemistry or similar topics. Practical experiences in one or more of the following subjects are beneficial: Electrochemistry, Surface Science, Material Science. English language proficiency is required.

**We offer** an attractive and modern workplace with access to excellent facilities of KIT, diverse and responsible tasks, a wide scope of advanced training options, supplementary pension with the VBL (Pension Authority for Employees in the Public Service Sector), flexible working time models, a job ticket (BW) allowance, and a cafeteria/canteen.

We prefer to balance the number of employees (f/m/d). Therefore, we kindly ask female applicants to apply for this job.

If qualified, severely disabled persons will be preferred.

Please send the full application with a cover letter, certificates of your academic degrees (bachelor, master or diploma), and transcripts of the courses, including marks or grades as well as your proficiency in English (and German, if applicable) as a single PDF file by **January 31<sup>st</sup>, 2020** to [phd.polis@ipc.kit.edu](mailto:phd.polis@ipc.kit.edu). For further information, please contact Prof. Dr. Rolf Schuster, email: [phd.polis@ipc.kit.edu](mailto:phd.polis@ipc.kit.edu).



Further details can be found on our website: [www.kit.edu](http://www.kit.edu).

KIT - The Research University in the Helmholtz Association