

OPEN POSTDOC / GROUP LEADER POSITION IN THEORETICAL CHEMISTRY /  
ELEMENTARY PROCESSES IN BATTERIES AT THE HELMHOLTZ INSTITUTE ULM  
(HIU)

Open PostDoc / Group leader position in Theoretical Chemistry / Elementary  
Processes in Batteries at the Helmholtz Institute Ulm (HIU)

A 3-year PostDoc / Group leader position is available in the Research group  
Elementary Processes of the Helmholtz-Institute Ulm (HIU) Electrochemical  
Energy Storage under the supervision of Prof. Dr. Axel Groß.

(<https://hiu-batteries.de/en/researches/research-groups/elementary-processes/>)

This position can in principle be extended by another three years to qualify  
for the Habilitation at Ulm University.

Project description: In the research group “Elementary Processes” of the  
HIU, structures and processes in batteries at the atomic level are  
examined by means of modern quantum chemical methods, especially using  
density functional theory calculations. The successful candidate is supposed  
to numerically and theoretically study microscopic configurations as they  
appear in battery electrodes and electrolytes and interfaces together with  
their electronic structure. Both purely systematic theoretical studies as  
well as joint projects with experimentalists at the HIU shall be performed.  
These research activities shall furthermore be performed in close  
collaboration with corresponding activities in the cluster of excellence  
Post-Lithium Storage POLiS (<https://www.postlithiumstorage.org/en/>) which is  
run jointly by Ulm University and the Karlsruhe Institute of Technology.

Candidate requirements: The candidate must hold a PhD degree in chemistry,  
physics, materials science or similar. Experience in applying  
first-principles electronic structure codes to materials and interfacial  
systems is expected. In addition, also method development and programming  
skills with respect to the first-principles data are beneficial. The  
successful candidate will also have the chance to be involved in teaching.

Interested candidates should send the usual application documents together  
with the names of at least two academic references to [axel.gross@uni-ulm.de](mailto:axel.gross@uni-ulm.de).  
Inquiries about the position might also be sent to Axel Groß  
(<https://www.uni-ulm.de/theochem>).