

**Prof. Dr. Axel Groß, Helmholtz-Institute Ulm (HIU) Electrochemical Energy Storage, 89081 Ulm/Germany
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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. Inquiries about the position might also be sent to Axel Groß (www.uni-ulm.de/theochem).