Technical Chemistry
Helge Sören Stein

Digital Catalysis

We utilize digital tools like data management, machine learning, and robotics to catalyze **battery and catalysis** research acceleration.

We don't just discover and optimize materials, components, and processes but try to investigate non-linear effects originating from a materials-in-systems perspective, such as batteries and chemical reactors. Research in our group is predominantly experimental, emphasizing (hardware and software) engineering in chemical engineering.

We also research on accelerating the very way how research is executed and deploy **Materials Acceleration Platforms.**

Currently, we investigate aqueous and solid-state batteries, oxidation, and hydrogenation catalysis, as well as data generation for foundational models in the natural sciences