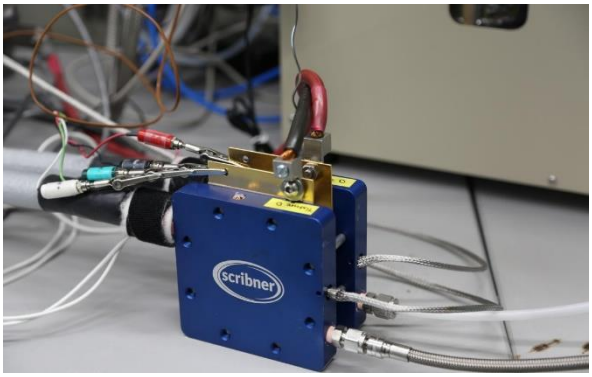
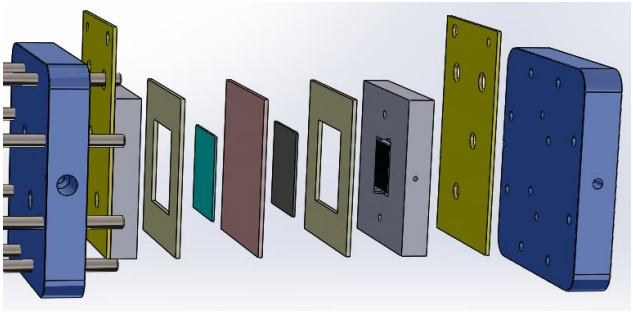
Student for a Bachelor Thesis (f/m/d): Development of an improved cell fixture design for the characterization of hydrogen fuel cells

Fuel cells convert hydrogen to electrical energy without harmful CO_2 emissions. For the evaluation of new fuel cell materials, it is crucial to analyze their performance. Our state-of-the-art fuel cell test benches allow for small scale testing under realistic working conditions. Therefore, the fuel cells will be clamped in-between a cell fixture as shown in the picture below. In future, we want to improve the performance and quality of our testing. For this purpose, we are looking for a motivated student to develop such an improved fuel cell fixture.





Your task

You will be working in collaboration with your supervisor on re-designing the existing fuel cell fixtures to improve reliability of the measurements as well as reduce costs by in-house production. This includes e.g. implementation of additional sensors as well as an option for cell cooling and improved designs. Your changes will be tested continuously with fuel cell devices allowing for an effective iteration process. Your work will be embedded in a research project with leading partners from automotive industry.

Your profile

- You are a student in engineering or physics
- A high level of team spirit and excellent communication skills are necessary
- You are highly motivated to work in the field of sustainable technologies
- Experience in (optional): lab work, electrochemistry, CAD software, sensors

The position

- We offer excellent working conditions in the young and interdisciplinary Electrochemical Energy Systems (EES) group with a friendly atmosphere
- Cutting edge equipment for fuel cells and material characterization
- The working language is English or German
- Earliest start possible: March 2021

Please send your application including CV, transcript of records and short motivation letter via e-mail to

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