

Student for a HiWi (f/m/d): Degradation Mechanisms in fuel cells

30% of CO₂ emission in German road traffic are caused by heavy-duty vehicles, although they account for only 10% of all vehicles. Therefore, significant amounts of CO₂ can be saved in this sector by electrifying relatively few vehicles. This can be done most economically with fuel cells. For this purpose, fuel cells for long lifetimes (30 000h) must be developed.

For this purpose, we are looking for a motivated student to help us to analyze degradation mechanisms in different functional parts of the fuel cell (e.g. catalyst layer,...) and compare them in different material classes. So these can be counteracted later on. The focus of your tasks may be shifted to your own strengths and interests. With so much to look forward to, there is the possibility to follow up with a Bachelor or Master Thesis



Your profile

- You are a student in engineering, physics, chemistry, material science; ideally with experience in Lab-Work
- You are highly motivated to work in the field of Fuel-Cells, sustainable technologies
- A high level of team spirit and strong intercultural communication
- optional skills: experience in: electrochemistry, polymerchemistry or solid-state Chemistry

The position

- We offer excellent working conditions in the young and interdisciplinary “electrochemical energy systems” group
- Possibility of writing a bachelor’s or master’s thesis
- The working language is English or German

The junior research group "[Electrochemical Energy Systems](#)" works on fuel cells, batteries and electrolyzers. The group is dedicated to integrate latest material developments into state-of-the-art electrochemical energy systems.

Please send your application including CV, transcript of records and short motivation letter via e-mail to julian.stiegeler@imtek.uni-freiburg.de

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