

Student Research Assistant (w/m/d)

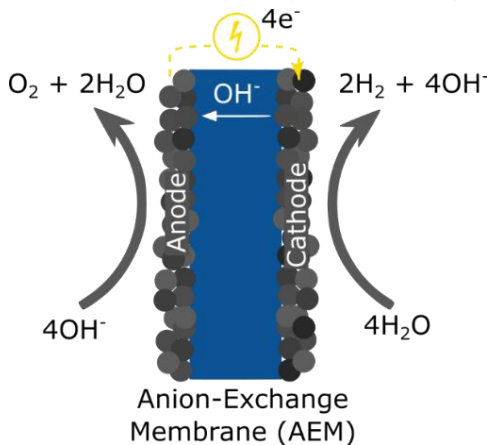
Field of study: engineering, chemistry, material science, physics (or similar)

Development and Analysis of Electrodes for Anion-Exchange Membrane (AEM) Water Electrolysis

Context

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

To date, the most widespread water-splitting technology is the proton-exchange membrane (PEM) water electrolysis due to its efficiency, long-term stability and operation at high current densities. While PEM electrolyzers are commercially available, their costs are still high due to the acidic environment, fluorine-based membranes and noble metal catalysts. Therefore anion-exchange membrane (AEM) based electrolyzers have attracted attention, since they combine the advantageous properties of PEMWEs with the promise of significant cost reduction.



For this purpose, we are looking for a motivated student to help develop membranes/electrodes for AEM electrolysis. You will be working in close collaboration with our PhD-students, post-docs and engineers, mostly in the laboratory measuring and analyzing fabricated devices using X-Ray fluorescence spectrometry.

Your profile

- Communication and team-work skills are essential
- You are interested to work in the field of energy storage and sustainable technologies
- You work in a target-oriented and structured manner
- Beneficial: experience in lab work, spectroscopy, and/or electrochemistry

The position

- Excellent working conditions in the young and interdisciplinary "Electrochemical Energy Systems" (EES) group
- Flexible working time with 4-15 hours per week
- Starting date: flexible
- Working language: English or German



For more information feel free to contact us or visit:
www.ees-lab.org

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

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