

# Student Research Assistant (w/m/d)

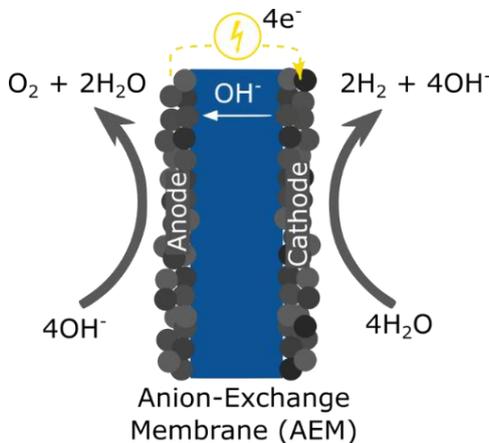
Field of study: engineering, chemistry, material science, physics (or similar)

## 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](http://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](mailto:susanne.koch@imtek.uni-freiburg.de)

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