

PhD Student (f/m/d)

Engineering, Physics, Computer Science, Material Science
(or similar disciplines)

Understanding Transport Processes in Hydrogen Fuel Cells

Your task

You will be working in a collaborative EU project on the development of next-generation hydrogen fuel cells. State-of-the-art fuel cells are mainly limited by transport processes in the electrodes. Therefore your aim is to improve the current understanding of those phenomena limiting the performance. For this purpose you conduct electrochemical experiments, but also imaging and modeling of the fuel cell microstructure using cutting edge 3D imaging methods, such as X-ray and electron tomography (infrastructure, software, models and computer clusters are available).

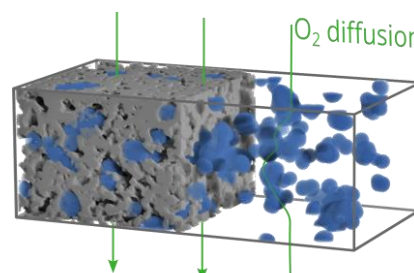


Fig. 1 Simulation of water generation and O_2 transport in a fuel cell electrode.

Your profile

- You are interested in the development of novel materials for sustainable mobility
- You work target-oriented and structured
- Excellent communication skills and team spirit are absolutely necessary
- (optional) experience in: electrochemistry, fuel cells, modeling or tomographic imaging

The position

- We offer excellent working conditions in the interdisciplinary “electrochemical energy systems” EES group with a nice atmosphere
- You will work with cutting edge equipment (X-ray, SEM, TEM, fuel cell test benches, ...)
- Includes both: freedom for own research and close contact to industry
- Typical duration of a PhD is planned for three years (80% TV-L 13)
- The working language is English or German
- Earliest possible start: Beginning of 2020

For more information feel free to contact us or visit

or visit www.imtek.de/laboratories/mems-applications/research/electrochemical-energy-systems

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

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