

## PhD Student (f/m/d)

with background in Engineering, Physics, Material Science or similar

### Degradation in PEM-Fuel Cells

#### Context

30% of CO<sub>2</sub> emissions in German road traffic are caused by heavy duty vehicles, although they account for only 10% of all vehicles. Significant amounts of CO<sub>2</sub> can therefore 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.

#### Your task

You will be working in an international EU project (DE, UK, FR, IT) on the development of durable PEM fuel cells (polymer electrolyte membrane) for heavy duty vehicles. For this purpose, you will characterize materials, conduct electrochemical experiments and fuel cell tests and, together with the project partners, develop prediction models for aging in fuel cells.



#### Your profile

- Excellent communication skills and team spirit are absolutely necessary
- You are interested in the development of novel materials for a sustainable mobility
- You work target-oriented and structured
- You enjoy working with measurement methods and are interested in the physical relationships

#### The position

- We offer excellent working conditions in the interdisciplinary “electrochemical energy systems” EES group with a nice atmosphere
- Cutting edge equipment for fuel cells and material characterization
- 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 2021
- Family friendly, flexible working hours

For more information feel free to contact us or visit

[www.imtek.de/laboratories/mems-applications/research/electrochemical-energy-systems](http://www.imtek.de/laboratories/mems-applications/research/electrochemical-energy-systems)

**Please send your application via mail to**

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