

Research assistant or Internship (w/m/d)

Characterization of proton-exchange membranes for water electrolysis

Background Chemistry, Material / Polymer sciences

Context

Water electrolysis based on proton exchange membranes is a key technology for the production of green hydrogen. Since the production of fluorine-free proton exchange membranes may be cheaper and more environmentally friendly than for the commonly used perfluorosulfonic acids, the aim of our project is to develop a long-term stable proton exchange membrane based on hydrocarbons.



Your tasks

To get a deeper understanding on the swelling behaviour of our polymers one of your first task will be the characterization of the water uptake in relation to different molecular weights and ion exchange capacities. Furthermore you will analyse the long term stability of our membranes in water. In addition, we have other exciting tasks in polymer synthesis and/or production of membranes.

Your profile

- You are communicative and have a high team-spirit
- You are interested in novel materials for renewable energies
- You can work in a concentrated, focused and structured way
- You are experienced with practical work in the lab

The position

- We offer excellent working conditions in an interdisciplinary research group with a pleasant collegial working atmosphere
- Modern infrastructure for material characterization
- Possibility of writing a bachelor's or master's thesis

Please send your application to:

Clara Schare or Andreas Münchinger

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