

## 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 to produce 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

Our aim is it to get a deeper understanding on the long term stability of our polymers in liquid water. For this purpose, we are looking for a motivated student to help us with ex situ characterisation. One of your first task could be the characterization of the swelling behaviour in relation to different molecular weights and ion exchange capacities. As we can offer further exciting tasks in the field of polymer synthesis and/or membrane production we are able to shift the focus of your tasks to your own strengths and interests.

#### 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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