

Helmholtz Call for Chinese Applicants Interested in Running for CSC 2021 Fellowship

Helmholtz Centre: Forschungszentrum Jülich GmbH – www.fz-juelich.de

Department/Institute: Institute of Energy and Climate Research, Helmholtz-Institute Münster:

Ionics in Energy Storage (IEK-12)

https://fz-juelich.de/iek/iek-12/EN/Home/home_node.html

Supervising scientist: Prof. Dr. Wolfgang Zeier

University for registration or for a future degree: Westfälische Wilhelms-Universität Münster

Research Field: Solid State Chemistry, Electrochemistry

Position open for: PhD Student ☑ Sandwich PhD Student □

Title of the research: Optimization of solid electrolytes for solid state batteries

More description of research topic:

Solid state batteries are currently discussed as the future alternative to the current lithium ion battery technology. However, certain parameters such as high ionic conductivity and interfacial stability of electrolytes are still in need for understanding and optimization.

In this project, solid electrolytes will be optimized for their ionic conductivity and tested in solid state batteries for their performance and interfacial stability. Within the project you will learn solid state syntheses of fast ionic conductors as well as their analysis of the ionic transport, structure and building and analyses of solid state batteries.

Specific requirements:

- Doctorate in chemistry or materials science
- Research experience in solid state chemistry or electrochemistry

Working Place: Münster

Earliest Start: September 2021

Language Requirement: Very good knowledge of English language, written and spoken. German

language courses are organised in the context of our in-house training

program and are free of charge.

Name and Address of the Supervisor: Helmholtz-Institut Münster, Forschungszentrum Jülich,

Institute of Energy and Climate Research (IEK-12), Corrensstraße 46,

48149 Münster, Germany

Prof. Dr. Wolfgang Zeier (w.zeier@fz-juelich.de)