



PHD STUDENT POSITION

Access to clean, potable water is a human right that remains inaccessible to millions of people. Energy efficient water remediation is also a key strategic technology for sustainable industries, agriculture, and mining. While capacitive deionization (CDI) with carbon is a promising technology, its severe limitations can be effectively overcome by use of ion intercalation materials. To explore novel materials, such as transition metal carbides (MXene) or transition metal dichalcogenides (TMDs), for electrochemical desalination. The INM Program Division Energy Materials announces an:

>PHD STUDENT POSITION FOR ELECTROCHEMICAL DESALINATION WITH ION INTERCALATION NANOMATERIALS<

The position is limited to three years. Payment is in alignment to TV-L (Treaty for German public service).

Major Duties/Responsibilities

- Synthesis and material characterization (microscopy, diffraction, spectroscopy etc.) of nano-engineered ion intercalation materials.
- Electrochemical and desalination measurements with electrochemical equipment, such as potentiostat / galvanostat/ impedance spectrometer, and electrochemical in situ devices (online chemical monitoring with ICP-OES and X-ray diffraction).
- Being an active member of a strong collaborative team with industrial partners.
- Active participation in the research activities of the entire Energy Materials Group and to provide support of and mentorship to other team members.
- Write and publish scientific papers resulting from this research and present results at appropriate national and international meetings.

Interested candidates should submit their complete application including a CV, transcript of records, publication list, and a 1-page motivation letter before December 31st, 2017. Please send us your application electronically (single pdf file, smaller than 5 MB) addressed to Prof. Volker Presser under volker.presser@leibniz-inm.de. The INM is an equal-opportunity employer with a certified family-friendly policy. We promote the professional opportunities for women and strongly encourage them to apply.

Qualifications Required

We are seeking a qualified person with a Master's degree in physics, chemistry, materials science, or another related field of science. Previous experience in capacitive deionization, electrochemical energy materials, or synthesis of ion intercalation / battery materials is desired. Candidates must be highly self-motivated, have excellent interpersonal, communication, and presentation skills, and a demonstrated ability to interact effectively with staff at all levels. The ability to work as a member of a multi-disciplinary and international team is a critical asset and proficiency in English is mandatory.

About Us

The INM - Leibniz Institute for New Materials, situated on the campus of Saarland University in Saarbrücken/Germany, is an internationally leading center for materials research. It is a scientific partner to national and international research institutions and a provider of research and development for companies throughout the world. As an institute of the Leibniz Association, the INM has about 250 employees working in the three main research fields nanocomposite technology, interface materials, and bio interfaces. Prof. Dr. Volker Presser is Professor for Energy Materials at Saarland University and the latter is the degree-awarding institution for enrolled PhD students.



Member of the



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CONTACT

INM - Leibniz Institute
for New Materials
Campus D2 2
66123 Saarbrücken/Germany
www.leibniz-inm.de

Prof. Dr. Volker Presser
Head, Energy Materials
volker.presser@leibniz-inm.de



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