



The Faculty of Natural Sciences, Professorship of Materials for Innovative Energy Concepts, offers a full employment at the earliest opportunity for a

PhD position

(50%; E13 TV-L)

The fixed term position for three years follows the Act of Temporary Employment in Higher Education (WisZeitVG) and the Saxon Law on Universities (SächsHSFG). Selection will occur according to suitability, qualification and professional performance. Chemnitz University of Technology aims to particularly support women and therefore explicitly asks for applications from qualified female candidates. Severely disabled persons or those with an equivalent status will be considered preferentially in accordance with SGB IX.

Your tasks comprise

- Development of intermetallic noble-metal free catalysts
- Conventional as well as innovative synthesis of intermetallic compounds
- Phase analysis and characterization of the materials
- Reactivity studies in different atmospheres
- Catalytic testing in reactions concerning chemical energy conversion

If you find it attractive to work in an interdisciplinary and highly motivated team on an international cooperation project with high practical relevance you should bring along the following qualifications and traits:

We are looking for a personality with experience in high-temperature or solvent-based synthesis of intermetallic compounds in bulk or nanoparticulate form. Knowledge in phase analysis (metallography, XRD, EDX, optical and electron microscopy) as well as heterogeneous gas phase catalysis are advantageous. Knowledge in conducting DTA/TG/MS and *in situ* as well as *operando* XRD and XPS are desirable.

A high degree of motivation and willingness for teamwork are of great importance. Good communication skills in English (both written and spoken) as well as a structured and targeted way of working would be favorable.

Applicants need to have completed university studies in natural sciences, preferably in chemistry or chemical engineering, to be eligible for PhD studies. Chemnitz University of Technology is an equal opportunity employer and encourages applications from women and severely disabled persons. Applicants have to fulfil the precondition of employment according to §71 SächsHSFG.

Please send your full application, either electronically as a single PDF file by e-mail, or by ordinary mail before 30.04.2017 using the reference number DFG-12-1-2017-211040 to the address below. Please do not send original documents, since applications will not be sent back but discarded according to data handling regulations. If you wish your application materials to be sent back to you please enclose a prepaid and correctly addressed envelope.

Prof. Dr. Marc Armbrüster
Professorship of Materials for Innovative Energy Concepts
Institute of Chemistry
Faculty of Natural Sciences
Technical University of Chemnitz
09107 Chemnitz

E-mail: jeanette.doerr@chemie.tu-chemnitz.de (contact person)