PhD position in DFT investigations of grain boundaries in metals at the Materials Center Leoben Forschung GmbH, Leoben, Austria

Description:

The Materials Center Leoben Forschung GmbH offers a PhD position focused on the computational design of a new **hydrogen-embrittlement-resistant alloy**. The candidate will perform **Density Functional Theory (DFT) calculations of grain boundaries** in a selected class of materials and contribute to an alloy design concept, which will also be supported by results of relevant phenomenological models and experimental testing. The position will be a part of a joint project between MCL and an industrial partner.

Institution:

The Materials Center Leoben Forschung GmbH (MCL) is the leading competence centre in the field of material science in Austria with about 150 employees. The group of Atomistic Modeling at MCL has a focus on ab-initio calculations of structural and functional materials, currently comprising 9 people. It is closely connected to the Montanuniversität Leoben and the University of Graz as well as an excellent network of international research partners.

Requirements:

- Master degree in Condensed Matter Physics, Computational Materials Science or a related field.
- Basic knowledge of DFT computational methods, a scripting language (Python, bash), Mathematica/Matlab as well as Linux is highly appreciated.
- Communication skills in English: Ability to discuss results, write scientific papers/reports and present results at project meetings and international conferences.
- Additional spoken and/or written German skills are welcome, but not necessary for this position.
- Communication and teamwork skills: Close interaction with other project members, including experimentalists and theoreticians, is crucial for the success of the project.

We offer:

- 3-year PhD position.
- Salary: 2.696 € per month pre-tax, plus Christmas and Holiday allowances (13th + 14th salary).
- Start: October 1, 2016.
- Interdisciplinary environment with close connection to Austrian and international industry and academia.
- Opportunity to take part in international conferences/workshops/schools (1-2 per year)

Documents sent will be screened by an evaluating committee and the shortlisted candidates will be invited for an interview.
Contact: Dr. Vsevolod Razumovskiy (Vsevolod.Razumovskiy@mcl.at)
Complete applications should include a CV, a copy of a draft (in the case if the thesis defense hasn't taken place yet) of the degree thesis, a complete list of attended courses with grades, list of publications, contact details of two reference persons. It should be submitted to Dr. Vsevolod Razumovskiy . The review of applications will begin immediately and will continue until the position is filled.