PhD position in: *Digital Material Design Guidelines for hydrogen-resistant alloys*
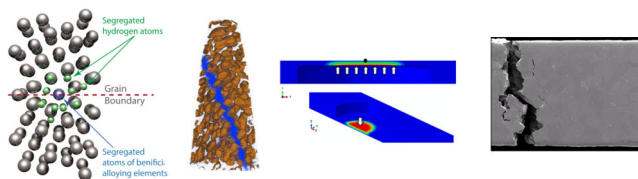
ReferenceNr.: MCL_270

Materials Center Leoben Forschung GmbH (MCL) is a leading competence center in the field of materials research and technology. In this context, we support numerous companies in the production sector developing high-performance materials, manufacturing processes and products. By developing specific computer-aided technologies, we accelerate materials based innovation including the digitalization of the manufacturing chain as well as of products. Our portfolio includes cooperative research and development projects with international and national partners from the production and research sectors as well as several consulting, laboratory and simulation services in materials science.

Would you like to work in an innovative and international setting?
Then MCL is the perfect work place for you!

Your Profile

- Academic degree (master equivalent) preferably in materials science or physics
- Knowledge in programming (python, Fortran, C++ …)
- Interest in multi-disciplinary approaches for alloy development
- Scientific curiosity, team skills, self-initiative
- Good oral and written communication skills in English

Tasks & Responsibilities

- Development of Digital Material Design Guidelines (DMDG) for precipitation hardened fcc alloys with increased resistance against hydrogen embrittlement
- Multiscale modelling of hydrogen-microstructure interaction (DFT, CALPHAD, FEM)
- DMDG validation by comparison to hydrogen charging experiments
- Presentation of results at international conferences
- Writing of scientific articles for peer reviewed journals

Our offer:

- flexible working hours
- further training/education
- home office
- employee events
- cooperation with Firmenradl

An employment contract with immediate start and a gross salary per year of € 51,846.00 (40h/week).

Please send us your application and a detailed resume. We are looking forward to it!
We would like to especially encourage women to apply.

bewerbung@mcl.at