## ReferenceNr.: MCL\_271

**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**

You are a motivated master student from materials science, physics, or computational sciences (e.g., computational mechanics, applied mathematics) with one or more of the following skills:

- crystallography/atomic-scale mechanics,
- atomistic simulation,
- linear algebra/machine-Learning methods,
- programming (Python, C++).



## **Tasks & Responsibilities**

Participation in one or more of the following projects:

- Development and/or assessment of machinelearning interatomic potentials (MLIPs) and training data for magnetic alloys,
- development of a massively-parallelized workflow management system for an automated construction of training sets for MLIPs,
- calibration of models for macroscopic properties of alloys (for example, strength, fracture toughness, or magnetization) using material properties computed with MLIPs, as well as writing of a peer-reviewed journal article on the obtained results.

Our offer:





- flexible working hours
  - further training/education
- employee events

The work can be carried within the scope of a Master thesis (fixed payment of  $\notin$  4,770.15 for a duration of 6 months and 10,5h/week) or an employment contract over 12 months with immediate start and a gross salary per year of  $\notin$  7,536.48 (8h/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