

Materials Center Leoben (MCL) - with a staff of 180 highly specialized employees - supports numerous companies in the production sector developing high-performance materials, manufacturing processes and products. MCL designs specific computer-aided technologies in order to accelerate innovation processes in manufacturing companies as well as to support the digitalization of the value chain and products. MCL's 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.

To strengthen our team, we are looking for someone with the following qualifications and responsibilities:

## Master Thesis

### Correlation between austenite grain size and martensite substructure of a high alloyed steel

Reference-n.: MCL\_193

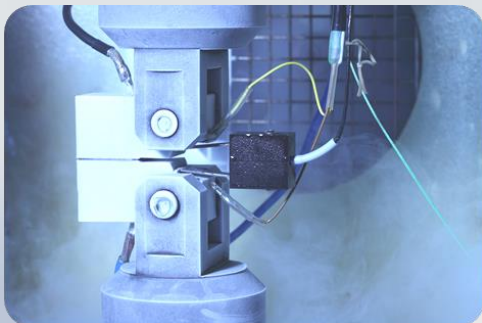
### Microstructure characterization and modelling - EBSD - electrolytic etching - X-ray diffraction

*These topics inspire you or you are already familiar with them? Then you are the right person for this position!*

#### What are we looking for?

- *Bachelors degree as well as ongoing matriculation in a master's programme in materials science, physics or similar studies*
- *Interest and experience in experimental techniques (EBSD, XRD, metallography)*
- *Knowledge in programming languages (Python and/or Matlab)*
- *Scientific curiosity, team skills, self-initiative*
- *Good oral and written communication skills in English*

#### We work in close cooperation with well-known scientific and company partners worldwide!



#### Your tasks?

- Evaluation and interpretation of experimental data including dilatometry, EBSD, XRD, metallographic preparation including electrolytic etching, mechanical tests
- Modelling of correlation between austenite microstructure (grain size, toughness), heat treatment and martensite microstructure (packet-, block-, subblock size)
- Literature research

#### Our offer:

An employment with immediate start and an expense allowance of €3000 net for 6 months.

Please send your complete application documents by email. We are looking forward to knowing you!

Materials Center Leoben Forschung GmbH  
z.H.: DI Thomas Hönigmann  
Roseggerstraße 12, A-8700 Leoben  
Email: [bewerbung@mcl.at](mailto:bewerbung@mcl.at); [www.mcl.at](http://www.mcl.at)

