

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

### *Implementation of a central control unit for an induction test rig*

*Reference-n°.: MCL\_197*

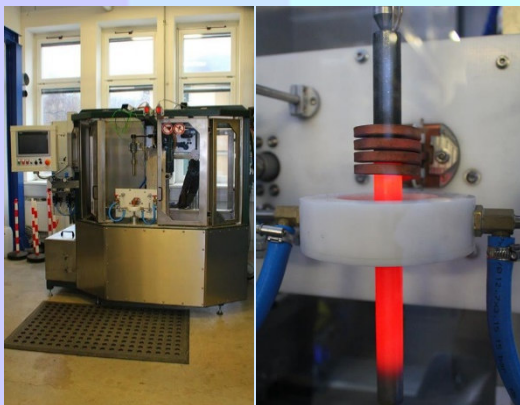
## Data Science – Automation – Induction Heating

*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 mechanical engineering, materials science, physics or similar studies*
- *Knowledge in programming languages (Python is mandatory)*
- *Experience with PLCs is welcome*
- *Interest and experience in experimental techniques and data science*
- *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?

- *Selection of hardware components with focus on performance and sampling frequency to ensure suitability for a high-frequency data acquisition system (HF-DAQ).*
- *Installation of a central control unit for an existing lab scale induction test rig.*
- *Establishment of a central monitoring of internal and external sensors (e.g. thermocouples) and central control of actuators (e.g. power supply and motor for inductor position).*
- *Establishment of communication of the central control unit with the preinstalled Siemens Simatic control unit.*

### Our offer:

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

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

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