

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:

## PhD position

### *Holistic track vehicle approach for damage prediction in railway tracks*

*Reference-n.: MCL\_195*

## **Wheel/rail contact – FE-modelling- Damage evolution**

*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?

- *Academic degree (master equivalent) preferably physics, materials science or mathematics*
- *Knowledge in programming languages*
- *Interest and experience in experimental techniques*
- *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?

- *Modelling material depending damage evolution regarding holistic rail track influences*
- *Evaluate relation between system dynamics and profile degradation*
- *Validation of simulation framework by experimental data*
- *Presentation of results at international conferences*
- *Writing of scientific articles for peer reviewed journals*

### Our offer:

A permanent employment with an immediate start and a gross monthly salary of € 2.971,39 (14 times per year).

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

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