

Materials Center Leoben (MCL) - with a staff of 170 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 area of responsibility or requirement profile:

Master student

Computational design of phononic crystals

Reference-n°.: MCL_166

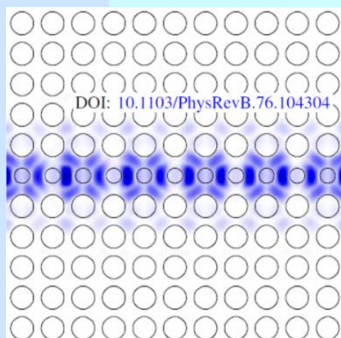
Coherent phonon transport; Phonon wavelike nature; Superlattices

These topics inspire you or you are already familiar with them? Then you are right the person we are looking for!

What do we need?

- Good mathematical background
- Good programming skills
- Interest in the application of theoretical and computational physics
- Scientific curiosity, team skills, self-initiative
- Good oral and written communication skills in English

We are working worldwide in strong cooperation with well-known scientific- and company partners



Your tasks?

- Investigate elastic wave propagation through superlattices using finite-difference time-domain methods
- Develop a tool to computationally design phononic crystal bandstructures of superlattices
- Write a scientific article for a peer reviewed journal reporting the outcome of the simulations

Our offer:

Temporary employment (6 months), 10,5 h per week, 504,00 € per month.

Please send your complete application documents by post or email. We would be pleased to get to know you!

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