

Materials Center Leoben Forschung GmbH (MCL) is an internationally active research institution specializing in materials research. The field of activity of MCL includes on the one hand the implementation of research and development projects along the whole product value chain (materials design, materials processing and materials use in innovative products) and on the other hand materialbased services (laboratory, computational and advisory services).

To strengthen our team, we are looking for someone with the following area of responsibility or requirement profile:

PhD position

Scarring of Acoustic Waves – Advanced Failure Detection in Microelectronics

Reference-n°.: MCL_158

Sub-Micrometer Failure Detection, Acoustic Interferometry, Characteristic Wave Patterns **Eg: thermal management – liquid cooling – CFD simulation**

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?

- *Academic degree (master equivalent) preferably physics, materials science or mathematics*
- *Knowledge in programming languages preferable Python*
- *Interest and experience in experimental techniques and theory*
- *Scientific curiosity, team skills, self-initiative*
- *Good oral and written communication skills in English*

You will work in strong cooperation with well-known company partners to bridge the gap between research and industrial exploitation!

Your tasks?

- Investigating the excitation of surface acoustic waves and the formation of characteristic wave patterns in cylindrical geometries
- Development of a technological concept based on acoustic wave generation/detection to read-out sub- μm sized failures
- Development of an advanced acoustic microscope enabling controlled interferometry of acoustic waves.
- Publication of results in international journals.
- Participation at FFG Young Scientist workshops to enhance your networking abilities and boost your career possibilities.



Our offer:

A PhD employment, with a start no later than 1st of October 2019 and a gross monthly salary of € 2.864,47.

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



Materials Center Leoben Forschung GmbH
z.H.: DI Dr. priv. Doz. Roland Brunner
Roseggerstraße 12, A-8700 Leoben
Email: bewerbung@mcl.at; www.mcl.at