MATERIALS CENTER LEOBEN
FORSCHUNG GMBH

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:

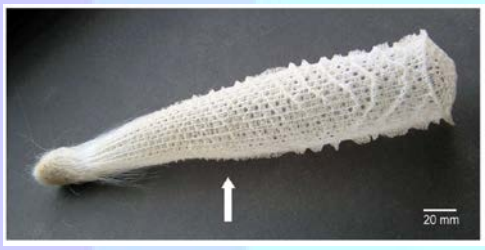
PhD / PostDoc Position

Computational design of damage tolerant, fatigue- and fracture resistant materials

Reference-n°.: MCL_133

<u>What do we need?</u>

- *Academic degree in engineering or science such as mechanical engineering, material science, physics, production science or the like, masters degree*
- Knowledge in finite element modelling, especially using ABAQUS would be favourable
- Scientific curiosity, team skills, self-initiative
- Good oral and written communication skills in English



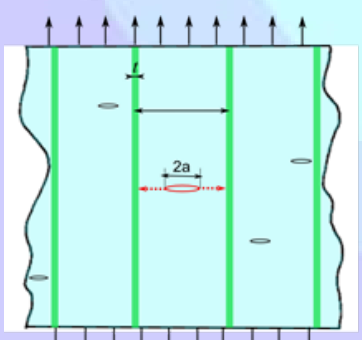
<u>Your tasks?</u>

- *To increase the fracture toughness and fatigue resistance of materials by intentional insertion of material inhomogeneites, under consideration of biomimetical approaches.*
- *For various loading situations, optimum architectures shall be found by numerical modelling.*
- *The research work mainly consists of numerical modeling of the behavior of defects in materials, applying conventional finite element modeling, the cohesive zone model and the concept of configurational forces.*

<u>Our offer:</u>

A permanent employment, with a start in August 2018 and a gross monthly salary of € 2.794,60 (for PhD Position). Overpayment dependent on your professional qualification and experience possible.

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



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