

Austrian Academy of Sciences

Competence Centers for Excellent Technologies

Research Position

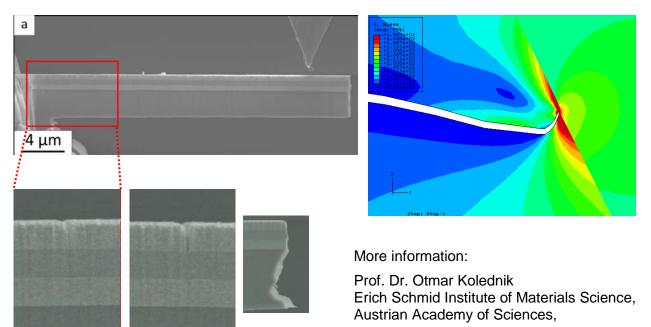
A research position is available at the *Erich Schmid Institute of Materials Science of the Austrian Academy of Sciences* in order to conduct a strategic project funded by the *COMET-K2 Competence Center on Integrated Research in Materials, Processing and Product Engineering* in Leoben.

The respective work package is entitled "*Computer-aided testing of nano- to macro-scale materials and compounds*" is part of a bigger strategic project on the development of new, computer-assisted fracture & fatigue testing concepts and assessment procedures for multi-material and multi-scale systems.

The work deals with numerical modeling of crack propagation of cracks in various types of inhomogeneous materials, applying conventional finite element modeling, the cohesive zone model and the concept of configurational forces. The work will be conducted in close cooperation with colleagues that conduct experimental work.

The project represents fundamental research with numerous prospective applications in mechanical engineering.

The position is a full Ph.D.-position. Alternatively, a Postdoc could be also employed. The earliest start is November 2018. Knowledge in finite element modeling, especially using ABAQUS, would be favorable.



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