

Kolloquium für Mechanik

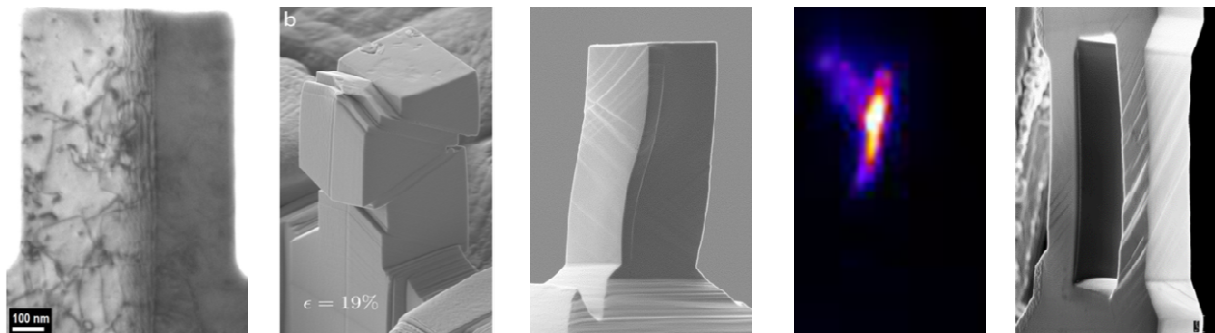
Referent: **Prof. Gerhard Dehm**
Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf

Datum: Do., 20.11.2014
Uhrzeit: 15:45 Uhr
Ort: Geb. 10.81, HS 62 (R 153)

Titel: **Small Scale Mechanical Testing: More than just a fashionable tool?!**

Abstract

In the last decade, miniaturized mechanical compression, tension and bending experiments have been developed using focused ion beam milling or lithographic processes to fabricate small samples from thin films and/or bulk materials. Many of the experiments provided new insights on the interplay of sample dimensions, dislocation density, and mechanical strength of single crystals. However, miniaturized mechanical testing also suffers from limitations which may lead to misinterpretations. In this talk, a critical overview on the challenges of micro-mechanical testing is provided. Additionally, current examples of micro-mechanical bending, compression and tension experiments combined with electron microscopy and/or μ Laue investigations are presented with the aim to shed light on the deformation mechanisms at interfaces in materials.



Alle Interessenten sind herzlich eingeladen.

Prof. Dr.-Ing. Thomas Böhlke