



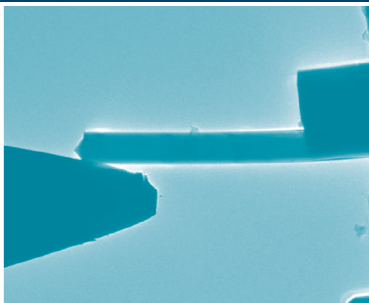
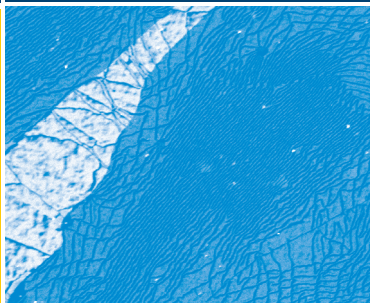
FRIEDRICH-ALEXANDER
UNIVERSITÄT
ERLANGEN-NÜRNBERG

SYMPOSIUM

Advanced Electron Microscopy for Materials Research

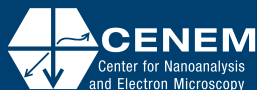
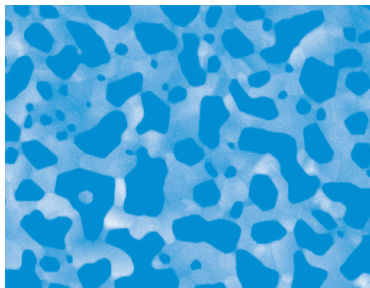
Thursday, April 30, 2015, 14.00

Hans-Georg-Waerber-Saal, Fraunhofer IISB



GRK 1896

in situ microscopy



Program

SESSION I: ADVANCED TEM METHODS

Chair: Prof. Joachim Mayer

- 14⁰⁰ Multi-Dimensional Electron Microscopy – Extending Electron Tomography for Materials Science
Prof. Paul A. Midgley, University of Cambridge
- 14³⁰ Real-space imaging of plasmonic modes of gold tapers with swift electrons
Prof. Peter van Aken, Max Planck Institute for Intelligent Systems, Stuttgart
- 15⁰⁰ 360° Electron Tomography of porous micro- and nanoparticles
Benjamin Winter, Lehrstuhl für Mikro- und Nanostrukturforschung, FAU Erlangen-Nürnberg
- 15¹⁵ *In situ* nanomechanics in the TEM: Challenges and benefits
Prof. Gerhard Dehm, Max-Planck-Institut für Eisenforschung, Düsseldorf
- 15⁴⁵ *In situ* STEM for investigation of solid state dewetting
Florian Niekiel, Lehrstuhl für Mikro- und Nanostrukturforschung, FAU Erlangen-Nürnberg
- 16⁰⁰ Coffee break

SESSION II: APPLICATIONS IN MATERIALS AND NANOSCIENCE

Chair: Prof. Gerhard Dehm

- 16³⁰ (Ba,Sr)(Co,Fe)O_{3-d} for oxygen separation membranes: suppression of secondary phase formation analyzed by electron microscopy
Prof. Dagmar Gerthsen, Karlsruhe Institute of Technology (KIT)
- 17⁰⁰ Microscopy and spectroscopy of functional oxide nanowires at atomic scale
Prof. Velimir R. Radmilović, University of Belgrade
- 17³⁰ Scale-bridging investigation of superdislocations in Ni-Base superalloys
Julian Müller, Lehrstuhl für Mikro- und Nanostrukturforschung, FAU Erlangen-Nürnberg
- 17⁴⁵ Defect interactions in silicon for photovoltaics
Prof. Michael Seibt, Universität Göttingen
- 18¹⁵ Dislocations in bilayer graphene
Dr. Benjamin Butz, Lehrstuhl für Mikro- und Nanostrukturforschung, FAU Erlangen-Nürnberg
- 18³⁰ Closure
- 19³⁰ Conference Dinner