



Helmholtz-Zentrum Geesthacht GEMS Outstation: Materials Research and High Resolution Imaging

Thursday, 26 January 2017

Bldg. 66, Seminar Room 013

The Helmholtz-Zentrum Geesthacht operates the research platform GEMS with an outstation at DESY, running beamlines and instruments with a focus on engineering materials research and high resolution imaging techniques. On the 2017 satellite meeting, the status of the HZG beamlines and future perspectives are reported and users will present recent research highlights.

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PROGRAMME

Session 1: Diffraction			
13:00	Welcome	Martin Müller	<i>Chair: P. Staron</i> HZG, Inst. of Materials Research
13:10	Status of HEMS and the new white-beam beamline	Peter Staron	HZG, Inst. of Materials Research
13:25	High-energy X-ray diffraction as a probe of current distribution in Li-ion batteries	Anatoliy Senyshyn	TU Munich/MLZ
13:45	In situ diffraction experiments during high-pressure torsion deformation	Erhard Schafler	Univ. Vienna, Faculty of Physics
14:10	Transient liquid phase bonding of γ -TiAl alloys — Understanding of microstructure development and mechanical strength with in-situ HEXRD measurements	Katja Hauschildt	HZG, Inst. of Materials Research
14:30 Coffee break			
Session 2: Imaging			
15:00	Imaging instruments at IBL, HEMS and MINAXS beamlines	Christina Krywka	<i>Chair: C. Krywka</i> HZG, Inst. of Materials Research
15:15	Loss of spatial organisation in articular cartilage during osteoarthritis - a new physiopathological model illustrated by 3d imaging	Ulf K. Hoffmann	Univ. Tübingen, Universitätsklinikum
15:35	Direct observation of coupled geochemical and geomechanical impacts on chalk microstructural evolution under elevated CO ₂ pressure	Yi Yang	Univ. Copenhagen, Department of Chemistry
15:55	Comparative head anatomy and postlarval muscle development in caddisflies revealed by μ CT	Frank Friedrich	Univ. Hamburg, Department of Biology
16:15	Final discussion		