Field of Expertise „Advanced Materials Science"

Materials Day 2009

Program

Thursday, October 1st: HS 224, Stremayrgasse 16	
09:00	**Franzisca Mendez-Martin:** "Microstructure stability of 12%Cr Steel for Fossil Power Plants: Experimental Research and Simulations"
09:20	**Roman Pschera:** "Problems in modelling the damage behaviour of steel during hot forming with a special focus on the rolling of seamless pipes"
09:40	**Pavel Sherstnev:** "Physical based microstructure modelling during the hot rolling of aluminium alloys"
10:00	**Florian Mittermayr:** "Micro-Structural Damage of Concrete Material by Chemical Alteration"
10:20	**Barbara Rupp:** "Photochemical cross-linking for tailoring mechanical properties of polymers"
10:40	Coffee Break
11:00	**Toni Uusimäki:** "Electron tomography"
11:20	**Herbert Reingruber:** "The ESEM and Water - Prospects and Limits"
11:40	**Thomas Rath:** Nanocomposit Solar Cells
1200	**Wernfried Haas:**"Electron microscopy as a tool for morphology control in nanocomposite solar cells"
1220	Lunch Break
1330	**Manfred Gruber:** "A Drift-Diffusion Model for Simulating Morphology Effects in Organic and Hybrid Solar Cells"
1350	**Peter Lichtenberger:** "Graphene, a Candidate for Future Nano-Electronics: Kinetic Simulation of the Charge Carrier Transport"
1410	**Johanna Stettner:** Preparation and Characterization of Self Assembled Monolayers
1430	**Heinz-Georg Flesch:** Structure and morphology of quinquethiophene based self assembled monolayers
1450	**Oliver Hofmann:** Interfaces between metal surfaces and strong donors and acceptors
1510	Coffee Break
1530	**Anna Fulterer:** Fascinating Physics of High Temperature Superconductors (Arrigoni)
1550	**Werner Krauss:** Piezoelectric properties and phase transition temperature of the lead-free ceramic system $(Bi_{0,5}Na_{0,5})TiO_3 - SrTiO_3$
1610	**Denis Schütz:** Phase relations and chemical modification of bismuth based ferroelectrics in contact with Ag/Pd electrodes
1630	**Open Discussion**
1700	**Invited Lecture** **Prof. Jürgen Rödel, TU Darmstadt:** Development of new lead-free piezoceramics
1830	**Post-Lecture Meeting**