

Program 1st ASEM-Workshop, Graz April 7th-8th 2011

Thursday, 7.4.2011, lecture room PHEG002, HS P2, Petersgasse 16, ground floor

- 16:30 – 17:00 **Registration**
17:00 – 17:15 **Opening & Greetings**
17:15 – 18:00 **Reinhard Rachel** (University of Regensburg, Germany)
“Cell Biology of *Ignicoccus hospitalis* - a unique Crenarchaeon”
18:00 – 18:45 **Jannik Meyer** (University of Vienna, Austria)
“The physics of nano-carbons explored by atomic resolution transmission electron microscopy”
19:30 – 22:00 **Workshop Dinner at Hotel Mercure Messe**

Friday, 8.4.2011, seminar room BKEG053, Petersgasse 14, ground floor.

08:30 – 10:00 Contributed talks

- P. Imrich** (Leoben)
“TEM analysis of dislocations in micron sized copper tensile samples”
W. Hetaba (Wien)
“Site selective analysis under electron channelling conditions”
S. Fladischer (Graz)
“Nanoanalytical characterization of an organic photodiode”
D. Kiener (Leoben)
“Quantitative in-situ tensile tests in a TEM”
H. Reingruber (Graz)
“Characterization of porous filtration membranes with advanced microscopic methods”
J. Rattenberger (Graz)
“Beam transfer characteristics of a low vacuum SEM”

10:00 – 10:30 Coffee

10:30 – 12:00 Contributed talks

- K. Gradauer** (Graz)
“Development and evaluation of thiomers-coated liposomes as mucoadhesive drug carriers”
B. Klein (Salzburg)
“The fate of histone H3 and lamin B1 during apoptosis in microglia investigated by TEM analysis”
D. Kolb (Graz)
“Electron tomography of vesicles at identified synaptic contacts in an insect”
T. Uusimäki (Graz)
“Quantitative 3D analysis of Fe₃O₄ nanoparticles incorporated within mesoporous silicon by electron tomography”
P. Schindler (Wien)
“TEM studies of PbS-ZnS/ZnO quantum confinement structures for solar cells”
W. Haas (Graz)
“Chemical (in)homogeneity of copper zinc tin selenide nanoparticles and

resulting solar absorber layers”

12:00 – 13:00 Lunch

13:00 – 14:45 Contributed talks

C. Röhrl (Wien)

“Investigation of cellular lipoprotein and lipid transport by combined light and electron microscopy using diaminobenzidine photooxidation”

S. Volland (Salzburg)

“Intracellular metal accumulation in the green alga MICRASTERIAS DENTICULATA measured by TEM-coupled electron energy-loss spectroscopy”

L.J. Zheng (Salzburg)

“Pb-induced ultrastructural alterations and subcellular localization of Pb in leaf and root cells of two Lespedeza (Fabaceae) species by TEM-coupled electron energy loss spectroscopy”

S. Löffler (Wien)

“Non-Lorentzian Scattering Behavior in Core-Losses—A Glimpse of Wave Functions”

C. Gammer (Wien)

“Combining advanced transmission electron microscopy methods for a complete structural analysis of bulk nanocrystalline materials”

D. Geist (Wien)

“Extreme structural inhomogeneities in the axial direction in high pressure torsion processed samples”

A. Grill (Wien)

“Structural analysis of severely deformed Ni₃Ge”

14:45 – 15:00 Closing Words

15:00 Visit of the installation of the FEI Titan cubed (ASTEM) at the FELMI-ZFE Coffee