Arbeitsgruppenseminar EMMS

Wintersemester 2015/2016, Mittwochs 11:30-13:30 Uhr, N27 2.042 (Glaskasten)

14.10.	**Tibor Lehnert** **Kecheng Cao**	In-situ crystallization of calcium sulfates from liquids in graphene pockets Preparation of Graphene/graphene-based hybrid materials and control of defects in graphene
21.10.	**Alissa Oelschlägel**	*Final report Studienarbeit* „Ladungs- und Schichtdickenbestimmung an frei tragenden Schichten im Rasterelektronenmikroskop"
27.10.	**Benjamin Gapp**	*Final report Bachelor work* Sample preparation and imaging of charge density waves in a few layers of 1T-TaS2 and 1T-TaSe2
5.11.	**Ute Kaiser**	General Discussion about the next tasks
11.11.	**Sebastian Sturn** **Michael Mohn**	Charge collection in battery materials - experimental setup and first results Momentum-resolved EELS - calculations for 2D multilayer systems
18.11.	**Ute Golla-Schindler**	State of the art battery project
1.12.	**Robert Leiter** **Haoyuan Qi**	"Imaging defects in naondiamonds" "Controlling of octahedral rotations in LaNiO3/LaGaO3 superlattices via interfacial octahedral connectivity."
9.12.	**Michael Kinyanjui** **Dorin Geiger**	Charge density waves Preparation and structure of $Li_9V_3(P_2O_7)(PO_4)_2$
16.12.	**Manuel Mundszinger** **Marc Oldenburger**	"FIB/SEM Investigations of Lithium Battery Materials" „Impedanzmessungen an Lithium-Ionen Zellen“
13.1.	**Yohei Sato**	High-Energy Resolution Electron Energy-Loss Spectroscopy Study of Interband Transitions Characteristic to Single-Walled Carbon Nanotubes
18.1. **14:30 Uhr**	**Jörg Bernhard** **Johannes Biskupek**	Safety instruction Instrumentation
27.1.	**Pia Börner** **Felix Börrnert**	Exploring charge density waves in transition metal dichalcogenide monolayers and hybrid heterostructures. State of the art CleanTech project
3.2.	**Baokun Liang** **Zhonbo Li**	*Final report Master thesis* Phase contrast in STEM
10.2.	**Xiaodan Chen** **Anna Skenteridou**	TEM investigations of GaN/InGaN heterostructures: HRTEM and weak beam dark-field imaging *Final report Master thesis*
11.2. **11Uhr**	**Yossi Lereah** Faculty of Engineering, Tel Aviv University	Quantitative Time Resolved Electron Microscopy of Phase Transitions The following phase transitions were qualitatively studied by in situ transmission electron microscopy: Crystallization of amorphous alloys, Surface melting in Nano-particles including their Quasi-melted state. The measurements were obtained with the following characteristics: Time resolution was 0.04 sec (TV rate), relative temperature measurements with 0.1C steps, Conventional HREM resolution. I will review our results with the above experimental characteristics, and will point the potential of the recent developments in EM toward further studies.