



"Microscopy of Tomorrow's Industrial Materials"

Berlin, October 3rd - October 7th, 2005

Preliminary Scientific Program

Monday, October 3rd: Arrival

Tuesday, October 4th: LCP building

- 10.00 – 10.15 Opening
- 10.15 – 11.00 W. Neumann (Berlin)
30th anniversary of the International Centre of Advanced Materials and Electron
Microscopy – a retrospective view
- 11.00 – 12.00 K. Urban (Jülich)
Aberration-corrected transmission electron microscopy
- 12.15 – 13.30 Lunch
- 13.30 – 14.15 W. Knoll (München)
Nano analytical electron microscopy for materials and semiconductor applications
- 14.30 – 17.00 Official opening ceremony of the Humboldt University Adlershof Electron
Microscopy Laboratory

Wednesday, October 5th: LCP building

- 9.00 – 9.45 U. Mühle (Dresden)
Application of advanced TEM techniques in semiconductor industry (part I)
- 9.45 – 10.30 U. Mühle (Dresden)
Application of advanced TEM techniques in semiconductor industry (part II)
- 10.45 – 11.15 Coffee break
- 11.15 – 12.00 E. List (Graz)
Bulk and interface-related electronic and optoelectronic properties of organic
semiconductors
- 12.15 – 13.30 Lunch
- 13.30 – 15.00 P. Werner (Halle), H. Kirmse (Berlin)
TEM of semiconductor quantum structures
- 15.15 – 15.45 Coffee break

- 15.45 – 16.30 A. V. Latyshev
Atomistic aspect of silicon surface processes studied by in-situ electron microscopy and atomic force microscopy
- 16.45 – 17.30 H. Hofmeister (Halle)
TEM of nanoparticulate composites of metal/oxide and semiconductor/oxide materials
- 19.30 School party

Thursday, October 6th: LCP building

- 9.00 – 9.45 F. Appel (Geesthacht)
 γ -Titanium aluminide alloys: alloy design, properties
- 9.45 – 10.30 F. Appel (Geesthacht)
 γ -Titanium aluminide alloys: processing
- 10.45 – 11.15 Coffee break
- 11.15 – 12.00 U. Glatzel (Bayreuth)
Single crystal nickel based superalloys for high temperature applications – microstructure, properties, anisotropy
- 12.15 – 13.30 Lunch
- 13.30 – 14.15 J. Dutkiewicz (Krakow)
TEM studies of the structure of amorphous and nanocrystalline metallic materials prepared using various methods
- 15.00 – 16.30 Short oral presentations of posters
- 16.30 – 17.30 Posters and beer, Session I
- 17.30 – 18.30 Posters and beer, Session II

Friday, October 7th: LCP building

- 9.00 – 9.45 P. Barna (Budapest)
History of thin films: growth, techniques, characterization
- 10.00 – 10.45 G. Radnoczi (Budapest)
Hard coatings: state-of-the-art and applications
- 11.00 – 11.30 Coffee break
- 11.30 – 13.00 D. Hesse, M. Alexe (Halle)
Ferroelectric nanostructures for future high-density non-volatile memory applications – preparation methods, microstructure, and physical properties
- 13.15 Closing remarks

Saturday, October 8th: Departure