

PhD-Symposium on Complex enzymes for biosensor applications

November 29-30 2012: Hotel Märkischer Hof, Poststrasse 8, 14943 Luckenwalde, Germany

Thursday, Nov 29th 2012		
09.30	Arrival	
10.00	Opening Silke Leimkühler (UP) / Frieder Scheller (IBMT/UP)	
Chair: Martin Mahro (UP)		
10.15	Inez Weidinger (TU Berlin)	Plenary lecture: "Interaction of enymes with inorganic surfaces studied by surface enhanced Raman spectroscopy"
10.45	Tillmann Utesch (TU Berlin)	Adsorption simulations of enzymes on modified surfaces
11.00	Sebastian Schmitz-Herzberg (IBMT)	Encapsulation of Autonomous Biosensors
11.15	Maria Bosserdt (IBMT)	First Electrochemically active Protein MIP
11.30	Gero Göbel (TFH Wildau)	Development of a fast and simple test system for the semiquantitative protein detection in liquor samples based on gold nanoparticles
11.45	LUNCH	
Chair: Tobias Hartmann (UP)		
13.00	Chantal Iobbi-Nivol (CNRS Marseille)	Molybdoenzymes, from maturation to degradation
13.30	Jan Dahl (UP)	Analysis of a sulfur donor for MPT formation
13.45	Ben Fräsdorf (UP)	Characterization of human TUM1. An Enzyme Involved in tRNA Thiolation?
14.00	Martin Voss (UP)	A multidrug resistance transporter as a part of Moco, FeS cluster and Heme biosynthesis?
14.15	Coffee	
Chair: Miriam Adamovski (UP)		
15.00	Elena Ferapontova (Aarhus U)	Electrochemical genosensors for sensitive and selective analysis of nucleic acids
15.30	Thomas Dietz (UP)	Interaction of cytochrome c with mesoporous tin-rich indium-tin-oxide
15.45	Merlin Tiencheu (IBMT)	Development of novel affinity sensors with PQQ dependent glucose dehydrogenase as label enzyme
16.00	Artur Fandrich (TFH Wildau)	Thermoresponsive Polymer Interface: Towards an Electrochemical Analysis System for Biorecognition Events
16.15	Coffee	
Chair: Mita Mullick-Chowdhury (UP)		
17.00	Lo Gorton (Lund)	Deglycosylated pyranose dehydrogenase a very promising redox enzyme for biosensors and biofuel cells
17.30	Christopher Schulz (Lund)	Cellobiose dehydrogenase – a sugar oxidising enzyme tunable by positive charges, suitable for biosensor and biofuel cell applications
17.45	Henry Memczak (IBMT)	Peptide Development for the Detection of Influenza Viruses
18.00	Sebastian Kersting (IBMT)	Isothermal recombinase polymerase amplification (RPA) for the detection of bacterial pathogens
18.15	End	

Friday, Nov 30th 2012		
	Chair: Cigdem Yildirim (UP)	
09.00	Sergey Shleev (Malmö University)	On the possibility of uphill intramolecular electron transfer in multicopper oxidases: Electrochemical and quantum chemical study of bilirubin oxidase
09.30	Magnus Falk (Malmö University)	Membrane- and mediator-less miniature nanostructured biofuel cells for ex vivo and in vivo applications
09.45	Peter Lamberg (Malmö University)	Biofuel cells in cell culture platforms
10.00	Johannes Tanne (IBMT)	Towards a conductive and biocompatible electrode material for biofuel cell applications
10.15	Decha Dechtriat (IBMT)	Protein Binding to an Electrochemical Surface-Confined Epitope Imprint
10.30	Coffee	
	Chair: Jan Dahl (UP)	
11.00	Joanne Santini (UCL London)	Bacterial Arsenite Oxidase
11.30	Zvonimir Marelja (UP)	Mapping and characterization of the four aldehyde oxidases in <i>Drosophila melanogaster</i>
11.45	Artavazd Badalyan (UP)	The influence of pH and ionic strength on mediated benzaldehyde oxidation by PaoABC
12.00	Stefan Kubick (IBMT)	Cell-free Systems: Protein Building Blocks for Synthetic and Chemical Biology
12.15	Rita Sachse (IBMT)	Functionalized biological membranes in eukaryotic cell-free systems
12.30	Robert Quast (IBMT)	Site-directed incorporation of non-canonical amino acids in cell-free systems
12.45	Closing remarks (Frieder Scheller)	
	Lunch	

Organized by: Jan Dahl (University of Potsdam)
 Silke Leimkühler (University of Potsdam)
 Ulla Wollenberger (University of Potsdam)

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