



Fraunhofer
IZI



PhD Workshop on Bioanalysis and Enzymology

November 26-27 2015: Hotel Märkischer Hof, Poststrasse 8, 14943 Luckenwalde, Germany

Thursday, Nov 26th 2015

10.20 Welcome		
Session 1 Chair: Marc Riedel		
10.30	Peter Neubauer, TU Berlin	Being successful in producing recombinant enzymes with EnPresso
11.00	Florian Glauche, TUB	Towards an automated expression optimisation for recombinant products
11.15	Lena Thoring, IZI-BB	Future perspectives for the synthesis of "Difficult-to-Express" proteins: Development of novel cell-free systems based on CHO cell lysates
11.30	Nadine Schwanhold, UP	The system-specific chaperone FdsC is involved in bis-MGD binding and insertion into the formate dehydrogenase from <i>R. capsulatus</i>
11.45	Benjamin Duffus, UP	Application of Electron Paramagnetic Resonance Spectroscopy for Molybdoenzyme Active Site Characterization
12.00	Lunch	
Session 2 Chair: Biljana Mitrova		
13.30	Katrin Scheibner, Martin Hofrichter, BTU	Unspecific Peroxygenases: Secreted Fungal Enzymes that Mimic P450 Activities
14.00	Gökhan Kücükgoze, UP	The substrate specificities of the mouse aldehyde oxidase homologues
14.15	Paul Kaufmann, UP	Studies on the active site of <i>E. coli</i> TMAO reductase
14.30	Katharina Jetzschmann, UP	Strategies for the molecular imprinting of Cytochrome P450 BM3
14.45	Xiaorong Zhang, UP	Molecularly imprinted polymers for transferrin – concept and first results
15.00	Coffee	
Session 3 Chair: Nadine Schwanhold		
15.30	Peter-Diedrich Hansen, TU Berlin	Biosensor and Phagocytosis with cryo-conserved cells in the orbit (ISS) under microgravity
16.00	Vida Krikstolaityte, DTU	Micro-hole preparation and characterisation in plastic materials
16.15	Marc Riedel, THW	InGaN/GaN nanowires: new tools for sensorial photoelectron-chemical NADH and H ₂ O ₂ detection
16.30	Bettina Neumann, UP	Adsorption of Microperoxidase 11 on mesoporous ATO electrodes
16.45	Biljana Mitrova, UP	Electrochemical behavior of formate dehydrogenase from <i>R. capsulatus</i> immobilized on a cationic polymer modified electrode surface
18.00-19.00	Dinner	
Evening activities		

Friday, Nov 27th 2015

Session 4 <i>Chair: Benjamin Duffus</i>		
09.00	Arto Heiskanen, DTU	Automated Microfluidic Platforms for Electrochemical Cell Analysis
09.30	Susanne Lobstein, THW	Comparison and establishment of digital droplet PCR with quantitative PCR for the detection of <i>Leishmania spp.</i>
09.45	Andreas Wiese, THW	Preparation of 3D fibrous network structures by using of electrospinning and carbonisation for application as basic material in enzyme electrodes
10.00	Ada-loana Bunea, DTU	Polymer-derived carbon surfaces for enhancing stem cell differentiation
10.15	Anne Zemella, IZI-BB	Membrane Protein Engineering in Eukaryotic Cell-free Systems: Functional Characterization of G protein-coupled receptors
10.30	Coffee	
Session 5 <i>Chair: Ada-loana Bunea</i>		
11.00	Rolf Schmid	Biotechnology in Far East
11.30	Kai Stieger, THW	Engineering of supramolecular photoactive protein architectures: Defined co-assembly of photosystem I and cytochrome c using a nanoscaled DNA-matrix
11.45	Ting Zeng, UP	Human sulfite oxidase on Quantum Dots modified ITO electrodes
12.00	Vanessa Gering, THW	Establishment and application of LC-MS/MS based detection methods: Analysis of coffee compounds
Closing remarks/Lunch		