



PhD Workshop on Bioanalysis

November 22-23 2018: Hotel Märkischer Hof, Poststrasse 8, 14943 Luckenwalde, Germany

Thursday, Nov 22th 2018

9.40 Welcome		
Session 1 Chair: Felix Weißenfeld		
9.45	Nicolas Plumeré (RUB)	Point-of-Use Bioelectrochemical Sensors for Big Data Collection in Agriculture
10.15	Mareike Noffke (IZI-BB)	Production and Characterization of Enzyme Nanoarrays Assisted by Alternating Electric Fields
10.30	Gero Göbel (THW)	Electrochemical Activity Determination of the Catechol-O-methyl Transferase via Selective Dopamine Detection
10.45	Stefan Rödiger (BTU)	Merging of Laboratory and Point-of-Care Test Methods into an eHealth Platform
11.00 Coffee		
Session 2 Chair: Christoph Jurischka		
11.30	Peter Schierack (BTU)	Automation of Detection and Quantification of Bacteria
12.00	Tobias Gerling (IZI-BB)	Dielectrophoresis-based Microfluidic Systems for Phase-Optical Cell Characterization and Cell Sorting
12.15	Tutku Ceren Karabulut (THW)	Development and Validation of HPLC Method for Simultaneous Determination of Betamethasone and Ketoconazole in Cream Formulations
12.30	Xiaorong Zhang (UP)	Electrosynthesized MIPs for Hemoglobin Recognition
12.45 Lunch		
Session 3 Chair: Moritz Klages		
14.00	Lars Lauterbach (TU)	H ₂ -driven Cofactor Regeneration for Production of Fine Chemicals
14.30	Adrian Kölsch (HU)	Cytochrome c Binding Site of Photosystem I
14.45	Dmitri Ciornii (THW)	PSI-based Photocathode by Wiring PSI via Fullerenes
15.00	Chris Cadek (UP)	Analysis of the Function of TusA Homologous Proteins in Sulfur Metabolism of <i>Escherichia coli</i>
15.15 Coffee		

Session 4 <i>Chair: Bettina Neumann</i>		
16.00	Jae-Hun Jeoung (HU)	ATP-driven Energizing of Double Cubane Cluster and Metal-binding Transformer
16.30	Mariam Esmaeeli (UP)	Human Aldehyde Oxidase 1: Structure-Function Studies on a Cysteine-Rich Loop
16.45	Christin Radon (UP)	Getting to Know the Structure of your Protein: R _c FDH as an Example
17.00	Biljana Mitrova (UP)	Electrochemical Biosensor for TMAO Detection with a Chimeric Enzyme
17.15-18.00	Free time	
18.00-19.00	Dinner	
19.00	Social event	

Friday, Nov 23th 2018

Session 5 <i>Chair: Jan Felix Knauer</i>		
09.00	Ilko Bald (UP)	DNA Origami Nanostructures for Chemical and Biological Sensing
09.30	Christin Möser (IZI)	Using DNA Nanostructures to Present and Potentiate Peptides in an Oligovalent Manner
09.45	Nico Dreymann (IZI-BB)	Aptamer-based Biomarker Assays for Cancer Detection
10.00	Christoph Jurischka (BTU)	Fish Probes for the Detection of High-risk HPV Nucleic Acid in Infected Host Cells
10.15	Coffee	
Session 6 <i>Chair: Anne Schieferdecker / Eva Keller</i>		
10.45	Katja Arndt (UP)	Synthetic Biology
11.15	Jan Felix Knauer (IZI-BB)	A Versatile Cell-free Protein Production Platform for the Synthesis of Fungal Peroxygenases
11.30	Jeffrey Schloßhauer (IZI-BB)	Novel Orthogonal Systems for the Fluorescent Labeling of Complex Membrane Proteins
11.45	Break	
12.00	Carsten Beta (UP)	Harnessing Motile Cells as Trucks for Microcargo Transport
12.30	Akanksha Moga (UP)	Towards the Biosynthetic Pathway Reconstruction in GUVs
12.45	Felix Weißenfeld (THW)	Osmotic Engine: Translating Osmotic Pressure into Macroscopic Mechanical Force via Poly(Acrylic Acid) Based Hydrogels
13.00	Closing remarks/Lunch	
14.00 End		