

SMCBS'2017 Programme

Friday, November 3

09:00-16:00 **Registration at IPC PAS**

12:00-13:00 **Lunch at IPC PAS**

13:00-19:00 **Transfer to Żelechów / Arrival**

14:00- **Setting up posters**

19:00-20:00 **Dinner**

20:00- **Evening session**

21:20 Chairs: Alexander Kuhn and Serena Arnaboldi

20:00- T01 **Frank Marken**

20:40 Current Rectification and Diodes in Membrane Electrochemistry

20:40- K01 **Kamil Wojciechowski**

21:00 Interaction of Biosurfactants with Lipid Membranes

21:00- K02 **Hanna Radecka**

21:20 Strategies for Design of Immuno- and Genosensors-Fundamentals and Applications

Saturday, November 4

08:00-09:00 **Breakfast**

09:00- **Morning session 1**

10:30 Chairs: Frank Marken and Kamil Wojciechowski

09:00- T02 **Lars J.C. Jeuken**

09:40 Supramolecular Electrode Assemblies in Bioelectrochemistry

09:40- K03 **Alain Walcarius**

10:00 Electrogeneration of Mesoporous Silica Films with Vertically Ordered Nanochannels for Chemical Sensing

10:00- SC01 **Pavel Zhurauski**

10:15 Self-assembled Gold Nanoparticles for Impedimetric and Amperometric Detection of a Prostate Cancer Biomarker

10:15- SC02 **Fangyuan Zhao**

10:30 A Solar Nernstian Biosupercapacitor Based on Cyanobacterial Photosynthetic Complexes

10:30-11:00 **Coffee break**

11:00-12:50		Morning session 2 Chairs: Lars J. C. Jeuken and Hanna Radecka
11:00-11:40	T03	Paweł Krysiński Surface- and Core-Modified Nanoferrites as Tools for Magnetic Field-Assisted Targeted Drug Delivery
11:40-12:00	K04	Tan-Phat Huynh Precipitation of Inorganic Phases Through a Photoinduced pH Jump: from Vaterite Spheroids and Shells to ZnO Flakes and Hexagonal Plates
12:00-12:20	K05	Barbara Jachimska Self-assembling Behavior of Proteins: Effect of the Interaction between Protein and Surface
12:20-12:35	SC03	Stanislav Trashin Towards Point-of-Care diagnostic of Toxocariasis: Electrochemical and Photoelectrochemical Magnetosensor with Nanobodies
12:35-12:50	SC04	Kamila Łepicka A Multi-composite Supercapacitor with a Dual Anode and a Dual Cathode
13:00-14:30		Group photo and Lunch
14:30-16:20		Afternoon session 1 Chairs: Paweł Krysiński and Tan-Phat Huynh
14:30-15:10	T04	Alexander Kuhn Chiral Recognition with Tailored Porous Metal Layers
15:10-15:30	K06	Alessandra Maria Bossi Molecularly Imprinted Nanomaterials Targeting Linear and Structured Peptides
15:30-15:50	K07	Andrew James Gross Buckypaper Bioelectrodes: Emerging Materials for Implantable and Wearable Bioelectronics Devices
15:50-16:10	K08	Gerd-Uwe Flechsig Structure of DNA Layers on Gold Surfaces Studied by Millisecond-resolved EQCM and H/D Kinetic Isotope Effects
16:10-16:25	SC05	Felipe Conzuelo Evaluation of (Bio)photocatalysts for Energy Conversion by Means of Scanning Photoelectrochemical Microscopy
16:25-17:00		Coffee break

17:00-18:50		Afternoon session 2 Chairs: Alessandra M. Bossi and Trashin Stanislav
17:00-17:40	T05	Jacek Lipkowski Application of IR Spectroscopy to Study Thin Films of Biomolecules at the Electrified Metal-Solution Interface
17:40-18:00	K09	Fred Lisdat Cytochrome c as Valuable Building Block in Multilayered Architectures of Biocatalysts on Electrodes
18:00-18:20	K10	Wolfgang Kaiser Surface-immobilized Electrically Actuated DNA Layers for the Measurement of Binding Kinetics, Stokes Radius and Conformational Changes of Proteins
18:20-18:35	SC06	Adam Kolodziej Electrochemical Stability of Thiols and Disulfides Assembled on Gold in Physiological Medium
18:35-18:50	SC07	Laurent Bouffier Straightforward Control of Chemical Surface Gradients by Wireless Electrochemistry

19:00-20:00 Dinner

20:00-22:00 Poster session

Sunday, November 5

08:00-09:00 Breakfast

09:00-10:30		Morning session 1 Chairs: Mathieu Etienne and Gerd-Uwe Flechsig
09:00-09:40	T06	Karsten Haupt Micro and Nanofabricated Molecularly Imprinted Polymers for Bioanalysis, Biosensing and Bioimaging
09:40-10:00	K11	Piyush Sindhu Sharma Designed Electroactive Functional Monomers for Providing Desired Selectivity in Electrochemical Molecular Imprinting
10:00-10:15	SC08	Carlo Gonzato Molecularly Imprinted Films on Interdigitated Electrodes via Photoiniferter Polymerization under Visible Light
10:15-10:30	SC09	Zofia Iskierko Epitope Imprinting for Selective Gluten Determination
10:30-11:00		Coffee break

11:00-12:50		Morning session 2 Chairs: Karsten Haupt and Alain Walcarius
11:00-11:40	T07	Andrzej Lewenstam Sensing Ion Fluxes Through Artificial and Biological Membranes and their Interfaces
11:40-12:00	K12	Nicolas Plumere Charge Recombination in Biophotoelectrodes
12:00-12:20	K13	Karolien De Wael Singlet Oxygen Based Electrosensing
12:20-12:35	SC10	Serena Arnaboldi Optimizing the Electrodeposition Protocol of Enantioselective Inherently Chiral Electrode Surfaces: a Multi-Technique Investigation
12:35-12:50	SC11	Vitali Scherbahn Wide-Field Surface Plasmon Microscopy for Detection of Biological Nano-/Microparticles
13:00-14:30		Lunch
14:30-15:45		Afternoon session 1 Chairs: Andrzej Lewenstam and Karolien De Wael
14:30-14:50	K14	Pawel Kulesza Charge Propagation in Electroactive Materials: Diagnosis of Mechanisms and Dynamics with Microelectrochemical Devices
14:50-15:10	K15	Gidi Shani Sensors for Breath Testing: From Nanomaterials and Surface Modifications to Comprehensive Disease Detection
15:10-15:30	K16	Sławomir Sęk Activity of Lipopeptides Toward Biomimetic Lipid Films
15:30-15:45	SC12	Mariano Garcia-Soto Polymer-coated Gold Nanoparticles
15:45-		Social program
20:00-22:00		Dinner/Banquette

Monday, November 6, 2017

08:00-09:00 Breakfast

09:00- Morning session 1

10:30 Chairs: Sławomir Sęk and Jingyuan Chen

09:00- T08 **Sergey Shleev**
09:40 Biosupercapacitors

09:40- K17 **Patrizia R. Mussini**
10:00 Strategies for High Enantioselectivity at Electrode Surfaces:
Implementing Inherent Chirality in Electroactive Thin Films or
Electrode|(Ionic Liquid) Interfaces

10:00- SC13 **Sebastian Mackowski**
10:15 Wide-Field Fluorescence Microscopy of Real-time Conjugation Sensing

10:15- SC14 **Michal Kizling**
10:30 Size Dependence of Gold Clusters Roles in Processes Catalyzed by
Redox Enzymes

10:30-11:00 Coffee break

11:00- Morning session 2

12:50 Chairs: Sergey Shleev and Patrizia R. Mussini

11:00- T09 **Krzysztof Winkler**
11:40 Formation, Characterization, and Application of 1-D Polypyrrole
Structures

11:40- K18 **Mathieu Etienne**
12:00 Electroactive Artificial Biofilms

12:00- K19 **Klaus Mathwig**
12:20 Fluorescent and Electrochemical Sensing Confined in Nanofluidic
Channels

12:20- SC15 **Maciej Cieplak**
12:35 Self-reporting Molecularly Imprinted Polymer for Label-free Selective
Electrochemical Sensing of *p*-Synephrine

12:35- SC16 **Roberto Ortiz**
12:50 Direct Electrochemistry of Cellobiose Dehydrogenases onto Gold
Nanoparticle Modified Gold Electrodes-The role of surface charges

13:00-14:30 Lunch

14:30- Afternoon session 1

16:25 Chairs: Krzysztof Winkler and Sebastian Mackowski

14:30- T10 **Francis D'Souza**
15:10 Artificial Photosynthesis: Surface Modified Biomimetic Materials for
Light Capture, Charge Separation, and Fuel Production

15:10- 15:30	K20	Wojciech Nogala Nanoelectrodes for Determination of Silver Species in Biological Cells
15:30- 15:50	K21	Ilaria Palchetti Nanostructured Electrochemical Platforms for the Detection of Clinically Relevant Molecules
15:50- 16:10	K22	Munetaka Oyama Electrochemical Characteristics of Palladium Nano- or Micro-particles Modified Electrodes
16:10- 16:25	SC17	Magdalena Michalak Micropatterning of Bare Metallic Nanostructures and their Electrochemical Studies in Alkaline Media. SECM pH mapping
16:25-17:00		Coffee break
17:00- 19:10		Afternoon session 2 Chairs: Francis D'Souza and Wojciech Nogala
17:00- 17:40	T11	Gary Blanchard Using Ionic Liquids to Control Interface Properties over Macroscopic Distances
17:40- 18:00	K23	Camelia Bala Versatility and Challenges in the Design of Biosensors for Food Security
18:00- 18:20	K24	Vladimir Mirsky Detection of Nano- and Microparticles of Engineered and Biological Origin by Wide-field Surface Plasmon Microscopy
18:20- 18:35	SC18	Marcin Holdynski Collisions of Suspended Prussian Blue Nanoparticles with Rotating Disk Electrode
18:35- 18:50	SC19	Michael Füg Towards Mechanistic Understanding of Silver Nanoparticle Formation Catalyzed by <i>Geobacter sulfurreducens</i>
19:00-20:00		Dinner
21:00-		Disco

Tuesday, November 7

08:00-09:00 **Breakfast**

09:00-10:30 **Morning session 1**
Chairs: Vladimir Mirsky and Gary Blanchard

09:00- T12 **Ambra Giannetti**
09:40 Spatially-selected Optical Microbubble Resonators for Biomolecule Immobilization

09:40- K25 **Gabriela Almeida**
10:00 Construction of Electrochemical Biosensors for Nitrite Detection: Needs, Challenges and Perspectives

10:00- SC20 **Jan Hrbac**
10:15 Electrode Modification by Metal-derived Nanostructures using Interelectrode Material Transfer and Spark Discharges

10:15- SC21 **Bhavana Gupta**
10:30 Wireless Actuation of Conducting Polymers

10:30-11:00 **Coffee break**

11:00-12:10 **Morning session 2**
Chairs: Gabriela Almeida and Ilaria Palchetti

11:00- T13 **Lo Gorton**
11:40 Electrochemical Communication Between Photosynthetic Membranes/Cells and Electrodes for Harvesting Solar Energy

11:40- K26 **Jingyuan Chen**
12:00 High-response Conducting Films Made of Suspensions of Polyaniline-coated Graphene

12:00-12:10 Closing

12:10-13:10 **Lunch**

13:10- **Departures**