

Friday, June 20			
Symposium Opening	9:00-9:15		
Nanotechnologies in nucleic acids and protein electrochemical biosensing	9:15-9:45	Joseph Wang	Nanomaterial-Based Biosensors and Biomedical Devices.
	9:45-10:00	Ronen Polsky	Electrochemical Biosensing at Sandia National Laboratories: Catalytic Nanoparticles and Multianalyte Detection of DNA and Proteins
	10:00-10:20	Arzum Erdem	Nanomaterial Based Electrochemical Sensor Technology
	10:20-10:40	Ján Labuda	Interface Design at DNA Modified Screen-printed Carbon Electrodes
coffee break	10:40-11:00		
Novel techniques to design electrochemical DNA biosensors	11:00-11:20	Jiří Janata	Conducting Polymer Based DNA Hybridization Array
	11:20-11:40	Tibor Hianik	Electrochemical DNA Aptasensors: Properties and Applications
	11:40-11:55	Emil Paleček	Self-assembled monolayers of thiolated DNA at mercury electrodes
	11:55-12:10	Hafsa Korri-Yousoufi	Electrochemical detection of DNA sequences based on metalloporphyrins conjugated to polypyrrole towards a multi-detection analysis
	12:10-12:25	Giovanna Marazza	New Analytical Applications of Electrochemical DNA Sensing
	12:25-12:40	Mikhail Yu. Vagin	Flow of Ions across the Liquid/Liquid Interface as an Electrochemical Probe for DNA Hybridization Detection
lunch	12:40-13:45		
Label-free electrochemical DNA sensing	13:45-14:10	Vladimír Vetterl	Adsorption and two-dimensional condensation of nucleic acid components and oligodeoxynucleotides at the electrodes.
	14:10-14:25	Stanislav Hasoň	Application of Carbon-Based Electrodes for Sensitive Voltammetric Detection of Purine Derivatives, Synthetic Oligonucleotides and Nucleic Acids in the Presence or Absence of Copper Ions
	14:25-14:45	Libuše Trnková	Elimination Voltammetry of Oligonucleotides
	14:45-15:10	Claudine Buess-Herman	On the use of PNA for a label free DNA biosensor
	15:10-15:25	Magdalena Gebala	Electrochemical Strategies for Detection of Salmonella spp.
coffee break+poster session	15:25-16:30	Posters I (see below)	
Electroactive labels/indicators for electrochemical DNA sensing	16:30-16:55	Miroslav Fojta	DNA labeling strategies for electrochemical biosensing
	16:55-17:15	Gerd-Uwe Flechsig	Electrochemical Detection of PCR-Products by labelling with Osmium Tetroxide
	17:15-17:35	Zbigniew J. Lesnikowski	Metallacarboranes as Labels for Multipotential Electrochemical Coding of DNA
	17:35-17:50	Luděk Havran	Using osmium tetroxide,2,2'-bipyridine as electroactive marker for sensitive detection of DNA damage

POSTERS I	
Joanna Hajdukiewicz, Paul Kavanagh, Donal Leech	Enzyme-amplified amperometric DNA hybridization assay based on bioelectrocatalysis using redox polymer-modified electrodes
Ewelina Zabost, Anna Maria Nowicka, Mikolaj Donten, Zbigniew Stojek	Effect of interactions of drugs with double stranded DNA on thermal denaturation of dsDNA
Petra Horáková, Miloslava Fojtová, Karel Vytřas, Miroslav Fojta	Disposable Screen-Printed Sensors for Enzyme-Linked Electrochemical Detection of Nucleotide Sequences and Gene Expression
Alena Kouřilová, František Jelen, Stanislav Hasoň, Libuše Trnková	Microanalysis of Purine Aminoderivatives by Stripping and Elimination Voltammetry on Carbon Electrodes
Jan Šílený, Dalibor Hůska, Violetta Shestivska, Ondřej Zítka, Jaromír Hubálek, Vojtěch Adam, René Kizek	Electrochemical Analysis of DNA at Miniaturized Electrodes
Julia Galandová, Radka Mikelová, Libuše Trnková, Ján Labuda	Application of elimination voltammetry for the investigation of the DNA-based biosensor with chitosan-carbon nanoparticles interface
Filiz Kuralay, Arzum Erdem, Serdar Abaci, Haluk Özyörük, Attila Yıldız	Electrochemical sensing of thiol linked oligodeoxynucleotides at poly(vinylferrocenium) modified electrodes
M. Fojta, L. Havran, P. Horáková, H. Pivoňková, S. Hasoň, P. Kostečka, J. Vacek, K. Němcová, E. Paleček	"Double-surface" electrochemical biosensing with magnetic beads
Pavel Kostečka, Martin Bartošik, Luděk Havran, Emil Paleček, Tibor Hianik and Miroslav Fojta	Osmium tetroxide-based SNP sensing
Miroslava Bittová, Pavel Kostečka, Libuše Trnková, Miroslav Fojta	Studies of selected oligonucleotides reactivity with Os,bipy
Mojmir Trefulka, Emil Paleček	Covalent Labeling of Nucleic Acids with VI-valent Osmium Complexes
Lukáš Fojt, Vladimír Vetterl	Two-dimensional Condensation of 5-methylcytosine
Jan Vacek, Luděk Havran, Miroslav Fojta	Constant current chronopotentiometry of doxorubicin and its DNA complexes at pyrolytic graphite electrode
Magdalena Stobiecka, Iwona Szymańska, Czesława Orlewska, Dimitri Janssen, Barbara Tudek, Wim Dehaen, Hanna Radecka	Dipyromethene Cu(II) electroactive monolayer. Its characterization and application for DNA detection
Annette-Enrica Surkus, Gerd-Uwe Flechsig	Electrochemical Detection of DNA Melting Curves by Means of Heated Biosensors
Ladislav Novotný	Use of New Designs, Regimes, Modes and Possibilities of Miniaturized and Special Mercury, Amalgam, Composite Amalgam or Other Electrode Systems
Petra Juskova, Jakub Grym, Frantisek Foret	Thin Film Resistance Sensor for Detection in Microfluidics

Saturday, June 21			
Electroactivity of amino acids and amino acid residues in proteins	9:00-9:30	Emil Paleček	Electroactivity of non-conjugated proteins and peptides
	9:30-9:50	Michael Heyrovský	Interaction of Biomacromolecules with Surfaces Viewed by Electrochemical Methods
	9:50-10:05	Petr Zuman	Some Aspects of Biochemical Activity of Orthophthalaldehyde
	10:05-10:20	Veronika Ostatná	Electrochemistry in Parkinson's disease. Interfacial properties of monomeric and aggregated $\alpha$ -synuclein
	10:20-10:35	Thomas Doneux	Electrochemical Investigations of a pH-Responsive Peptide Monolayer
coffee break	10:35-11:05		
Direct electron transfer in conjugated proteins	11:05-11:25	Lo Gorton	Direct and Mediated Electron Transfer between Intact Succinate:Quinone Oxidoreductase from Bacillus Subtilis and a Surface Modified Gold Electrode Reveals Redox State Dependent Conformational Changes
	11:25-11:45	Frieder W. Scheller	Electrochemistry of Protein/Polyelectrolyte Multilayer Systems
	11:45-12:05	Julea N. Butt	Spectroelectrochemistry, Catalysis and Nitric Oxide: Fresh Insights into a Multi-Heme Cytochrome
	12:05-12:20	commercial presentation: Biotech.cz	
lunch	12:20-13:30		
Nanoparticles in protein sensors	13:30-14:00	Arben Merkoci	Nanobioelectronics, a powerful technology for DNA and protein sensing
	14:00-14:20	Martin Pumera	Redox Protein Noncovalent Functionalization of Double Wall Carbon Nanotubes: Electrochemical Binder-less Glucose Biosensor
	14:20-14:40	Augustín Costa Garcia	Immuno Bi-sensor for Free and Total PSA determination in Human Serum
coffee break+poster session	14:40-15:45	Posters II (see below)	
Enzyme sensors and immunosensors	15:45-16:05	José M. Pingarrón	Bacteria detection through electrochemical activity monitoring
	16:05-16:25	Ülkü Anik	The Usage of Glassy Carbon Paste Electrode (GCPE) as Biosensor Transducer.
	16:25-16:40	Petr Kotzian	Biosensors for quality control based on rhodium dioxide-modified screen-printed carbon electrodes and redox enzymes
	16:40-17:00	Petr Skládal	Portable Electrochemical and Piezoelectric Immunosensor Systems for Detection of Pathogens

POSTERS II	
Samuel Sanchez, <u>Maria Jose Esplandiú</u> , Esteve Fabregas, Martin Pumera	Characterization and Enhancement of Electrochemical Properties of MWCNT/polysulfone Composite Modified Screen-printed Electrodes
Samuel Sanchez, Sandra Perez, Monica Roldan, Esteve Fabregas	MWCNT/PSf Composite for Easy, Fast and Versatile Immobilization of Immobilization Prepared by Phase Inversion Method for <b>Biosensing Applications</b>
Karel Stejskal, Jiří Baloun, Dalibor Hůska, <u>Vojtěch Adam</u> , Ladislav Havel, Josef Zehnálek, René Kizek	Liquid Chromatography with Coulometric Detection as a Tool for Determination of Phytochelatin Synthase Activity at Plants
Lucie Baldrianová, P. Agrafiotou, Ivan Švancara, Karel Vytřas, S. Sotiropoulos	Square Wave Cathodic Stripping Voltammetry of Cysteine at Bismuth-Modified Carbon Paste Electrodes
Ivo Fabrik, Hana Binková, Zuzana Horáková, Jiří Kukačka, Richard Průša, Vojtěch Adam, Tomáš Eckschlager, René Kizek	Electrochemical Determination of Metallothionein at Patients with Malignant Tumours
Michal Galik, Ana Banica, Karel Vytřas, Ivan Švancara, Florinel Gabriel Banica	Catalytic Hydrogen Evolution in the Presence of Thio-Amino Acids and Ni or Co Ions-New Results Obtained by Cathodic Stripping <b>Voltammetry</b>
Soňa Křížková, Ivo Fabrik, Violetta Shestivska, Tomáš Eckschlager, Jan Hraběta, Vojtěch Adam, Libuše Trnková, <u>René Kizek</u>	Metallothionein-Cisplatin Interaction Revealed by Quartz Crystal and Mercury Electrode
J. Krejčí, Z. Grosmanová, J. Krejčí jr., T. Marvánek	Application of Soret Phenomenon to Electrochemical Sensor Response Improvement
J. Krejčí, H. Koutková, K. Lacina	New Microflow Vessel Improving Reproducibility and Sensitivity of Electrochemical Measurements
Filip Duša, Ivo Fabrik, <u>Dalibor Hůska</u> , Vojtěch Adam, František Jelen, Libuše Trnková, René Kizek	Electrochemical Detection of Ceruloplasmin
Philani Mashazi, Richard Moutloali, Robert T. Tshikhudo, Elma van der Lingen, Tebello Nyokong	Conjugation and Immobilization of Biomolecules onto Functionalized Substrates: Their Electrical and Optical Applications
Marko Zivanović, Veronika Ostatná, Emil Paleček	Electrochemistry of Histone Proteins
M. Bartošik, V. Ostatná, E. Paleček, M. Heyrovský	Chronopotentiometric analysis of riboflavin-binding protein and its interaction with riboflavin
Vlastimil Dorčák, Emil Paleček	Constant current chronopotentiometric stripping analysis of peptides and proteins
<u>Luděk Havran</u> , Miroslav Fojta, Hana Pivoňková, Petra Horáková, Emil Paleček	Electrochemical monitoring of protein-ligand interactions. Changes in the protein interfacial behavior and reactivity of tryptophan residues towards an osmium electroactive marker in the (strept)avidin-biotin complex
Meliha Çubukçu, Serdar Çevik, <u>Ülkü Anik</u>	Comparison of Electroanalytical Performances of SWCNT and MWCNT Nafion Film Electrodes
<u>Ülkü Anik</u> , Suna Timur	The Usage of BiFE As A Biosensing Transducer
Shohre Rouhani	Electrochemical Behavior of mono- and di-hydroxy- Azo Dye Derivatives as Biomarkers
Karel Lacina, <u>Jan Přibyl</u> , Martin Kříž and Petr Skládal	New generation of bioaffinity layer for QCM biosensors
<u>Milan Jilek</u> , Jan Přibyl, Jiří Žeravík, Petr Skládal	Combined approach for monitoring of the electropolymerization of m-phenylenediamine and resorcinol using AFM, electrochemistry and microbalance