

Obsah	Strana
<u>Martin Bartoš</u> , <u>Magda Janoušková</u> , and <u>Michaela Kovářová</u> Izotachoforetic Determination of Melamine	9
<u>Miroslav Behúl</u> , <u>Marian Vojs</u> , <u>Marián Marton</u> , <u>Pavol Michniak</u> , and <u>Andrea Vojs Staňová</u> A Study on Electrolytic Corrosion of Boron-Doped Diamond Electrodes	13
<u>Markéta Bosáková</u> , <u>Iveta Třísková</u> , <u>Jan Hrbáč</u> , and <u>Libuše Trnková</u> The Oxidation Processes of Methylguanines on the Pencil Graphite Electrode	18
<u>Aleš Daňhel</u> , <u>Peter Šebest</u> , <u>Pavína Vidláková</u> , and <u>Filip Ligmajer</u> Limitations and Possibilities of Nanostructured Silver Amalgam	22
<u>Hana Dejmková</u> , <u>Martin Baroch</u> , <u>Jiří Zima</u> , and <u>Jiří Barek</u> Coulometric Detection with Carbon Felt	27
<u>Libor Dušek</u> , <u>Veronika Kočanová</u> , and <u>Ladislav Novotný</u> Recovery of Zinc from Waste Water by using Electrodeposition	30
<u>Jan Fischer</u> , <u>Georgios Vasilopoulos</u> , <u>Anastasios Economou</u> , and <u>Jiří Barek</u> Voltammetric Determination of Dye Yellow Sunset at Silver Solid Amalgam Electrode	34
<u>Lukáš Fojt</u> and <u>Miroslav Fojta</u> 2D Condensation of 5-Fluorocytosine in Different Electrolytes	37
<u>Miroslav Fojta</u> , <u>Aleš Daňhel</u> , <u>Jan Špaček</u> , <u>Luděk Havran</u> , <u>Peter Šebest</u> , <u>Petr Orság</u> , <u>Hana Pivoňková</u> , <u>Jana Vosáhlová</u> , and <u>Karolina Schwarzová-Pecková</u> Utilization of Catalytic Hydrogen Evolution in Electrochemical Analysis of Nucleic Acids	41
<u>Július Gajdár</u> , <u>Tomáš Goněk</u> , <u>Josef Jampílek</u> , <u>Marie Brázdová</u> , <u>Zuzana Bábková</u> , <u>Miroslav Fojta</u> , <u>Jiří Barek</u> , and <u>Jan Fischer</u> Determination of a Novel Antimycobacterial Agent in a Single Drop of a Solution by Voltammetry at a Glassy Carbon Electrode	45
<u>Stanislav Hasoň</u> and <u>Miroslav Fojta</u> Effect of Thymine and Cytosine Nucleobase Sequence on the Two-dimensional Condensation of Pyrimidine Oligodeoxynucleotides at Mercury Surface	49
<u>Luděk Havran</u> , <u>Pavína Vidláková</u> , <u>Jan Špaček</u> , <u>Monika Hermanová</u> , and <u>Miroslav Fojta</u> Novel Reactive Groups for Modification DNA by Oxoosmium Complexes	54
<u>Monika Hermanová</u> , <u>Petr Orság</u> , and <u>Miroslav Fojta</u> Electrochemical Methods for Detection of Protein-DNA Interactions	57
<u>Jan Hrbáč</u> , <u>Jan Rozsypal</u> , <u>Daniel Riman</u> , <u>Vladimir Halouzka</u> , <u>Dušan Hemzal</u> , and <u>Vít Pavelka</u> Electrochemical Preparation of Nanostructures for Amperometric and SERS Sensors	61

<u>Vojtěch Hrdlička, Jiří Barek, and Tomáš Navrátil</u> Hollow-fibre Based Microextraction and Voltammetric Determination of Vanillylmandelic Acid	66
<u>Magdaléna Hromadová, Jana Kocábová, Viliam Kolivoška, and Lubomír Pospíšil</u> Effect of pH on the Oxide Film Formation on a Pristine Zr Electrode	71
<u>Jaromíra Chýlková, Vladimír Jehlička, Lenka Janíková, Renáta Šelešovská, and Markéta Tomášková</u> Simultaneous Voltammetric Determination of Plant Hormones Indole-3-Acetic Acid and Indole-3-Butyric Acid on a Boron-Doped Diamond Electrode	76
<u>Aleksandr V. Ivanishchev, Artem M. Abakumov, Irina A. Ivanishcheva, Stanislav S. Fedotov, Nellie R. Khasanova, and Evgeny V. Antipov</u> Regularities of Li-ion Intercalation Processes in Li ₃ V ₂ (PO ₄) ₃ -Electrode	81
<u>Michal Jakl, Jana Jaklová Dytrtová, Tomáš Navrátil, and Anna Marková</u> Influence of Fungicide Thiram on Chlorophyll Content and on the Growth of Garden Strawberry (<i>Fragaria Annanassa</i>)	86
<u>Jana Jaklová Dytrtová, Michal Jakl, Rena Milgrom, and Michal Šteffl</u> Use of Hyphenation of Electrochemistry with Mass Spectrometry to Study of Stress Hormone Levels Changes after Exercise Based on Laban's Movement Principles	91
<u>Oksana Josypčuk and Bohdan Josypčuk</u> Electrochemical Biosensors with Flow-through Enzymatic Reactors	95
<u>Viliam Kolivoška, Jakub Šebera, Marcin Lindner, Michal Valášek, Marcel Mayor, Gábor Mészáros, Jindřich Gasior, and Magdaléna Hromadová</u> Charge Transport Through Molecular Towers Based on Tetraphenylmethane Tripods	99
<u>Martina Komendová, Radovan Metelka, and Jiří Urban</u> Pulse Biamperometry for Electrochemical Detection in Flow Systems	104
<u>Aneta Kovářová, Jana Drbohlavová, Zuzana Bílková, and Lucie Korecká</u> A Perspective Combination of Quantum Dots and Silica Nanoparticles for Bioconjugation with Antibodies used in Immunosensors for Detection of Human Alpha-Fetoprotein	108
<u>Michaela Kovářová, Martin Bartoš, and Jana Vladýková</u> Influence of Cyclodextrins to Isotachophoretic Separation of Selected Ions	113
<u>Štěpánka Lachmanová, Jakub Šebera, Jindřich Gasior, Grégory Dupeyre, Philippe Lainé, Gábor Mészáros, and Magdaléna Hromadová</u> Single Molecule Conductance and Junction Formation in Solution. Solvent Effect	118
<u>Alan Liška, Jiří Ludvík, and Pavel Vojtíšek</u> Stereo-electrochemistry of calixarenes	123

<u>Paweł Lochyński, Heinrich Glorian, Viktor Schmalz, Eckhard Worch, and Thomas Dittmar</u> An Innovative Method for the Determination of Dissolved Organic Carbon (DOC) Based on Electrochemical Decomposition with Boron-doped Diamond Electrodes	128
<u>Karol Lušpai, Daniela Keszelióvá, Martin Barlog, and Václav Petrák</u> Transparent Boron-doped Diamond Electrode (t-BDDE) for Spectroelectrochemistry	132
<u>Anna Makrlíková, Frank-Michael Matysik, Tomáš Navrátil, Jiří Barek, and Vlastimil Vyskočil</u> Determination of 5-Hydroxyindole-3-Acetic Acid using Flow Injection Analysis with Electrochemical Detection	137
<u>Pavína Martinková, Renáta Šelešovská, Jaromíra Chýlková, and Miroslav Behúl</u> Comparison Study of Voltammetric Determination of Dantrolene Using Boron-Doped Diamond Electrodes with Different Content of Boron	142
<u>Gábor Mészáros</u> Electrochemical Noise of Redox Reactions	147
<u>Tomáš Mikysek, Kateřina Kolesíková, Kamila Rosecká, and Ivan Švancara</u> Electrochemical Determination of Various Alkaloids Using Carbon Paste Electrodes	151
<u>Vendula Němcová, Vlastimil Vyskočil, and Jiří Barek</u> Voltammetric Determination of Chlorpromazine Hydrochloride Using a Large-Surface Carbon Film Electrode	155
<u>David Novák, Marika Svrčková, Martina Zatloukalová, Petra Dvořáková, Dominika Coufalová, Lenka Hernychová, and Jan Vacek</u> Monitoring Dicarbonyl Stress in Na ⁺ /K ⁺ ATPase by Electrochemical and Mass Spectrometric Methods	158
<u>František Opekar and Petr Tůma</u> A Flow Gating Interface for Capillary Electrophoresis	163
<u>Bakhtiyar Qader and Jose Gonzalez-Rodriguez</u> Electrochemical Determination of 2-isopropoxyphenol using Glassy Carbon Electrode	167
<u>Marie Sejkorová and Jan Šenkýř</u> IR Spectrometry as Alternative Potentiometric Determination of Total Base Number Engine Oils	172
<u>Karolina Schwarzová-Pecková, Lenka Benešová, Shanelle Diana Habániková, Polina Yershova, and Jan Klouda</u> Possibilities of Electrochemical Oxidation of Sterols at Bare Electrode Materials	177
<u>Barry Silver, Karel Holub, and Vladimír Mareček</u> Determination of the Rate of Tetraethylammonium Ion Transfer across the Water/1,2-DCE Interface with Steady-State Voltammetry at a Nano-ITIES	181

<u>Jana Skopalová, Jana Štěpánková, Hana Tomková, Pavla Kučerová, Jitka Součková, and Petr Barták</u> Interaction of Dopamine and its Metabolite with Phospholipid Layer	186
<u>Romana Sokolová, Jana Kocábová, Viliam Kolivoška, and Miroslav Gál</u> Supported Phospholipid Bilayer at the Conductive Interface	190
<u>Veronika Svitková and Ján Labuda</u> CdS Quantum Dots Effect on UV Induced DNA Damage Tested by Electrochemical Biosensor	194
<u>Milan Sýs, Granit Jashari, Tahir Arbneshi, Radovan Metelka, Ivan Švancara, and Karel Vytřas</u> Effect of Pasting Liquids on the Extraction of Vitamin K1	197
<u>Renata Šelešovská, Barbora Kráňková, Michaela Štěpánková, Pavlína Martinková, Lenka Janíková, Jaromíra Chýlková, and Marian Vojs</u> Boron-Doped Diamond Electrodes with Different Boron Content – Determination of Leucovorin	201
<u>Ivana Šestáková and Tomáš Navrátil</u> Labile Lead Phytochelatin Complexes Could Enhance Transport of Lead Ions across Biological Membrane	206
<u>Ludmila Šimková and Jiří Ludvík</u> Redox Properties of Quasi Dimer of 1,3-diphenylisobenzofuran for Singlet Fission	210
<u>Michaela Štěpánková, Renáta Šelešovská, Lenka Janíková, Marián Marton, and Pavol Michniak</u> Comparison of Lab-Made Boron-Doped Diamond Electrodes in Electroanalysis of Linuron and Mesalazine	215
<u>Ján Tkáč, András Hushegyi, Filip Květoň, and Tomáš Bertók</u> Ultrasensitive Electrochemical Glycan Biosensors	220
<u>Markéta Tomášková, Jaromíra Chýlková, and Pavlína Krejsová</u> Voltammetric Determination of Phosphoric Antioxidant used as Motor oil Additive	225
<u>Kornélia Tomčíková, Filip Květoň, Ján Híveš, Ján Tkáč, and Miroslav Gál</u> Impedimetric Biosensor for Influenza Detection	230
<u>Hana Tomková, Jana Skopalová, Lukáš Kučera, Pavla Kučerová, Jitka Součková, and Petr Barták</u> Application of Phospholipids for Electrochemical Determination of Paraquat	234
<u>Petr Tůma</u> Frequency-Tuned Contactless Conductivity Detector	239
<u>Aneta Večeřová, Iveta Tříšková, and Libuše Trnková</u> The Mystery of Guanine Oxidation Double Peak	244
<u>Helena Veselá, Michal Žďárský, Martin Hostovský, and Emanuel Šucman</u> Possibility of Voltammetric Determination of Acrylamide in Dry Feedstuff	248

<u>Jana Skopalová, Jana Štěpánková, Hana Tomková, Pavla Kučerová, Jitka Součková, and Petr Barták</u> Interaction of Dopamine and its Metabolite with Phospholipid Layer	186
<u>Romana Sokolová, Jana Kocábová, Viliam Kolivoška, and Miroslav Gál</u> Supported Phospholipid Bilayer at the Conductive Interface	190
<u>Veronika Svitková and Ján Labuda</u> CdS Quantum Dots Effect on UV Induced DNA Damage Tested by Electrochemical Biosensor	194
<u>Milan Sýs, Granit Jashari, Tahir Arbneshi, Radovan Metelka, Ivan Švancara, and Karel Vytřas</u> Effect of Pasting Liquids on the Extraction of Vitamin K1	197
<u>Renata Šelešovská, Barbora Krňanková, Michaela Štěpánková, Pavlína Martinková, Lenka Janíková, Jaromíra Chýlková, and Marian Vojs</u> Boron-Doped Diamond Electrodes with Different Boron Content – Determination of Leucovorin	201
<u>Ivana Šestáková and Tomáš Navrátil</u> Labile Lead Phytochelatin Complexes Could Enhance Transport of Lead Ions across Biological Membrane	206
<u>Ludmila Šimková and Jiří Ludvík</u> Redox Properties of Quasi Dimer of 1,3-diphenylisobenzofuran for Singlet Fission	210
<u>Michaela Štěpánková, Renáta Šelešovská, Lenka Janíková, Marián Marton, and Pavol Michniak</u> Comparison of Lab-Made Boron-Doped Diamond Electrodes in Electroanalysis of Linuron and Mesalazine	215
<u>Ján Tkáč, András Hushegyi, Filip Květoň, and Tomáš Bertók</u> Ultrasensitive Electrochemical Glycan Biosensors	220
<u>Markéta Tomášková, Jaromíra Chýlková, and Pavlína Krejsová</u> Voltammetric Determination of Phosphoric Antioxidant used as Motor oil Additive	225
<u>Kornélia Tomčíková, Filip Květoň, Ján Híveš, Ján Tkáč, and Miroslav Gál</u> Impedimetric Biosensor for Influenza Detection	230
<u>Hana Tomková, Jana Skopalová, Lukáš Kučera, Pavla Kučerová, Jitka Součková, and Petr Barták</u> Application of Phospholipids for Electrochemical Determination of Paraquat	234
<u>Petr Tůma</u> Frequency-Tuned Contactless Conductivity Detector	239
<u>Aneta Večeřová, Iveta Trísková, and Libuše Trnková</u> The Mystery of Guanine Oxidation Double Peak	244
<u>Helena Veselá, Michal Žďárský, Martin Hostovský, and Emanuel Šucman</u> Possibility of Voltametric Determination of Acrylamide in Dry Feedstuff	248

<u>Pavína Vidláková</u> , Luděk Havran, and Miroslav Fojta Electrochemically Switchable DNA Tags	253
<u>Jana Vosáhlová</u> , Karolina Schwarzová-Pecková, Aleš Daňhel, Luděk Havran, and Miroslav Fojta Voltammetric Study of DNA Nucleosides Labelled by Reducible Redox Markers at Boron-Doped Diamond Electrode	257
Marquise Touomo Wouafo, Joel Donkeng Dazie, Jean-Bosco Tchatchueng, Chicgoua Noubactep, and <u>Jiří Ludvík</u> Mystery of Ageing of "Zero-Valent Iron" (ZVI)	261
<u>Magda Zlámalová</u> , Pavel Janda, and Karel Nesměrák Graphite Electrode Modified by Poly(Methylene Blue) and its Electrocatalytic Activity towards Hydrogen Sulfide Oxidation	266
Rejstřík autorů	271