

CONTENTS

Reduction of a “Cation Pool”: A New Approach to Radical Mediated C-C Bond Formation Seiji Suga, Shinkiti Suzuki and Jun-ichi Yoshida	1
Anodic Partial Fluorination Under Ultrasonication Toshio Fuchigami, Takeshi Sunaga, Hideki Ishii and Mahito Atobe	5
Electrosynthesis Using New Biphasic Organic Reaction System with Mutual Miscibility Kazuhiro Chiba, Yusuke Kono, Shokaku Kim, Yoshikazu Kitano, and Masahiro Tada	9
Use of Electrogenated Highly Reactive Zinc in Facile Synthesis of 2-Arylpropenoic Acid Esters and Anti-Inflammatory Agents Masoa Tokuda, Aishah A. Jalil and Nobuhito Kurono	13
Optimizing Turnover of a Metallopolyion-Coated Electrode in a Flow Cell in Microemulsions Abhay Vaze and James F. Rusling	17
N-Oxyl-Mediated Electrooxidation of Alcohols in Silica Gel-Aqueous NaOCl Disperse Systems (Ex-Cell Method). A Column-Flow System Hideo Tanaka, Machiko Mine, Akimi Morimoto, Jingyu Chou and Manabu Kuroboshi	21
Intramolecular Cyclization of Heteroatom-Containing Non-Conjugated Unsaturated Ketones by Electroreduction Ikuzo Nishiguchi, Satoshi Goda, Kouji Yamada and Hirofumi Maekawa	25
Functional Group Transformation of Trifluoromethyl-Substituted Organic Compounds by Electrochemical Oxidation Yoshihiro Matsumura, Kimihiro Shirai, Toshihide Maki and Osamu Onomura	29
Electrochemical Carbonylation of Primary Amines to Symmetrical N,N'-Disubstituted Ureas Using Palladium (II) Catalyst in Combination with its Anodic Recycling Isabella Chiarotto and Marta Feroci	33

Enantioselective Reduction of 3-Methylinden-1-one in the Presence of Chiral Catalysts Tim Küpper and Hans J. Schäfer	36
The Use of Solid Metallic Cathodes in Organic Electrochemistry: Immobilization of π-Acceptors onto Platinum Interfaces Charles Coughon and Jacques Simonet	40
Highly Selective and Facile Synthesis of Dihydro- and Tetrahydro-Pyridine Dicarboxylic Acid Derivatives Using Electroreduction as a Key Step Ikuzo Nishiguchi, Yoshio Kita, Hirofumi Maekawa and Yasuhiro Yamasaki	44
Electrochemical Molecular Transformations Catalyzed by Vitamin B₁₂ Derivatives Yoshio Hisaeda, Hisashi Shimakoshi, Aki Nakazato and Takashi Hayashi	48
Electroreductive Deoxygenation of Aliphatic Organic Compounds Bernardo A. Frontana-Urbe	52
Cathodic Dechlorination of Trichloroethylene Min-Hua Chen and Tse-Chuan Chou	56
Polarographic Study of the Kinetics and Equilibria of the Reaction of Benzaldehydes with Hydrazine Petr Zuman and M. S. Baymak	60
Mediated Electrochemistry of Horseradish Peroxidase: Catalysis and Inhibition Murielle Dequaire, Benoît Limoges, Jacques Moiroux and Jean-Michel Savéant	64
Model Acyclic Peroxides of the Fenton Probes 2-Methyl-1-Phenyl-Propyl Hydroperoxide (MPPH): Kinetic Probes for Dissociative Electron Transfer David C. Magri and Mark S. Workentin	69
Electrochemically-Induced Reactivity of Fullerene Derivatives Maurizio Carano, Luigi Garlaschelli, Michele Maggini, Massimo Maraccio, Demis Paolucci, Francesco Paolucci and Sergio Roffia	73
Electrochemistry in Ionic Liquids: Voltammetry and Electrochemical Reduction of Dinitro Compounds Albert J. Fry and Dennis G. Peters	77
Ion/Radical Pair from Dissociative Electron Transfer: Stability as a Function of Solvent Laurence Pause, Marc Robert and Jean-Michel Savéant	81

Intramolecular Dissociative Electron Transfer Through Peptide Bridges Sabrina Antonello and Flavio Maran	85
Electron Transfer to Endoperoxides: 3,3,6,6-Tetraaryl-1,2-Dioxanes as Mechanistic Probes Donald L. B. Stringle and Mark S. Workentin	89
Single Two-Electron Transfers in the Electrochemical Oxidation and Reduction of Carotenoids Valery V. Konovalov, Philippe Hapiot, Lowell D. Kispert and Jean-Michel Savéant	93
Reduction of Alkyl Halides by Electrogenerated Cobalt (I) Salen and Nickel (I) Salen: Reactions of Alkyl Radicals with NO and O₂ Dennis G. Peters, Chang Ji, Benjamin J. Wozniak and Parichatr Vanalabhpatana	100
Electrochemical Reduction of 1,3,5-Triphenylbenzene and Related Compounds Henning Lund	104
Voltammetric Studies of the Reduction of <i>cis</i>- and <i>trans</i>- α-Nitrostilbene Dennis H. Evans, Charoenkwan Kraiya and Zory V. Todres	108
Stepwise and Concerted Reaction Paths Triggered by Electrochemical, Homogeneous and Photoinduced Electron Transfer Jean-Michel Savéant	112
New Methodologies for the Preparation of Highly-Regulated Structure Films of Conducting Polymers Mahito Atobe and Toshio Fuchigami	116
Growth and Conductivity of Monolayer Protected Cluster Films-New Strategies Robert L. Donkers, Michael C. Leopold and Royce W. Murray	120
Stability Improvement of Solid-State Dye Sensitized Photovoltaic Cell by Adding Imidazolium Thiocyanate to Copper Iodide p-Type Semiconductor Layer Akinori Konno, G. R. Asoka Kumara and Kirthi Tennakone	124
Electrochemical Reduction and Carboxylation of Chloroacetonitrile Abdirisak Ahmed Isse and Armando Gennaro	128
Electrochemical Conversion of Brown Coal (Victoria Brown Coal) into Soluble Humic Acid Derivatives by Using Small ZAPPI Cell for Bio- Gasification Process Sigeru Torii and Koichi Inoue	132

Development of Hydrogenolysis-free Hydrogenation Selective Pd Black Catalyst Deposited on Sheet Shojiro Maki	136
Towards Molecular-Level Understanding of Electrocatalytic Hydrogenation. Part 1: Behavior of Benzene at Pt (III) Zorana Radovic-Hrapovic, Jean-Pierre Tessier, Gregory Jerkiewicz and Jean Lessard	138
Electroreduction of Methyl Azinyl Ketoximes and their Ni(II), Cu(II) and Zn(II) Complexes on Mercury- Correlation with their Hydrolytic Activity Jiří Ludvík and Radek Cibulka	142
Redox-Triggered Molecular Switches: Electronic Communication in Heterobimetallic Indacenyl Mixed Valence Complexes Saverio Santi, Flavio Carli, Alberto Cecon, Laura Crociani, Alessandro Gambaro, Mauro Tiso and Alfonso Venzo	146
Experimental and Theoretical Study of Electrochemical Oxidation of 4-Hydroxyiminopyrazol-2-in-5-ones V. V. Yanilkin, A. V. Toropchina, V. I. Morozov, and G. A. Chmutova	150
Conversions of Nitrogen-Containing Heterocycles Induced by Electron Transfer N. V. Nastapova, V. V. Yanilkin, V. I. Morozov, R. M. Eliseenkova, Z. A. Bredikhina, A. A. Bredikhin and B. I. Buzykin	154
Author Index	158
Subject Index	160