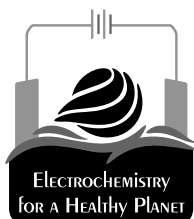


Program of Oral Presentations



ISE 2008 Spring Meeting

Foz do Iguacu, Brazil – March 16-19, 2008

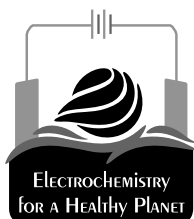
March 16 – 18:30 Opening ceremony and lecture – 20:00 Welcome reception

March 17	March 18	March 19
9:00-10:00 Keynote lecture 1	9:00-10:00 Keynote lecture 2	9:00-10:00 Keynote lecture 3
10:10 - 12:20 Oral sessions 1 and 2	10:10 - 12:20 Oral sessions 5 and 6	10:10 - 12:20 Oral sessions 9 and 10
Invited lectures	Invited lectures	Invited lectures
Oral presentations	Oral presentations	Oral presentations
12:20 - 14:10 Lunch		
14:10 - 17:00 Oral sessions 3 and 4	14:10 - 16:20 Oral sessions 7 and 8	14:10 - 17:00 Oral sessions 11 and 12
Invited lecture	Invited lectures	Invited lecture
Oral presentations	Oral presentations	Oral presentations
17:00 - 19:00 Poster Session 1 (Open bar, from 18:00)	16:40 - 18:40 Poster Session 2 (Open bar, from 17:40)	17:00 - 19:00 Poster Session 3 (Open bar, from 18:10)
20:30 - Dinner	20:30 - Special dinner	20:30 - Farewell barbecue

March 20 – 8:30 - 12:00: Excursion to Iguassu Falls (optional)

Excursion (technical) to Itaipu Dam (optional)

Program of Oral Presentations



Sunday 16 March - PM

Welcome Session

18:30 to 22:00

Room: Atlântico

Opening Ceremony

18:30 to 19:00

Chair: Romeu C. Rocha-Filho

Welcome Lecture

19:00 to 20:00

Chair: Luis A. Avaca (Univ. of São Paulo, Brazil)

page 47

Christos Comninellis (Faculty of Basic Science EPFL, Lausanne, Switzerland)

The importance of electrode material in environmental electrochemistry

Welcome Reception

20:00 to 22:00

Room: Átrio Cataratas

Monday 17 March - AM Keynote Lecture 1

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chair: Maria Valnice Boldrin (S. Paulo State Univ., Brazil)

09:00 to 10:00

page 50

**Krishnan Rajeshwar (The University of Texas at Arlington, Center for
Renewable Energy Science & Technology, Arlington, USA)**

Electrodeposition and Combustion Synthesis of Oxide Semiconductors for
Solar Photocatalysis Applications

Monday 17 March - AM

Oral Sessions 1 and 2

Environmental analytical electrochemistry: monitoring the planet

Room: Santiago

Chairs: Yoshitaka Gushikem (Campinas State Univ., Brazil) and
Joseph Wang (Arizona State Univ., USA)

10:10 to 10:40 — INVITED LECTURE page 61

Joseph Wang (Biodesign Institute, Arizona State University, Tempe, USA)

New concepts for in-situ environmental electroanalysis

10:40 to 11:00 Coffee Break, Room: Pacifico

11:00 to 11:20 page 78

Karel Vytras (Analytical Chemistry Department, University of Pardubice, Pardubice, Czech Republic), Ivan Svancara

Recent Applications of Carbon Paste Electrodes in Electrochemical Analysis

11:20 to 11:40 page 63

Jacqueline Arguello (Instituto de Quimica, UNICAMP, Campinas, Brazil), Richard Landers, Yoshitaka Gushikem, Hérica Magosso

Electrocatalytic application of a sol-gel derived carbon ceramic electrode based on cobalt(II) tetrasulfonated phthalocyanine

11:40 to 12:00 page 76

Toshiyuki Usagawa (Advanced Research Laboratory, Hitachi Ltd., Kokubunji, Japan) Youta Kikuchi, Sadaki Nakano, and Koichi Yokosawa

Reliable Low Power Si-MOSFET Hydrogen Gas Sensors

12:00 to 12:20 page 74

Tavo Romann (Institute of Chemistry, University of Tartu, Tartu, Estonia), Enn Lust

Renewable Surface Microelectrode System for Research and Electroanalysis

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chairs: Nerilso Bocchi (S. Carlos Federal Univ., Brazil) and
Guohua Chen (Hong Kong Univ. Sci. Tech., China)

10:10 to 10:40 —INVITED LECTURE page 56
Guohua Chen (Department of Chemical Engineering, The Hong Kong
University of Science and Technology, Hong Kong, China)
Hot-Filament Chemical Vapor Deposition Method to Fabricate Stable
Diamond Film Electrodes for Wastewater Treatment

10:40 to 11:00 Coffee Break, Room: Pacífico

11:00 to 11:20 page 107
Yuri Pleskov (Frumkin Institute of Physical Chemistry and
Electrochemistry, Moscow, Russian Federation)
Synthetic Diamond, Diamond-based, and Diamond-like Electrodes: the
Dependence of Their Electrochemical Activity on the Resistivity

11:20 to 11:40 page 120
Sachio Yoshihara (Department of Energy and Environmental Science,
Graduate School of Engineering, Utsunomiya University, Utsunomiya,
Japan), *Muthu Murugananthan*
Decomposition of Various Endocrine-Disrupting Chemicals at Boron
Doped Diamond Electrode

11:40 to 12:00 page 108
Romeu C. Rocha-Filho (São Carlos Federal University, São Carlos,
Brazil), *Leonardo Santos Andrade, Nerilso Bocchi, Diogo Lima da Silva, Sonia
Regina Biaggio, Thiago Teixeira Tasso*
On the performances of lead dioxide and boron-doped diamond electrodes
in the anodic oxidation of a simulated wastewater containing the Orange
Reactive 16 dye

12:00 to 12:20 page 103
José L. Nava (Universidad Autónoma Metropolitana-Iztapalapa,
Chemical Department, Mexico D.F., Mexico), *Edgar Butron, Ignacio
González*
The role of the filter-press-type FM01-LC electrochemical reactor using
BDD electrodes for the incineration of cresols, indigo textile dye and

vinasses contained in industrial wastewater

Monday 17 March - PM

Oral Session 3

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chairs: **Ernesto Calvo** (Univ. of Buenos Aires, Argentina) and
Edson Ticianelli (Univ. of S. Paulo, Brazil)

14:10 to 14:40 — INVITED LECTURE page 60

Edson A. Ticianelli (Instituto de Química de São Carlos - USP, São Carlos, Brazil), *Amanda C. Garcia, Valdecir A. Paganin, Luis G. S. Pereira*
Catalyst and Electrode Designs for CO-tolerant PEM Fuel Cell Anodes

14:40 to 15:00 page 85

Vincenzo Baglio (CNR-ITAE, Messina, Italy), *Vincenzo Antonucci, Antonino Arico, Alessandra Di Blasi, Fabio Matera, Alessandro Stassi*
Investigation of a Passive DMFC Mini-Stack Operating at Ambient Temperature

15:00 to 15:20 page 110

Wolfgang Schuhmann (Analytische Chemie - Elektroanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), *Michael Bron, Xingxing Chen, Kathrin Eckhard, Artjom Maljus, Andrea Puschof, Leonard Stoica*

Local visualization of catalyst activity as a prerequisite for optimization of fuel cells and industrial electrolysis processes

15:20 to 15:40 page 95

Akimitsu Ishihara (Chemical Energy Laboratory/Yokohama National University, Yokohama, Japan), *Shigenori Mitsushima, Ken-ichiro Ota*
Partially Oxidized Group 4 and 5 Transition Metal Carbonitrides as New Non-Platinum Cathodes for PEFC

15:40 to 16:00 page 114

Rafael Eduard Szamocki (INQUIMAE-DQIAyQF, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Buenos Aires, Argentina), *Ernesto Julio Calvo, Victoria Flexer*

Laccase-modified electrodes by layer-by-layer self assembly for the use as fuel cell cathodes

16:00 to 16:20 Coffee Break, Room: Pacífico

16:20 to 16:40

page 83

Beatriz Antoniassi (Universidade Estadual Paulista (UNESP)/Faculdade de Ciências/Departamento de Química/Grupo de Eletrocatalise e Reações Superficiais, Bauru, Brazil), Antonio Carlos Dias Ângelo, Gessie Mercedes Brisard, Roberto Batista de Lima, Patrick Dubé, Tatiane Pereira Scachetti

DEMS and FTIR Studies of Ethanol and Methanol Oxidation on Ordered Intermetallic Platinum Phases

16:40 to 17:00

page 113

Janaína Souza-Garcia (Instituto de Química de São Carlos/USP, São Carlos, Brazil), Juan Feliu, Edson Ticianelli

Nitrate Reduction on Pt Single Crystals with Pd Multilayer

Monday 17 March - PM Oral Session 4

**Environmental electrochemical engineering:
protecting the planet**

Room: Santiago

**Chairs: Luis F.P. Dick (Rio Grande do Sul Federal Univ., Brazil) and
Lo Gorton (Lund Univ., Sweden)**

14:40 to 15:00

page 92

Lo Gorton (Department of Analytical Chemistry, Lund University, Lund, Sweden), Andreas Christenson, Nicolas Mano, Tautgirdas Ruzgas, Sergey Shleev, Alexander Yaropolov, Adam Heller

Direct Electron Transfer between Multicopper Blue Oxidases and Carbon

15:00 to 15:20

page 94

Adrian Hightower (Physics Department, Occidental College, Los Angeles, USA), William Cheuh, Marc Sells, Sossina Haile

Ceria Supported Rh₃Pt₂Sn Nanoparticles as Low Temperature Ethanol Steam Reforming Catalysts

15:20 to 15:40 page 118
Arnaldo Visintin (Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas (INIFTA), Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina), *Gustavo Andreasen, Ana Arenillas, Peter Barath, Marie Sedla Āková, Jorge Thomas, Jiri Vondrak, L. Zubizarreta*
Effect of Carbon Support on the Kinetic Behaviour of a Metal Hydride Electrode

15:40 to 16:00 page 89
Luis Frederico P. Dick (Depto de Metalurgia-UFRGS, Porto Alegre, Brazil), *Daniel A. Dalla Corte*
The hydrogen evolution reaction on surface modified nitinol (Ti-Ni)

16:00 to 16:20 Coffee Break, Room: Pacífico

16:20 to 16:40 page 81
Antoine Allanore (ArcelorMittal R&D Industrial Operations-Sustainability, Maizières-lès-Metz, France), *Jean-Pierre Birat, François Lapicque, Hervé Lavelaine, Gérard Valentin*
Iron electrowinning in alkaline media: Producing iron by electrolysis of an iron oxide suspension?

16:40 to 17:00 page 109
Sverre Rolseth (SINTEF Materials and Chemistry, Trondheim, Norway), *Henrik Gudbrandsen, Geir Martin Haarberg, Eirin Kvalheim, Tsuyoshi Murakami*
Production of iron with low CO₂ emissions. Electrowinning from molten salts

Tuesday 18 March - AM Keynote Lecture 2

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chair: Mauro Bertotti (Univ. of S. Paulo, Brazil)

09:00 to 10:00

page 49

**Derek Pletcher (School of Chemistry, University of Southampton,
Southampton, United Kingdom)**

Electrochemical Technologies for a Healthy Planet – Promises or
Achievement?

Tuesday 18 March - AM

Oral Sessions 5 and 6

Environmental analytical electrochemistry: monitoring the planet

Room: Santiago

Chairs: **Tony Breton** (Univ. d'Angers, France) and
Greg M. Swain (Michigan State Univ., USA)

10:10 to 10:40 —INVITED LECTURE page 59

Greg Swain (Department of Chemistry, Michigan State University, East Lansing, USA)

Addressing Environmental Challenges Electrochemically Using Diamond Electrodes

10:40 to 11:00 Coffee Break, Room: Pacifico

11:00 to 11:20 page 79

Huimin Zhao (School of Environmental and Biological Science and Technology, Dalian, China), *Hongbin Yu, Hua Wang, Shuo Chen*
Chemical Oxygen Demand Sensor Based on a Boron-Doped Diamond (BDD) Electrode

11:20 to 11:40 page 70

Pawel Kulesza (Department of Chemistry, University of Warsaw, Warsaw, Poland), *Katarzyna Karnicka, Barbara Kowalewska, Krzysztof Miecznikowski, Iwona Rutkowska, Magdalena Skunik*
Development of Novel Nanostructured Electrode Materials for Electrocatalytic and Bioelectrocatalytic Analytical Determinations

11:40 to 12:00 page 67

Tony Breton (University of Angers, Angers, France), *I. Tapsoba, M. Pontié*
Development of bi-layer modified carbon fiber ultramicroelectrodes (UME) for a selective analysis of methyl-parathion and its metabolites

12:00 to 12:20 page 66

Carmel Breslin (Department of Chemistry, National University of Ireland, Maynooth, Ireland), *Valeria Annibaldi, Sinead McDermott, Denise Rooney*
Polypyrrole Modified with Supramolecular Cages: Applications in the Electrochemical Sensing of Herbicides

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chairs: Erik G. Soegaard (Aalborg Univ., Denmark) and
Sibel Pamukcu (Lehigh Univ., USA)

10:10 to 10:40 —INVITED LECTURE page 57

Sibel Pamukcu (Department of Civil and Environmental Engineering,
Lehigh University, Bethlehem, USA)

Electrically Enhanced Transformations on Clay Surfaces

10:40 to 11:00 Coffee Break, Room: Pacífico

11:00 to 11:20 page 112

Erik Soegaard (Aalborg University, Esbjerg Institute of Technology,
Esbjerg, Denmark), *Christian Damsgaard, Rasmus Erichsen, Jens Muff*

Electrochemical Degradation of Pollutants of Drainage Water from a
Depot of Organophosphates (Insecticides) buried as Waste in a Sand Dune

11:20 to 11:40 page 97

Yoshihiro Kitatsuji (Nuclear Science and Engineering Directorate, Japan
Atomic Energy Agency, Ibaraki, Japan), *Sorin Kihara, Takaumi Kimura*

Electrolytic Control of Oxidation State and Removal of Neptunium Ion
based on Reduction and Adsorption on the Carbon Fiber Electrode

11:40 to 12:00 page 91

Jorge Frade (Ceramics and Glass Engineering Dep., University of Aveiro,
Aveiro, Portugal), *Vladislav Kharton, Syargei Poznyak, E. Naumovich*

Enhanced Performance of Ni-Based Anodes in Aqueous Hematite
Suspensions.

12:00 to 12:20 page 117

Bart van Limpt (Wetsus, Centre for Sustainable Water Technology,
Leeuwarden, Netherlands), *Harry Bruning, Wim Rulkens, Michel Saakes*

Prediction of Capacitive Deionization performance by BET surface area
measurements

Tuesday 18 March - PM

Oral Sessions 7 and 8

Environmental analytical electrochemistry: monitoring the planet

Room: Santiago

Chairs: Johan Bobacka (Åbo Akademi Univ., Finland) and
Jiri Barek (Charles Univ., Czech Republic)

- 14:10 to 14:40 —INVITED LECTURE page 52
Jiri Barek (UNESCO Lab. of Environmental Electrochemistry, Dept. of Analytical Chemistry, Charles University, Prague, Czech Republic), *Josino C. Moreira, Karolina Peckova, Jiri Zima*
 New electrode materials and arrangements for analysis of environmental carcinogens
- 14:40 to 15:00 page 65
Johan Bobacka (Åbo Akademi University, Process Chemistry Centre, Laboratory of Analytical Chemistry, Åbo-Turku, Finland), *Andrzej Lewenstam, Ulriika Mattinen*
 A New Type of Polymer-Based Solid-State Reference Electrode
- 15:00 to 15:20 page 77
Gabriela Valdés (Univ. Autón. Metropolitana - Iztapalapa, México / Univ. Perpignan, Perpignan, France) *Didier Fournier, Ma. Teresa Ramírez Silva, Jean-Loius Marty*
 Amperometric biosensors to quantify Dichlorvos and their application in real samples.
- 15:20 to 15:40 page 75
Gustavo Urbano Reyes (Univ. Autó. del Estado de Hidalgo, Pachuca, Mexico), *Ignacio González, Victor Reyes-Cruz, María Aurora Veloz*
 Electrochemical Characterization of Some Stages of the Acid Rock Drainages (ARD)
- 15:40 to 16:00 page 68
Magdalena Gebala (Analytische Chemie - Elektroanalytik & Sensorik; Ruhr-Universität Bochum, Bochum, Germany), *Sebastian Neugebauer, Wolfgang Schuhmann, Leonard Stoica*
 Electrochemical strategies for detection of Salmonellosis
- 16:00 to 16:20 page 71
Grzegorz Milczarek (Institute of Chemistry and Technical Electrochemistry, Poznan University of Technology, Poznan, Poland)
 Lignin and its derivatives as multifunctional electrocatalysts

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chairs: Carlos A. Martinez-Huitle (Univ. of Milan, Italy) and
Onofrio Scialdone (Univ. of Palermo, Italy)

- 14:10 to 14:40 —INVITED LECTURE page 58
Onofrio Scialdone (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, University of Palermo, Palermo, Italy), *Giuseppe Filardo, Alessandro Galia, Chiara Guarisco, Serena Randazzo, Giuseppe Silvestri*
 Influence of operative parameters on the electrochemical incineration of oxalic acid
- 14:40 to 15:00 page 102
Carlos Alberto Martinez-Huitle (Department of Chemistry, University of Ferrara, Ferrara, Italy), *Achille De Battisti, Martina Donatoni, Sergio Ferro*
 Electrooxidation of oxalic acid at different electrode materials
- 15:00 to 15:20 page 84
Sidney Aquino Neto (Departamento de Química, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto, Brazil), *Adalgisa De Andrade*
 Electrodegradation of glyphosate herbicide at DSA® electrodes: pH, current density and concentration effects
- 15:20 to 15:40 page 90
Stéphane Fierro (Group of Electrochemical Engineering - Swiss Inst. of Techn., Lausanne, Switzerland) *Helmut Baltruschat, Christos Comninellis*
 Investigation of oxygen evolution and formic acid oxidation on Ti/IrO₂ electrodes using isotope labelling and on-line mass spectrometry
- 15:40 to 16:00 page 101
Osugi Marly (Departamento de Química Analítica - Instituto de Química - UNESP, Araraquara, Brazil) *C. R. Chanthamarakshan, N. R. Tacconi, G. A. Woldemariam, S. S. Mandal, M. V. B. Zanoni, K. Rajeshwar*
 Photoelectrocatalytic Oxidation of Disperse Dyes on Nanotubes Ti/TiO₂ Electrodes
- 16:00 to 16:20 page 82
Lucia G. Alvarado (Inst. de Metalurgia / Univ. Autonoma de San Luis Potosi, San Luis Potosi, Mexico), *Israel Rodriguez, Armando I. Vazquez*
 Electrodeionization process applied to hexavalent chromium removal from synthetic solutions at pH 5

16:20 to 16:40 Coffee Break, Room: Pacífico

Wednesday 19 March - AM

Keynote Lecture 3

Environmental analytical electrochemistry: monitoring the planet

Room: Santiago

Chair: Artur de Jesus Motheo (Univ. of S. Paulo, Brazil)

09:00 to 10:00

page 48

**Christopher Brett (Departamento de Química Fac. Ciências e
Tecnologia, Universidade de Coimbra, Coimbra, Portugal)**

Advances in electrochemical sensors and biosensors for monitoring
environmental pollution

Wednesday 19 March - AM

Oral Sessions 9 and 10

Environmental analytical electrochemistry: monitoring the planet

Room: Santiago

Chairs: Ana Maria Oliveira-Brett (Univ. Coimbra, Portugal) and
Damien Arrigan (Tyndall Nat. Inst., Ireland)

10:10 to 10:40 —INVITED LECTURE page 51

Damien Arrigan (Tyndall National Institute, Lee Maltings, University
College, Cork, Ireland)

Miniaturised Sensors and Devices for Environment and Health

10:40 to 11:00 Coffee Break, Room: Pacifico

11:00 to 11:20 page 64

Omotayo Arotiba (SensorLab, Department of Chemistry, University of
Western Cape, Cape Town, South Africa), *Amir Al-Ahmed, Priscilla Baker,*
Emmanuel Iwuoha, Joseph Owino, Tesfaye Waryo

An Electrochemical DNA Biosensor Developed on a Polypropylene Imine
Dendrimer-Gold Nanocomposite

11:20 to 11:40 page 73

Judith Rishpon (Department of Molecular Microbiology and
Biotechnology, Tel-Aviv University, Tel-Aviv, Israel), *Tova Neufeld, Rachela*
Popovtzer, Yosi Shacham-Diamand

Electrochemical Monitoring of Biological Reactions Using a Novel Nano-
Bio-Chip Array

11:40 to 12:00 page 72

Ana Maria Oliveira-Brett (Departamento de Química, Universidade de
Coimbra, Coimbra, Portugal), *Severino C. B. Oliveira, Oana Corduneanu,*
Victor C. Diclescu, Ana-Maria Chiorcea-Paquim

In situ Evaluation of Hazard Compounds-DNA Interactions Using an
Electrochemical DNA-Biosensor

12:00 to 12:20 page 69

Nicolette Hendricks (SensorLab, Department of Chemistry, University
of the Western Cape, Cape Town, South Africa), *Amir Al-Ahmed, Priscilla*
Baker, Emmanuel Iwuoha, Tesfaye Waryo

Microsomal CYP3A4 Nanobiosensor for the Determination of 2,4-
dichlorophenol - an Endocrine Disruptor Compound

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chairs: Kaido Tammeveski (Univ. of Tartu, Estonia) and
Rodnei Bertazzoli (Campinas State Univ., Brazil)

- 10:10 to 10:40 —INVITED LECTURE 53
Rodnei Bertazzoli (The State University of Campinas, Campinas, Brazil),
Leticia Ferreira, Juliane Forti, Robson Rocha
 Reduction and oxidation based electrochemical synthesis on gas diffusion electrodes
- 10:40 to 11:00 Coffee Break, Room: Pacífico
- 11:00 to 11:20 page 96
Kazuhiro Kaneda (Human Ecology Research Center/Sanyo Electric Company Ltd., Ora, Japan), *Mineo Ikematsu, Masahiro Iseki, Katsura Kawata, Kenta Kitsuka*
 Electrochemical Ozone Generation by a Zirconium Oxide Electrode Fabricated by Sputtering
- 11:20 to 11:40 page 88
Christiane de Arruda Rodrigues (Departamento de Ciências Exatas e da Terra, Universidade Federal de São Paulo, Diadema, Brazil), *Rodnei Bertazzoli, Raul Figueiredo*
 Investigation on the Performance of Gas Diffusion Electrode for Electrolysis in Chlor-Alkali Cell
- 11:40 to 12:00 page 115
Kaido Tammeveski (Institute of Chemistry, University of Tartu, Tartu, Estonia), *Marko Kullapere, Uno Mäeorg, Gilberto Maia, Fernando Cesar Maschion, David J. Schiffrin, Jaanika-Maria Seinberg*
 Modification of glassy carbon surface with anthraquinone from the solutions of its diazonium derivatives: An oxygen reduction study
- 12:00 to 12:20 page 106
Ernesto Pereira (Depto. Química, Universidade Federal de São Carlos, São Carlos, Brazil), *Ettore Antunes, Renato Freitas*
 Preparation and Characterization of Nanostructured Metallic Billayers of Pt/Ir/Pt for CO and Methanol Electrooxidation

Wednesday 19 March - PM

Oral Session 11

Environmental electrochemical engineering: protecting the planet

Room: Atlântico

Chairs: **Luiz Henrique Dall'Antonia** (Londrina State Univ., Brazil) and

Enric Chairs: **Brillas** (Univ. Barcelona, Spain)

- 14:10 to 14:40 —INVITED LECTURE page 54
Enric Brillas (**Química Física/Universitat de Barcelona, Barcelona, Spain**)
 Solar Photoelectro-Fenton: a Very Efficient and Low Cost Environmentally Friendly Electrochemical Method for Water Remediation
- 14:40 to 15:00 page 121
Maria Valnice Boldrin Zanoni Zanoni (**Institute of Chemistry, UNESP, Araraquara, Brazil**), *Luciano Fraga, Maria Beatriz, Fabiana Paschoal, Luciane Romão, Jeosadaque Sene, Marc Anderson*
 Photoelectrochemical Generation of Chlorine and Oxidation of Organics in Superficial Water
- 15:00 to 15:20 page 86
M.E. Henry Bergmann (**Anhalt University, Koethen/Anh., Germany**), *Johanna Rollin*
 The perchlorate problem in drinking water electrolysis
- 15:20 to 15:40 page 99
Geoffroy R.P. Malpass (**IQSC/USP, São Carlos, Brazil**), *Claudomiro P. Barbosa, Artur J. Motheo*
 Electro-removal of Cu(II) in the presence of Humic Acid
- 15:40 to 16:00 page 111
Woonsup Shin (**Department of Chemistry and Interdisciplinary Program of Integrated Biotechnology, Sogang University, Seoul, Korea**), *Jieun Song, Chang Hwan Kim, Zhen Yu Hong*
 Screening of Microbes for Searching for the Effective Catalysts in Electrochemical Activation of Carbon Dioxide

16:00 to 16:20 Coffee Break, Room: Pacífico

16:20 to 16:40 page 105

Paulo Olivi (Dep. Química, FFCLRP - USP, Ribeirão Preto, Brazil),

Carla Regina Costa

Electrochemical treatment of tannery wastewater

16:40 to 17:00 page 93

Geir Martin Haarberg (Department of Materials Technology, Norwegian

University of Science and Technology, Trondheim, Norway), *Marte*

Bjørnsdotter, Torbjørn Engebretsen, Ole Edvard Kongstein

The Supply of Dissolved Oxygen by Electrolysis in Lake Biwa

Wednesday 19 March - PM

Oral Session 12

Environmental electrochemical engineering:
protecting the planet

Room: Santiago

Chairs: Pawel J. Kulesza (Univ. of Warsaw, Poland) and

Florian Mansfeld (Univ. of Southern California, USA)

14:40 to 15:00 page 100

Florian Mansfeld (Corrosion and Environmental Effects Laboratory,

Mork Family Dep. of Chemical Eng. and Materials

Science, University of Southern California, Los Angeles, USA), *Orianna*

Bretschger, David Harrington, Aswin Karthik Manohar, Kenneth Nealson

An Evaluation of the Performance of a Mediator-less Microbial Fuel Cell

15:00 to 15:20 page 98

Elisabeth Lojou (Bioénergétique et Ingénierie des Protéines - CNRS,

Marseille, France), *Myriam Brugna, Sébastien Demantin, Marie-Thérèse*

Giudici-Ortoni, Marc Rousset

Hydrogenases as biocatalysts for biofuel cells: efficient H₂ oxidation at electrodes modified by carbon nanotubes

15:20 to 15:40 page 116

Federico Tasca (Analytical Chemistry Department, Lund University, Lund, Sweden), Gilbert Nöll, Wolfgang Harreither, Roland Ludwig, Dietmar Haltrich, Jindrich Volc, Lo Gorton

Immobilization of Pyranose Dehydrogenase on Graphite Electrodes Modified with Length Fractionated Single Wall Carbon Nanotube and Low Potential Osmium Polymer for Biofuel Cell Applications

15:40 to 16:00 page 87

Susan Boland (School of Chemistry, National University of Ireland, Galway, Ireland), Kevin Foster, Paul Kavanagh, Dónal Leech

Integration of Enzymes, Redox Mediators and Structured Materials to Provide Bioelectrochemical Fuel Cells

16:00 to 16:20 Coffee Break, Room: Pacifico

16:20 to 16:40 page 80

Yvonne Ackermann (Analytische Chemie - Elektroanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Nina Dimcheva, Lo Gorton, Dmitrii Guschin, Katarzyna Karnicka, Pawel J. Kulesza, Wolfgang Schubmann, Leonard Stoica

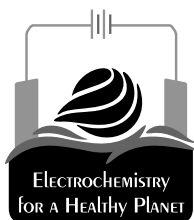
Tunable redox polymer matrices for the development of membraneless biofuel cells using a laccase cathode and cellobiose dehydrogenase anode

16:40 to 17:00 page 104

Gilbert Nöll (Department of Analytical Chemistry Lund University, Lund, Sweden), Federico Tasca, Vasile Coman, Lo Gorton, Wolfgang Harreither, Roland Ludwig, Dietmar Haltrich

Direct Electron Transfer at Anodes for Biofuel Cells Constructed by Coadsorption of Cellobiose Dehydrogenase and Length Separated Single-Walled Carbon Nanotubes

Program of Poster Presentations



Room: Pacífico

Monday 17 March

17:00 to 19:00 (Open bar from 18:00)

s1-P-001; s1-P-003; s1-P-005; s1-P-007; s1-P-008; s1-P-012; s1-P-015;
s1-P-017; s1-P-020; s1-P-024; s1-P-026; s1-P-028; s1-P-031; s1-P-034;
s1-P-037; s1-P-039; s1-P-042; s1-P-045; s1-P-049; s1-P-052

s2-P-001; s2-P-005; s2-P-007; s2-P-009; s2-P-013; s2-P-016; s2-P-019;
s2-P-022; s2-P-026; s2-P-028; s2-P-031; s2-P-034; s2-P-036; s2-P-039;
s2-P-042; s2-P-045; s2-P-048; s2-P-051; s2-P-054; s2-P-057; s2-P-060;
s2-P-063; s2-P-066; s2-P-068; s2-P-071; s2-P-074; s2-P-077; s2-P-081;
s2-P-084; s2-P-088

Tuesday 18 March

16:40 to 18:40 (Open bar from 17:40)

s1-P-002; s1-P-004; s1-P-006; s1-P-009; s1-P-010; s1-P-013; s1-P-018;
s1-P-021; s1-P-025; s1-P-029; s1-P-032; s1-P-035; s1-P-041; s1-P-043;
s1-P-048; s1-P-050; s1-P-053; s1-P-055; s1-P-057

s2-P-002; s2-P-003; s2-P-008; s2-P-011; s2-P-014; s2-P-017; s2-P-020;
s2-P-023; s2-P-025; s2-P-027; s2-P-029; s2-P-030; s2-P-035; s2-P-041;
s2-P-044; s2-P-046; s2-P-049; s2-P-052; s2-P-055; s2-P-058; s2-P-061;
s2-P-064; s2-P-067; s2-P-070; s2-P-073; s2-P-076; s2-P-079; s2-P-082;
s2-P-085; s2-P-087

Wednesday 19 March

17:00 to 19:00 (Open bar from 18:00)

s1-P-011; s1-P-014; s1-P-016; s1-P-019; s1-P-022; s1-P-023; s1-P-027;
s1-P-030; s1-P-033; s1-P-036; s1-P-038; s1-P-040; s1-P-044; s1-P-046;
s1-P-047; s1-P-051; s1-P-054; s1-P-056; s1-P-058; s1-P-059

s2-P-004; s2-P-006; s2-P-010; s2-P-012; s2-P-015; s2-P-018; s2-P-021;
s2-P-024; s2-P-032; s2-P-033; s2-P-037; s2-P-038; s2-P-040; s2-P-043;
s2-P-047; s2-P-050; s2-P-053; s2-P-056; s2-P-059; s2-P-062; s2-P-065;
s2-P-069; s2-P-072; s2-P-075; s2-P-078; s2-P-080; s2-P-083; s2-P-086;
s2-P-089; s2-P-090

Environmental analytical electrochemistry: monitoring the planet

s1-P-001

Enrico Andreoli (Department of Chemistry, National University of Ireland, Maynooth, Ireland), *Carmel Breslin, Denise Rooney*

Modification of polypyrrole composites with metal nanoparticles: A new material for environmental applications

s1-P-002

Valeria Annibaldi (Department of Chemistry, National University of Ireland, Maynooth, Ireland), *Carmel Breslin, Denise Rooney*

Conducting Polypyrrole Matrix Modified with Sulfated α -Cyclodextrin and its Ability to Sense Viologens

s1-P-003

Patricia Alexandra Antunes (Universidad de Valladolid, Valladolid, Spain / UNOESTE, Presidente Prudente, Brazil), *Marystela Ferreira, Osvaldo Novais Oliveira Jr., Maria Luz Rodriguez-Mendez, Jose Antonio S. Saja*

Preparation and Characterization of Nanostructured Films Formed by Poly(allylamine), Albumin and Nickel Phthalocyanine. Sensing Properties Towards Biological Amines

s1-P-004

Verónica Arancibia (Chemistry Faculty, Santiago, Chile), *Cesar Gonzalez, Edgar Nagles, Manuel Zúñiga*

Determination of Chromium (VI) by Adsorptive Stripping Voltammetry with Morin

s1-P-005

Maurício Ribeiro Baldan (Instituto Nacional de Pesquisas Espaciais, São José dos Campos, Brazil), *Neidenêi Gomes Ferreira, Jorge Tadao Matsushima, Leide L. G. Silva*

Influence of nitrogen on boron doped diamond electrodes in the nitrate electrochemical response

s1-P-006

Talita Barcellos (Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto - USP, Ribeirão Preto, Brazil)

Electrochemical oxidation of maleic acid an import by-product in the phenolic compounds degradation route

s1-P-007

Jiri Barek (Analytical Chemistry, Charles University in Prague, Prague, Czech Republic), Miroslav Fojta, Tomas Navratil, Bogdan Yosypchuk
Multisensor for Electrochemical Determinations

s1-P-008

Jiri Barek (Analytical Chemistry, Charles University in Prague, Prague, Czech Republic), Ales Danhel, Vlastimil Vyskocil, Bogdan Yosypchuk
New Silver Solid Amalgam Paste Electrode for Environmental Application

s1-P-009

Jiri Barek (Analytical Chemistry, Charles University in Prague, Prague, Czech Republic), Ivan Jiranek, Zuzana Kralova, Josino Moreira, Karolina Peckova
The Use of Solid Amalgam Electrodes as Electroanalytical Sensors for the Determination of Nitroquinolines

s1-P-010

Jiri Barek (Analytical Chemistry, Charles University in Prague, Prague, Czech Republic), Dana Deylova, Karolina Peckova, Vlastimil Vyskocil
Voltammetric Determination of Submicromolar Concentrations of Genotoxic 5-Nitrobenzimidazole at Hanging Mercury Drop Electrode and Carbon Paste Electrode

s1-P-011

Jiri Barek (Analytical Chemistry, Charles University, Prague, Czech Republic), Hana Dejmkova, Zuzana Jemelkova, Monika Kocourkova, Josino Moreira, Jiri Zima
Voltammetric Determination of Benserazide Using Carbon Paste Electrodes

s1-P-012

Georgeta Burtica (Politehnica University of Timisoara, Department of Applied Chemistry and Engineering of Inorganic Compounds and Environment, Timisoara, Romania), Adriana Bebeselea, Florica Manea, Aniela Pop, Ciprian Radovan, Joop Schoonman, Carmen Teodosiu
Anodic Determination of Oxalic Acid in the Presence of 4-Chlorophenol using Expanded Graphite-Epoxy Composite and Boron-Doped Diamond Electrodes

s1-P-013

José Miguel Campiña (Chemistry Department, Porto University, Porto, Portugal), Ana Maria Martins, Fernando Silva
Effect of pH, Electrolyte Anion, and Temperature in the Permeation of SAMs by Electroactive Probes

s1-P-014

Ivani Carlos (DQ/UFSCar, São Carlos, Brazil), Joana Luiza Pires Siqueira
Development of Environmentally Non-Aggressive Pb-Sn Deposition
Baths: New Alternatives to Fluoborate Baths.

s1-P-015

Ivana Cesarino (Instituto de Química de São Carlos - USP, São Carlos, Brazil), Ivana Cesarino
Thiol-functionalised Silica Film Modified Glassy Carbon Electrode in the
Determination of Mercury Ions

s1-P-016

Lucia Coelho (Universidade de São Paulo, São Paulo, Brazil), Ivano Gutz
Comparison between two electroanalytical techniques for atmospheric
formaldehyde determination

s1-P-017

Tiago Francisco da Silva (Departamento de Química Analítica - Instituto de Química de Araraquara - UNESP, Araraquara, Brazil), Nelson Ramos Stradiotto
Determination of Heavy Metals in Waters of Guarani Aquifer by
Voltammetric Methods Using Solid Amalgam Electrode

s1-P-018

Acelino de Sá (Departamento de Física e Química - UNESP, Ilha Solteira, Brazil), Devaney do Carmo
Voltammetric behavior of a modified silica with copper nitroprusside

s1-P-019

Rodrigo Del Rio (Departamento de Química Inorgánica, Facultad de Química, Pontificia Universidad Católica de Chile, Santiago, Chile), Andrea Amaro, Ricardo Schrebler
Gold Nanowires Electrodeposition Using Block Copolymers Films as
Templates

s1-P-020

Devaney do Carmo (Departamento de Física e Química – Unesp - Ilha Solteira., Ilha Solteira, Brazil), Urquiza Bicalho, Newton Dias Filho
Electrochemical properties of a new nanostructured azido copper (II)
octa (3-aminopropyl) octasilsesquioxane using graphite paste electrode

s1-P-021

Lukáš Fojt (Institute of Biophysics ASCR, Brno, Czech Republic), Jiri Vanek, Vladimír Vetterl
Adsorption and two-dimensional condensation of nucleic acid
components

s1-P-022

Mariano Fonticelli (Instituto de Investigaciones Físicoquímicas Teóricas y Aplicadas (INIFTA), Facultad de Ciencias, Exactas, Universidad Nacional de La Plata – CONICET, La Plata, Argentina), Guillermo A. Benitez, Gaston Corthey, Lisandro Giovanetti, Felix Requejo, Roberto C. Salvarezza, Young S. Shon, Carolina Vericat

A Novel Electrochemical Strategy for the Production of Bimetallic Nanoparticles

s1-P-023

Catherine Fox (Department of Chemistry, National of University of Ireland Maynooth, Maynooth, Ireland)

An Application of Silver Nanoparticles in Environmental Chemistry: Sensing of Nitrates

s1-P-024

Cristiane X. Galhardo (Instituto de Química e Biotecnologia - UFAL, Maceió, Brazil)

Evaluation of Lead Concentration in Mussel *Mytella charruana* in the Mundaú Estuarine Lagoon, Maceió, Brazil

s1-P-025

Eric de Souza Gil (Faculdade de Farmácia - Universidade Federal de Goiás, Goiânia, Brazil), Sérgio Antonio Spinola Machado, Fernando Cruz Moraes, Aline Oliveira, Juliana Chaves Santana, Eduardo Queija Siqueira

Development of a Modified Biosensor by a Crude Extract of *Guariroba* (*Syagrus oleracea*) for the Analysis of Phenolic Compounds in Environmental Samples

s1-P-026

Karolina Haberska (Department of Analytical Chemistry/Lund University, Lund, Sweden), Thomas Arnebrant, Liselott Lindh, Tautgirdas Ruzgas, Sergey Shleev, Olof Svensson

Lactoperoxidase Activity at Gold Surfaces: Amperometric Response to Hydrogen Peroxide

s1-P-027

Lauro Kubota (Instituto de Química, Universidade Estadual de Campinas, Campinas, Brazil)

Monitoring the electrochemical oxidation of a mixture of phenol compounds on boron-doped diamond electrode using fluorescence and multiway methods

s1-P-028

Lauro Kubota (Unicamp, Campinas, Brazil), *Vitor Baranauskas, Helder Ceragioli, Marcia Ferreira, Alfredo Peterlevitz, Reinaldo F. Teófilo*
Use of Fluorescence Intensity for Aromaticity Monitoring of Phenolic Compounds during the Electrochemical Oxidation on Boron-Doped Diamond Electrode

s1-P-029

Cecilia Lete (Institute of Physical Chemistry, Bucharest, Romania)
Electrochemical monitoring of some phenol derivatives at modified electrodes

s1-P-030

Maria Luisa Lozano (Universidad Autónoma Metropolitana-Iztapalapa, México, Mexico)
Incorporation of Fe(III) into a poly (5-Amino 1,10 phenanthroline) matrix.

s1-P-031

Florica Manea (Politehnica University of Timisoara, Department of Applied Chemistry and Engineering of Inorganic Compounds and Environment, Timisoara, Romania), *Adriana Bebeselea, Georgeta Burtica, Dan Cinghita, Monica Ihos, Cristina Proca, Ciprian Radovan*
The Availability of Boron-Doped Diamond Electrode for Anodic Determination of Nonylphenols Etoxylates

s1-P-032

Glimaldo Marino (Instituto de Química de São Carlos - USP, São Carlos, Brazil), *Ivana Cesarino*
Evaluation of a Carbon Paste Electrode Modified with Organofunctionalised Amorphous Silica in the Simultaneous Determination of Lead, Copper and Mercury Ions in Natural Water

s1-P-033

Jorge Tadao Matsushima (Instituto Nacional de Pesquisas Espaciais - INPE, São José dos Campos, Brazil), *Maurício Baldan, Neidenêi Gomes Ferreira, William Melo Silva*
The correlation between boron content and surface modifications on the nitrate reduction for Boron-Doped Diamond Electrodes

s1-P-034

Sinead Mc Dermott (Department of Chemistry, National University of Ireland, Maynooth, Ireland), *Carmel Breslin, Denise Rooney*
Conducting Polymers modified with Cyclodextrins and their ability to detect the Pollutant Paraquat

s1-P-035

Fernando Cruz Moraes (Departamento de Química / Universidade Federal de São Carlos, São Carlos, Brazil), Sérgio Antonio Spínola Machado, Lúcia Helena Mascaro, Sonia T Tanimoto

Determination of 4-Nitrophenol in natural waters using a multi-wall carbon nanotubes sensor

s1-P-036

Luis Moreira (Laboratório de Pesquisas em Eletroquímica e Eletroanalítica, Universidade São Francisco, Bragança Paulista, Brazil), Marcos Lanza, Maria Sotomayor, Auro Tanaka

Marcos Lanza, Maria Sotomayor, Auro Tanaka

Octhyl dimethyl PABA Detection in Natural and Artificial Aquatic Systems based on a PANI/FeTSPc Sensor

s1-P-037

Carolina Muñoz (Departamento de Química Inorgánica I, Facultad de Química/ Pontificia Universidad Católica de Chile, Santiago, Chile), Verónica Arancibia, Manuel Zúñiga

Verónica Arancibia, Manuel Zúñiga

Accumulation and Determination of Pb and Cd Using an Alginic Acid-Modified Carbon Paste Electrode

s1-P-038

Reza Ojani (Department of Chemistry, Chalous, Iran, Shahla Fathi, Jahanbakhsh Raoof

Jahanbakhsh Raoof

A New Electrocatalytic Sensor for Hydrogen Peroxide Prepared by Ferricyanide Immobilized on Organically Modified MCM-41

s1-P-039

Gabriela Beristain Ortíz (Centro de Graduados e Investigación, Instituto Tecnológico de Tijuana, Tijuana, Mexico), Rosa Ma. Félix Navarro, Mercedes Oropeza-Guzmán, Emigdia Sumbarda-Ramos

Mercedes Oropeza-Guzmán, Emigdia Sumbarda-Ramos

CMEs used for Pb and Cu detection in soil samples by Osteryoung Square Wave Stripping Voltammetry

s1-P-040

Marly Osugi (Departamento de Química Analítica - Insituto de Química - UNESP, Araraquara, Brazil)

Degradation of Disperse Dyes by Photoelectrocatalysis in Chloride and Conventional Chlorination

s1-P-041

Levent Özcan (Anadolu University, Department of Chemistry, Eskisehir, Turkey)

Electropreparation of Ascorbic Acid Imprinted Polypyrrole and Overoxidized-Polypyrrole: A Comparatively Study

s1-P-042

Levent Özcan (Anadolu University, Department of Chemistry, Eskisehir, Turkey)

Simple and Low Cost Voltammetric Determination of Catechol at a Pencil Graphite Electrode

s1-P-043

Thiago Paixão (Instituto de Química - Universidade de São Paulo, São Paulo, Brazil), Mauro Bertotti

Glassy carbon electrode modified with ruthenium oxide hexacyanoferrate as an electrochemical sensor for hydrogen peroxide determination in rainwater

s1-P-044

Rosalina Pérez García (Centro de Graduados e Investigación del Instituto Tecnológico de Tijuana, Tijuana, Mexico), Mercedes Oropeza Guzmán

Electroflotation as an alternative treatment for water containing suspended solids and emulsions

s1-P-045

Fábio Ruiz Simões (NANOFAEL - LIEC - Chemistry Department - Federal University of São Carlos, São Carlos, Brazil), Ernesto Chaves Pereira, Leandro Pocrifka

Study of the Electrochemical Behavior of Self-Assembled Films Used in Environmental Applications

s1-P-046

Silvana Saidman (INIEC - Departamento de Ingeniería Química - Universidad Nacional del Sur, Bahía Blanca, Argentina), Ivana Lehr, Oscar Quinzani

Comparative study of polypyrrole films electrosynthesized in alkaline and acid solutions

s1-P-047

Onofrio Scialdone (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, University of Palermo, Italy), Giuseppe Filardo, Alessandro Galia, Giuseppe Silvestri, Dario Verchiani

Electrochemical processes for the treatment of dichloroethane in water solutions

s1-P-048

Vernon Somerset (Natural Resources and the Environment, CSIR, Stellenbosch, South Africa), Emmanuel Iwuoha, Joy Leaner, Robert Mason, Chantel Petersen, Chavon Williams

Stripping Voltammetric Determination of Inorganic Mercury Using a Polyaniline, Polyaniline-poly(vinylsulfonate) and Polyaniline-poly(methylene blue) Coated Glassy Carbon Electrode

s1-P-049

Gustavo Stoppa Garbellini (Departamento de Química e Física Molecular - Instituto de Química de São Carlos - USP, São Carlos, Brazil), Luis Alberto Avaca, Giancarlo R. Salazar-Banda, Robson T. S. Oliveira

On The Use of Ultrasound-Assisted Electrochemical Methods for The Determination and Removal of Model Pollutants

s1-P-050

Ludek Strašák (Institute of Biophysics - ASCR, Brno, Czech Republic), Fojt Lukáš, Hason Stanislav

Adsorption of microorganisms on mercury surface

s1-P-051

Emigdia Sumbarda Ramos (Centro de Graduados del ITT, Tijuana, Mexico), Marlene García García, Mercedes T. Oropeza Guzmán, Ignacio González Martínez, Bayardo Murillo Rivera

Characterization of soil samples from a heavy metals contaminated site and the possibility of using in-situ electrokinetic remediation

s1-P-052

Boland Susan (School of Chemistry, National University of Ireland, Galway, Ireland), Kevin Foster, Joanna Hajdukiewicz, Peter Jenkins, Paul Kavanagh, Dónal Leech

Mediated Enzyme Reactions: From Biosensors to Biopower

s1-P-053

Marcos F. S. Teixeira (Faculdade de Ciências e Tecnologia - Departamento de Física, Química e Biologia - UNESP, Presidente Prudente, Brazil), Fernando H. Cincotto

Electrocatalytic Oxidation of Peroxide by Ruthenium-Pyridil Complex Confined In a Polymer Perfluorinated Membrane

s1-P-054

Marcos F. S. Teixeira (Faculdade de Ciências e Tecnologia - Departamento de Física, Química e Biologia - UNESP, Presidente Prudente, Brazil), Tony R. L. Dadamos

Electrochemical Sensor for Sulfite Determination Based on Copper-Salen Film Modified Electrode

s1-P-055

María Soledad Ureta-Zañartu (Depto. Ciencias del Ambiente, Facultad de Química y Biología, USACH, Santiago, Chile), Roxana Arce, Cristhian Berrios, Claudio Gutiérrez

Oxidation of 2,4,6-trichlorophenol at a GC Electrode Modified with Metal Phthalocyanines

s1-P-056

María Aurora Veloz Rodríguez (Universidad Autónoma del Estado de Hidalgo, ICBI-AAMyM, Pachuca, Mexico), Ignacio González Martínez, Victor Esteban Reyes Cruz, Gustavo Urbano Reyes

Electrochemistry Applied to Detect Potentially Toxic Elements (PTE's) in Contaminated Soils by Mining Residues

s1-P-057

Jarmila Vytrasova (Department of Biological and Biochemical Sciences, University of Pardubice, Pardubice, Czech Republic), Libor Cervenka, Michal Hrubes, Iva Peskova, Karel Vytras

Electroimmunoassay for Detection of Bacterial Cells

s1-P-058

Maria Valnice Boldrin Zanoni (Institute of Chemistry, UNESP, Araraquara, Brazil)

Simultaneous Photoelectrochemistry Reduction of Cr(VI) and Dye Oxidation in a Leather Effluent

s1-P-059

Jorge Omar Zerbino (INIFTA, La Plata, Argentina)

Voltammetric and ellipsometric study of platinum electrodes in acid solutions containing sulphur dioxide

Environmental electrochemical engineering: protecting the planet

s2-P-001

**Sergey Alferov (Analytical Chemistry, Lund University, Lund, Sweden),
Vasile Coman, Lo Gorton, Tobias Gustavsson, Cecilia Hägerhäll**
Wiring of *Escherichia coli* With Different Electron Transport Mediators

s2-P-002

**Patrícia A. Alves (Institute of Chemistry of São Carlos – University of
São Paulo, São Carlos, Brazil), Geoffroy R. P. Malpass, Douglas W. Miwa,
Artur J. Motheo**
Electrochemical and Photo-Assisted Electrochemical Degradation of Real
Textile Effluent

s2-P-003

**Leonardo Santos Andrade (Chemistry Dep./UFSCar, São Carlos, Brazil),
Nerilso Bocchi, Romeu Cardozo Rocha-Filho, Kallyni Irikura, Sonia Regina
Biaggio**
Electrochemical degradation of the Blue Reactive 19 dye in a filter-press
reactor using a carbon-fiber/PbO₂ anode in the presence or absence of
chloride

s2-P-004

**José Mario Aquino (Chemistry Department/UFSCar, São Carlos, Brazil),
Leonardo S. Andrade, Sonia R. Biaggio, Nerilso Bocchi, Romeu C. Rocha-Filho**
Electrochemical Degradation of the Reactive Red 141 Dye on Ti-Pt/ β -
PbO₂ and DSA Anodes

s2-P-005

**Vincenzo Baglio (CNR-ITAE, Messina, Italy), Vincenzo Antonucci, Irene
Gatto, Ester Modica, Ruben Ornelas, Enza Passalacqua, Alessandro Stassi**
Electrochemical and Physico-Chemical Investigation of Polymer
Electrolyte Fuel Cell Catalysts for High Temperature Operation

s2-P-006

**Peter Barath (Department of Electrical and Electronic Technology/The
Faculty of Electrical Engineering and Communication Brno, University
of Technology, Brno, Czech Republic), Jiri Kazelle, Marie Sedlarikova, Petr
Spicak, Arnaldo Visintin, Jiri Vondrak**
Metal hydride electrodes studied by QCM technique

s2-P-007

Katlin Ivon Barrios Eguiluz (Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Luis Alberto Avaca, Giancarlo Richard Salazar Banda

Effect of the catalyst composition in the $\text{Pt}_x(\text{Ru-Ir})_{1-x}/\text{C}$ system on the electro-oxidation of methanol in acid media

s2-P-008

Henry Bergmann (Anhalt University of Applied Sciences, Koethen/Anh, Germany), Karsten Kresse, Johanna Rollin

Bromate formation on BDD anodes

s2-P-009

Henry Bergmann (Anhalt University of Applied Sciences, Koethen/Anh, Germany), Tatiana Iourchouk

The study of anion exchange materials for electrodeionization

s2-P-010

José M. Bisang (PRELINE/Facultad de Ingeniería Química/Universidad Nacional del Litoral, Santa Fe, Argentina), Javier M. Grau

Development of a Bipolar Electrochemical Reactor with Rotating Cylinder Electrodes of Woven-Wire Meshes for Effluent Treatment

s2-P-011

José M. Bisang (PRELINE/Facultad de Ingeniería Química/Universidad Nacional del Litoral, Santa Fe, Argentina)

Comparative Study of Concentration-Time Relationships in Recirculating Electrochemical Reactor Systems

s2-P-012

Nilson Tadeu Camarinho de Oliveira (IQ-UNESP-Araraquara, Araraquara, Brazil), Antonio Carlos Guastaldi

Corrosion Resistance And Stability Of Ti-Mo Alloys For Biomedical Applications

s2-P-013

Nilson Tadeu Camarinho de Oliveira (IQ-UNESP-Araraquara, Araraquara, Brazil), Antonio Carlos Guastaldi, Salvatore Piazza, Carmelo Sunseri

Photoelectrochemical and Impedance Studies of Passive Films on Different Ti-Mo Alloys

s2-P-014

Carlos Carlesi Jara (Escuela de Ingeniería Química/Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile)

Optimization of Current Density for Waste Water Direct Electrooxidation Electrolyzers

s2-P-015

Beatriz Castro (INIFTA, Universidad Nacional de La Plata, La Plata, Argentina), *R.H. Milocco, E. B. Castro, D. J. Cuscuenta, A.A. Ghilarducci, Sandra Rojas, H. R. Salva, A. Visintín*

Model Validation of Ni-MH Batteries Under Constant Discharge Current

s2-P-016

Élida Beatriz Castro (Instituto de Investigaciones Físicoquímicas Teóricas y Aplicadas - Facultad de Ciencias Exactas - U.N.L.P., La Plata, Argentina), *Mariela Ortiz, Silvia Graciela Real*

Dynamic Monitoring of Structural Changes in Porous Nickel Hydroxide Electrodes Employed in Batteries

s2-P-017

Marisela Choy de Martínez (Chemistry Dep., Univ. de Los Andes, Mérida, Venezuela), *María González, José Miguel Ortega, Zogehil Puentes*

Advances in the Electrocatalysts Systems for the Hydrocarbons Oxidation

s2-P-018

Alejandro N. Colli (PRELINE/Facultad de Ingeniería Química/ Universidad Nacional del Litoral, Santa Fe, Argentina), *José M. Bisang*

An Experimental Study of the Morphological Characteristics of Copper Electrodeposits in Three-Dimensional Electrodes

s2-P-019

Luiz Henrique Dall'Antonia (Departamento de Química/Universidade Estadual de Londrina, Londrina, Brazil), *Samira Castellari, Luiz Henrique Dall'Antonia, Paulo Olivi, Demetrius Profeti, Maria C Solci*

Electro-Fenton method for removal of hormones in an electrochemical system using $\text{Ti/Sn}_{0.99}\text{Ir}_{0.01}\text{O}_2$ as cathode

s2-P-020

Ken Darcovich (National Research Council of Canada, Institute for Chemical Process and Environmental Technology, Ottawa, Canada), *Teddy Caroni, Isobel Davidson*

Charge-Discharge Simulation of Lithium Ion Batteries in a Cogeneration Load-Leveling Context

s2-P-021

Martin Davila (Universidad Autonoma de Puebla, Puebla, Mexico), *Maria Elizalde, Ana Mendez, Rigoberto Tovar*

Electrochemical and Photocatalytic Degradation of Azo and Methine Dyes in Water

s2-P-022

Gildiberto M. de Oliveira (Chemistry Dep./Federal University of São Carlos, São Carlos, Brazil), Ivani A. Carlos

Silver-zinc electrodeposition from a non-cyanide solution

s2-P-023

Alessandra Di Blasi (CNR-ITAE, Messina, Italy)

Investigation of Pt-M/C Tolerance in Presence of Ethanol Acid Solution for the Oxygen Reduction Reaction

s2-P-024

Paula Drob (Electrochemistry and Corrosion/Institute of Physical Chemistry, Bucharest, Romania), Silviu Iulian Drob, Mihai Vasile Popa, Julia Claudia Rosca, Ecaterina Vasilescu, Cora Vasilescu

Electrochemical Deposition Technology of Organic Coating to Protect the Environment

s2-P-025

Pablo Sebastián Fernández (Instituto de Investigaciones Físicoquímicas Teóricas y Aplicadas - Facultad de Ciencias Exactas - U.N.L.P., La Plata, Argentina), Élica Beatriz Castro, María Elisa Martins, Silvia Graciela Real

Towards the Mechanism of Electrochemical Hydrogen Storage in Nanostructured Carbon Materials

s2-P-026

Violetta Ferri (Department of Chemistry, University of Ferrara, Ferrara, Italy), Achille De Battisti, Sergio Ferro, Carlos Alberto Martinez-Huitle

Electrokinetic extraction of surfactants and heavy metals from a municipal wastewater sludge

s2-P-027

Juliane Forti (Universidade Estadual de Campinas - UNICAMP, Campinas, Brazil), André Beati, Rodnei Bertazzoli, Fabiana Fisnack, Vânia Prado

Chloramphenicol oxidation via electro-fenton reagent on a flow reactor using modified gas diffusion electrodes

s2-P-028

Jorge Frade (Ceramics and Glass Eng. Department, University of Aveiro, Aveiro, Portugal), Vladislav Kharton, Syargei Poznyak, Ekaterina Tsipis, Aleksey Yaremchenko

Effects of Composition and Microstructural Changes on Ceramic Anodes for Alkaline Conditions

s2-P-029

André de Carvalho Frank (Instituto de Química - Universidade de São Paulo, São Paulo, Brazil), *Paula Decot Galgano, Paulo Teng An Sumodjo*
Modeling the Early Stages Kinetics of the Electrodeposition of Magnetic Thin Films From a Citrate or Glycine Bath. I. Deposition of Co and of Ni

s2-P-030

André de Carvalho Frank (Instituto de Química - Universidade de São Paulo, São Paulo, Brazil), *Paulo Teng An Sumodjo*
Modeling the Early Stages Kinetics of the Electrodeposition of Magnetic Thin Films From a Citrate or Glycine Containing Bath. II. Deposition of CoNi Films from a Glycine Containing Bath

s2-P-031

Manuel Gacitúa (Laboratorio de Electroquímica de Polímeros, Facultad de Química, Pontificia Universidad Católica de Chile, Santiago, Chile), *Luis Canales, María Angélica del Valle, Giovanni Soto*
Electropolymerization Of Mono, Bi, Ter and Tetra-thiophene

s2-P-032

Alexandre Galio (Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil), *Juliana Ketl, Iduvirges Lourdes Müller*
Environmental friendly coatings for aerospace industry applications

s2-P-033

Adrian Moises Garcia Lara (CINVESTAV del I.P.N., Unidad Saltillo, Ramos Arizpe, Mexico)
Improvement of Arsenic Electroremoval from Underground Water by Lowering the Interference of Other Ions

s2-P-034

Irene Gatto (CNR-ITAE, Messina, Italy), *Alessandra Carbone, Enza Passalacqua, Rolando Pedicini, Ada Saccà*
Evaluation of Ru Introduction in CO tolerant Anodes for PEFC

s2-P-035

Luciano Gomes (Instituto de Química de São Carlos / Universidade de São Paulo, São Carlos, Brazil), *Geoffroy R. P. Malpass, Douglas W. Miwa, Artur J. Motheo*
Textile dye Reactive Orange 16 degradation using DSA® electrode

s2-P-036

Omar González Pérez (PRELINE/Facultad de Ingeniería Química/ Universidad Nacional del Litoral, Santa Fe, Argentina), *José M. Bisang*
A Simplified Model of an Electrochemical Reactor with a Bipolar Three-Dimensional Electrode

s2-P-037

Lo Gorton (Department of Analytical Chemistry, Lund University, Lund, Sweden), *Vasile Coman, Tobias Gustavsson*

Electrical Wiring of Living Bacterial Cells Using Flexible Osmium-Redox Polymers

s2-P-038

Eduardo R. Henquín (PRELINE/Facultad de Ingeniería Química/ Universidad Nacional del Litoral, Santa Fe, Argentina), *José M. Bisang*

Prediction of the Secondary Current Distribution and Leakage Current in Bipolar Electrochemical Reactors

s2-P-039

Yi Kang (Department of Nuclear Engineering & Management, School of Engineering, The University of Tokyo, Tokyo, Japan), *Akihiro Suzuki, Takayuki Terai*

Effect of solid proton conductor Hydronium- β - Al_2O_3 in the electrode on the performance of PEFC

s2-P-040

Manuel J. LLansola Portolés (INIFTA, Departamento de Química, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina), *Monica Gonzalez*

Preparation and optimization of Photoelectrochemical parameters for synthesis of silicon nanoparticles from n-type wafers

s2-P-041

Geoffroy R.P. Malpass (IQSC/USP, São Carlos, Brazil), *Sérgio A Machado, Douglas W. Miwa, Adriana C Miwa, Artur J. Motheo, Ricardo L. Santos, Eny M. Vieira*

Atrazine degradation by electrochemical and photo-assisted electrochemical methods: Toxicity assessment

s2-P-042

Taise Manhabosco (Metallurgy/UFRGS, Porto Alegre, Brazil)

Deposition of Diamond-like Carbon films using a liquid phase electrodeposition

s2-P-043

Carlos Alberto Martinez-Huitle (University of Milan, Department of Analytical Chemistry, Milan, Italy), *Achille De Battisti, Sergio Ferro, Marco A Quiroz Alfaro, Silvia Reyna*

Electrochemical oxidation of methamidophos in aqueous solution: Role of the electrode material

s2-P-044

Grzegorz Milczarek (Institute of Chemistry and Technical Electrochemistry, Poznan, Poland)

Electrocatalysis of nitrite reduction using a polyaniline/
nordihydroguaiaretic acid composite film

s2-P-045

Bárbara Miranda (Instituto de Química - Universidade Estadual de Campinas, Campinas, Brazil), Claudia Longo, Haroldo Oliveira

Preparation and Characterization of Titanate Electrode for Application in Solar Energy Conversion

s2-P-046

Daniela Nichela (INIFTA, Departamento de Química, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina)

Optimization of operational conditions for nitrobenzene (NBE) degradation by Electro-Fenton methods.

s2-P-047

Yuko Nishiyama (Division of Chemical Engineering, Graduate School of Engineering Science, Osaka University, Toyonaka, Japan), Yasuyuki

Egashira, Norikazu Nishiyama, Korekazu Ueyama

Proton Conductive Silicate/Phosphate Composite Membranes

s2-P-048

Evgeny Nizhnikovskiy (Interdepartmental Scientific Council on Complex Problems in Physics, Chemistry, and Biology at the Presidium of RAS, Moscow, Russian Federation), Valeriy Frolchenkov, Vitalii Grinberg,

Vladimir Kuznetsov, Nina Machova, Marina Struchkova, Yuliya Syroeshkina

Non-polluting indirect electrochemical synthesis of
6-methyl-1,5-diazabicyclo[3.1.0]hexane

s2-P-049

Ali Özcan (Anadolu University, Department of Chemistry, Eskisehir, Turkey)

Anodic Oxidation of Protham in Water using BDD Electrode

s2-P-050

Ali Özcan (Anadolu University, Department of Chemistry, Eskisehir, Turkey)

Removal of Basic Blue 3 from Water by Electrochemically Generated Fenton's Reagent

s2-P-051

Ernesto Pereira (Depto. Química, Universidade Federal de São Carlos, São Carlos, Brazil), Renato Freitas, Luciano Gomes, Geoffroy Malpass, Artur Motheo

Electrochemical oxidation of the dye Reactive Orange 16 using a low cost Pt film electrode prepared by Pechini method

s2-P-052

Ernesto Pereira (Depto. Química, Universidade Federal de São Carlos, São Carlos, Brazil), Renato Freitas

Metallic Nanostructures of Pt/Bi/Pt for the Oxidation of CO Molecules

s2-P-053

A.R. Pierna (Chemical Engineering and Environment Dep./University of Basque Country, San Sebastian, Spain), J. Barranco, J. Barroso, B. Carton, F. Lopez, A. Lorenzo, F.F. Marzo, A. Perez

Comparative study of methanol and ethanol oxidation on amorphous $\text{Ni}_{59}\text{Nb}_{40}\text{Pt}_{(1-x)}\text{Y}_x$ (Y=Sn,Ru) in acid media.

s2-P-054

Vilmária Aparecida Ribeiro (Centro de Células a Combustível e Hidrogênio/Instituto de Pesquisas Energéticas e Nucleares, São Paulo, Brazil)

Preparation of Pt Rare Earth/C electrocatalysts using the alcohol-reduction process for ethanol electro-oxidation

s2-P-055

Vilmária Aparecida Ribeiro (Centro de Células a Combustível e Hidrogênio/Instituto de Pesquisas Energéticas e Nucleares, São Paulo, Brazil)

PtRuNi/C electrocatalysts prepared by an alcohol reduction process for methanol electro-oxidation

s2-P-056

Luciana M. Rodrigues (Depto. de Metalurgia, Porto Alegre, Brazil), Sabrina Neves da Silva, Cristina R. Weber

The behavior of soils with embedded pipelines under cathodic protection

s2-P-057

Marcelo Rodrigues da Silva (UNESP / Faculdade de Ciências / Departamento de Química / Grupo de Eletrocatalise e Reações Superficiais, Bauru, Brazil), Antonio Carlos Dias Angelo, Andreia Franco Innocente

Synthesis, Characterization and Electrochemical Evaluation towards Alcohol Oxidation Reaction of Ordered Intermetallics Nanostructured PtSn and PtSb

s2-P-058

Israel Rodriguez (Instituto de Metalurgia / Universidad Autonoma de San Luis Potosi, San Luis Potosi, Mexico), Roberto Briones, Isabel Lazaro
Treatment of wastewater of paper industry by Electrocoagulation process using aluminum electrodes

s2-P-059

Israel Rodriguez (Instituto de Metalurgia / Universidad Autonoma de San Luis Potosi, San Luis Potosi, Mexico), José Bisang
Theoretical Study of the Primary Current Distribution in Cylindrical Electrodes

s2-P-060

Felipe J. Rodríguez Nieto (INIFTA, Departamento de Química, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina), Maite Elissalde, Miguel A. Pasquale
Design and development of Cooper gas diffusion electrodes (Cu-GDE) applied to the electrochemical reduction of carbon dioxide

s2-P-061

Fabricio Ruiz (Instituto Balseiro, Centro Atómico Bariloche, Bariloche, Argentina), Beatriz Castro, Hernán Peretti, Silvia Real, Walter Triaca, Arnaldo Visintin
Electrochemical Studies of Secondary Phases in Hydride-forming AB_2 Alloys

s2-P-062

Luís Augusto Ruotolo Martins (Chemical Engineering Dep./Federal University of São Carlos, São Carlos, Brazil), Pedro Henrique Britto-Costa, Arthur Câmara-Martins
Oxidation of Dyes on Pt and $Ti/Ti_{0.7}Ru_{0.3}O_2$ Electrodes in Chloride Medium. Effect of Chloride Concentration and Current Density

s2-P-063

Luís Augusto Ruotolo Martins (Chemical Engineering Dep./Federal University of São Carlos, São Carlos, Brazil), Pedro Henrique Britto Costa
Phenol Oxidation on Commercial $Ti/Ti_{0.7}Ru_{0.3}O_2$ Electrodes in Chloride Medium. Effect of Chloride Concentration, Current Density and Flow Rate

s2-P-064

Giancarlo Richard Salazar-Banda (Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Sergio Antonio Spinola Machado, Artur Jesus Motheo
Microstructural and Electrochemical Characterization of Environmentally Friendly Sol-gel Based Layers on Aluminum Alloys

s2-P-065

Leonardo Salgado (Depto. Química, Universidad Autónoma Metropolitana Iztapalapa, D.F., Mexico), Ignacio Camarillo, Sergio Durón, Doralice Meza, Ulises Morales, Celso Velázquez
Formation, Characterization and Electrocatalytic Activity of Pt-W Particles for the Oxygen Reduction Reaction

s2-P-066

Daniel Salinas (INIEC - Instituto de Ing. Electroquímica y Corrosión - Depto. de Ing. Química - Universidad Nacional del Sur, Bahía Blanca, Argentina), Andrea Alvarez
Reduction of Nitrate Ions on Supported Pd-Cu Nanocrystals Obtained by Electrodeposition

s2-P-067

Daniel Salinas (INIEC - Instituto de Ing. Electroquímica y Corrosión - Depto. de Ing. Química - Universidad Nacional del Sur, Bahía Blanca, Argentina), Silvana Garcia, Lorena Meier
Reduction of Nitrate Ions on a Au(111)/Pd/Sn Electrode

s2-P-068

Yusuke Shiratori (Department of Mechanical Engineering Science, Faculty of Engineering, Kyushu University, Fukuoka, Japan), Toshihiro Oshima, Kazunari Sasaki
Performance of biogas-fueled SOFC with different fuel compositions

s2-P-069

Graziela da Silva (ITA/INPE, São José dos Campos, Brazil), Leide Lili G. da Silva Kostov, Maria Auxiliadora Silva Oliveira, Mario Ueda
Enhanced corrosion resistance of aluminum alloys treated by nitrogen plasma immersion ion implantation

s2-P-070

Gilmar Clemente Silva (Universidade Federal Fluminense - EEIMVR, Volta Redonda, Brazil), Jane da Silva Faria, Carlos Eduardo de Souza Teodoro, Fabiana Soares dos Santos
Microbial fuel cell: A prospective technology for power production from wastewater

s2-P-071

Fernando Simões (Faculdade de Filosofia Ciências e Letras de Ribeirão Preto-Universidade de São Paulo, Ribeirão Preto, Brazil), Paulo Olivi
Oxygen reduction reaction on platinum electrodes prepared by decomposition of polymeric precursors

s2-P-072

Zvonimir Stankovic (University of Belgrade, Technical Faculty at Bor, Bor, Yugoslavia), Zvonko Damnjanovic

The Electrochemical Extraction of Copper from Waste Electrolyte Using Electrochemical Reactor with Tree Dimensional Electrode

s2-P-073

Ema Stupnisek-Lisac (Faculty of Chemical Engineering and Technology, University of Zagreb, Zagreb, Croatia), Katarina Marusic, Helena Otmacic Curkovic, Hisasi Takenouti

Protection of Bronze Patina by an Environment Friendly Corrosion Inhibitor

s2-P-074

Jorge Thomas (Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina), Beatriz Castro, Arnaldo Visintin

Effect of compaction pressure on the behaviour of metal hydride pellet electrodes: New modelling

s2-P-075

Edson A. Ticianelli (Instituto de Química de São Carlos - USP, São Carlos, Brazil), Kenia S. Freitas

Electrocatalysis of the Hydrogen Oxidation Reaction on W_2C -Dispersed Platinum Catalysts in Acid Medium

s2-P-076

Giombattista Traina (Istituto Giordano SpA, Bellaria, Italy), Achille De Battisti, Sergio Ferro, Carlos Alberto Martinez-Huitle

Electrokinetic stabilization as means of dealing with waste materials polluted by both salts and heavy metals

s2-P-077

Cora Vasilescu (Electrochemistry and Corrosion/ Institute of Physical Chemistry, Bucharest, Romania), Paula Drob, Mihai Vasile Popa, Ecaterina Vasilescu

Electrochemical Behaviour of a New Resistant Alloy for the Prevention of the Environmental Pollution

s2-P-078

Ecaterina Vasilescu (Institute of Physical Chemistry, Bucharest, Romania), Paula Drob, Mihai Vasile Popa, Cora Vasilescu

Electrochemical Corrosion Resistance Modeling of Some Alloys for a Clean Industry

s2-P-079

Mónica Lucía Vásquez Garzón (LACOR - PPGEM - Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil), *Giancarlo Bonotto, Luciano Marder, Andréa Moura Bernardes, Jane Zoppas Ferreira*
Effect of Solution Concentration and pH on Tartrate Ions Transport Properties through an Anion-Exchange Membrane

s2-P-080

Vladimir Vetterl (Center for Dental and Craniofacial Research, Faculty of Medicine, Masaryk University, Brno, Czech Republic)
Adsorption of Human Blood Plasma Proteins and Oligonucleotides at the Titanium Surface

s2-P-081

Csaba Visy (Institute of Physical Chemistry, University of Szeged, Szeged, Hungary), *Gábor Bencsik, Csaba Janáky, Emese Kriván*
Conducting Polymer Composites as New Electrodes for Clean Energy Technologies

s2-P-082

Teresa Zayas (Centro de Química y Posgrado en Ciencias Ambientales, Universidad Autónoma de Puebla, Puebla, Mexico), *Ulises Morales, Leonardo Salgado, Mario Segura, Osnelda Villegas*
Electrochemical Oxidation Treatment of Refractory Organic Pollutants in Aqueous Media

s2-P-083

Weihua Li, Qiao (Institute of Oceanology, Chinese Academy of Sciences, Qingdao, China) *He, Zhihua Tao, Baorong Hou, Qigang Zhang*
Experimental and theoretical investigation of the adsorption behaviour of new triazole derivatives as inhibitors for mild steel corrosion in acid media

s2-P-084

César O. Avellaneda (Laboratório de Nanotecnologia e Energia Solar, Universidade Estadual de Campinas, Campinas, Brazil), *Agnaldo S. Gonçalves and Ana F. Nogueira*
TiO₂-SrTiO₃ core-shell electrode for Dye-Sensitized Solar Cells

s2-P-085

Jens Muff (Chemical Engineering Department, Esbjerg Institute of Technology, Aalborg University, Esbjerg, Denmark)
Direct versus indirect electrochemical oxidation of pesticide polluted drainage water containing sodium chloride

s2-P-086

Alexandre Rossi (Universidade Federal dos Vales do Jequitinhonha e Mucuri, Diamantina, Brazil), *Marcelo A. Oliveira, Danilo O. S. Assis, Jonas P. Ramos, Luís A. da Silva, Valéria A. Alves*

Electrochemical Studies of Cephalexin Using Dimensionally Stable Anodes

s2-P-087

S. G. García (INIEC - Inst. de Ing. Electroquímica y Corrosión - Universidad Nacional del Sur, Bahía Blanca, Argentina), *M. C. del Barrio, D. R. Salinas*

Formation of Ultrathin Films on Au(111) used as Electrocatalysts for Nitrate Reduction

s2-P-088

M.A. Dresch (Instituto de Pesquisas Energéticas e Nucleares – IPEN/ CNEN-SP, São Paulo, Brazil), *R.A. Isidoro, F. C. Fonseca, M. Linardi, E. I. Santiago*

Evaluation of Nafion-SiO₂ Hybrids as Electrolytes in PEMFC operating at High Temperature

s2-P-089

Diego Barsellini (Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas, Facultad de Ciencias Exactas, UNLP, La Plata, Argentina)

Faceted Platinum Catalysts with Preferential Crystal Orientation for Low Temperature Fuel Cells

s2-P-090

Valderi Pacheco Santos (Universidade Estadual do Oeste do Paraná / Coordenação de Química, Toledo, Brazil), *Germano Tremiliosi Filho*

FTIRS Comparative Studies of the Ethanol Electrooxidation on Pt(100) and Pt(111) after Osmium Spontaneous Depositions