The 61st Annual Meeting of the International Society of Electrochemistry

Electrochemistry from Biology to Physics
September 26th - October 1st, 2010, Nice, France

PROGRAM

Contents list

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1004 Lausanne
Switzerland

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Welcome Address

On behalf of the Executive Committee of ISE, the Organizing Committee and Symposium Organizers, we warmly welcome you to Nice and look forward to your participation in the 61st Annual Meeting of the ISE, "Electrochemistry from Biology to Physics", from September 26th to October 1st, 2010.

Nice became French 150 years ago in 1860 and it is now the fifth largest town in France. We hope that you will appreciate its sunny and temperate climate and you will find time to walk along the lovely seaside, to see its interesting museums and famous landmarks. You will also appreciate the typical culinary art of Nice in a large number of restaurants to be found everywhere in town.

France has a strong tradition in Electrochemistry and has a large number of ISE members. Accordingly, ISE has visited France previously - in 1982 in Lyon and more recently in 1997 in Paris with a joint meeting with ECS.

This conference, with 16 different symposia, shows the development of our Society and covers both traditional and new areas of electrochemistry. All the scientific Divisions of ISE are involved and some interdisciplinary symposia are sponsored by two or three divisions. From Biology to Physics, all different aspects of electrochemistry will be represented in this meeting which is the largest ISE Annual meeting by its number of participants, of oral communications and of posters.

We welcome all electrochemists and invite you to develop communication between these different fields, to establish new links between researchers and finally to find and cultivate new ideas.

Bernard Tribollet, Christian Amatore, and Robert Hillman
Co-chairs, Organizing Committee, ISE Annual Meeting 2010

Organizing Committees

Co-Chairs

B. Tribollet, France (chair)
C. Amatore, France (co-chair)

Members

E. Ahlberg, Sweden
E. Dunach, France
P. Hapiot, France
R. Hillman, U.K.
J. M. Léger, France
S. Roscoe, Canada
R. Torresi, Brazil
M. Watanabe, Japan

Symposium Organizers

Symposium 1: New Insights and Applications in Ionic Liquid Electrochemistry
Alan Bond, (Coordinator) Monash University, Australia
Didier Devilliers, UPMC University, Paris, France
Corinne Lagrost, Université de Rennes 1, France
Jie Zhang, Institute of Bioengineering and Nanotechnology, Singapore

Symposium 2: Environment, Water and Analytical Electrochemistry
Nicole Jaffrezic-Renault, (Coordinator) University of Lyon, France
Salvatore Daniele, University of Venice, Italy
Hubert Perrot, CNRS, UPMC University, Paris, France
Chee-Seng Toh, National University of Singapore, Singapore

Symposium 3: Bioelectrochemistry. From Fundamentals to Applications with a Special Focus on Nanostructured Material
Lo Gorton, (Coordinator) Lund University, Sweden
Alexander Kuhn, University of Bordeaux, France
Woonsup Shin, Sogang University, Seoul, Korea
Christophe Innocent, CNRS, Montpellier, France

Symposium 4: Electrochemical Energy Conversion and Storage
Martin Winter, (Coordinator) University of Muenster, Germany
Deborah Jones, CNRS and University of Montpellier 2, France
Elzbieta Frackowiak, Poznan University of Technology, Poland
Christophe Coutanceau, University of Poitiers, France

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials
Mikhail Vorotyntsev, (Coordinator) Université de Bourgogne, Dijon, France
Jean-Claude Moutet, Université Joseph Fourier, Grenoble, France
Vessela Tsakova, Institute of Physical Chemistry, Sofia, Bulgaria
Galina A. Tsirlina, Moscow State University, Russia

Symposium 6: Corrosion Science: Mechanisms and Methods
Philippe Marcus, (Coordinator) ENSCP, Paris, France
Nadine Pébère, ENSIACET, Toulouse, France
Francesco Di Quarto, University of Palermo, Italy
Hiroki Habazaki, Hokkaido University, Sapporo, Japan

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Catherine Debiemme-Chouvy, (Coordinator) CNRS, UPMC University, Paris, France
Olaf Magnussen, University of Kiel, Germany
Stanko Brankovic, University of Houston, Houston, USA
Michel Rosso, Ecole Polytechnique, Palaiseau, France
Daniel Lincot, ENSCP, Paris, France

Symposium 8: Electrochemical Process Engineering and Technology

Francois Lapicque, (Coordinator) CNRS-Nancy, Université, France
Karel Bouzek, ICT Prague, Czech Republic
Sachio Yoshihara, Utsunomiya University, Japan
Theo Tzedakis, INP Toulouse, France

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Bernd Speiser, (Coordinator) University of Tuebingen, Germany
Marcin Opallo, Institute of Physical Chemistry, Warzaw, Poland
Jiri Ludvik, J. Heyrovsky Institute, Prague, Czech Republic
Elisabeth Dunach, University of Nice, France
Anny Jutand, ENS, Paris, France

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

YuYe Tong, (Coordinator) Georgetown University, Washington, USA
Timo Jacob, University of Ulm, Germany
Elena R. Savinova, University of Strasburg, France
Marc Robert, University of Paris Diderot, France

Symposium 11: Sensors and Biosensors

Fred Lisdat, (Coordinator) Wildau University, Germany
Wolfgang Schuhmann, Ruhr-Universitaet Bochum, Germany
Alexander Vaskevich, Weizmann Institute of Science, Israel
Alain Walcarius, University of Nancy, France
Féthi Bédioui, ENSCP, Paris, France

Symposium 12: Electrochemistry on a Local Scale

Vincent Vivier, (Coordinator) CNRS, UPMC University, Paris, France
Emmanuel Maisonhaute, ENS, Paris, France
Daniel Mandler, The Hebrew University, Jerusalem, Israel
Kei Murakoshi, Hokkaido University, Sapporo, Japan
Gunther Wittstock, Carl von Ossietzky University, Oldenburg, Germany

Symposium 13: Surface Functionalization

Gérard Bidan, (Coordinator) INAC, CEA-Grenoble, France
Jean-Christophe Lacroix, ITODYS, Université Paris 7, France
György Inzelt, Faculty of Science, Eötvös Lorand University, Hungary
Roberto Salvarezza, Universidad Nacional de la Plata, Argentina

Symposium 14: Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel cells

Frédéric Barrière, (Coordinator) Université de Rennes 1, France
Alain Bergel, CNRS Toulouse, France
Evgeny Katz, Clarkson University, Potsdam, USA
Martin Winter, University of Münster, Germany

Symposium 15: Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells

Alejandro A. Franco, (Coordinator) CEA, Grenoble, France
Kourosh Malek, NRC-IFCI, Vancouver, Canada
Yann Bultel, Clarkson University, Potsdam, USA
Elzbieta Frackowiak, University of Münster, Germany

Symposium 16: General Session

Claude Deslouis, (Coordinator) CNRS, UPMC University, Paris, France
Susana Torresi, University of Sao Paulo, Brazil

Tutorial Lectures

Sunday, 26 September, 2010

Location: Calliope

15:00 to 18:30 (coffee break from 16:30 to 17:00)

Redox Protein and Redox Enzyme Electrochemistry: Fundamental Studies and Applications

Christophe. Léger
Direct electron transfer

Phil. Bartlett
Mediated electron transfer

Location: Uranie

15:00 to 18:30 (coffee break from 16:30 to 17:00)

Electrochemical Quartz Crystal Microbalance

Hubert Perrot and Rob Hillman

Celebration of the International Year of Chemistry 2011

Location: Risso 8

16:30

Special meeting to discuss ISE activities in the framework of the International Year of Chemistry

Chair: Christopher Brett (brett@ci.uc.pt)

Plenary Lecturers

Location: Apollon

Monday, 27 September, 2010

08:45 to 09:45

Andrew Ewing
(Department of Chemistry, University of Gothenburg, Gothenburg, Sweden)

Electrochemical Monitoring of Neurotransmitter Release: From Small to Smaller

Tuesday, 28 September, 2010

08:30 to 09:30

Gerald Frankel
(Fontana Corrosion Center, The Ohio State University, Columbus, USA)

Prevention of Corrosion and Cracking of Steel Tanks for High Level Radioactive Waste

Wednesday, 29 September, 2010

08:30 to 09:30

Oleg Petrii
(Department of Chemistry Moscow State University, Moscow, Russia)

A Wide Variety of Electrochemistry as an Irresistible Attraction

Thursday, 30 September, 2010

08:30 to 09:30

Allen Bard
(The University of Texas, Austin, USA), Hongjun Zhou, Seong Jung Kwon, Fu-Ren Fan

Electrochemistry of Single Molecules and Particles

Friday, 1 October, 2010

08:30 to 09:30

Philippe Allongue
(Physique de la Matière Condensée, CNRS, Ecole Polytechnique Palaiseau, France)

Nanoelectrochemistry: From Synthesis to Functionality

ISE Prize winners 2009

Tajima Prize

Patrice Simon, *Université Paul Sabatier, Toulouse, France*

09:40 to 10:00, Tuesday, 28 September, 2010, Symposium 4

Ion Adsorption in Microporous Carbons: Towards High-Energy Density Electrical Double Layer Capacitors?

Prix Jacques Tacussel

Olaf Magnussen, *Christian-Albrechts-Universität, Kiel, Germany*

14:00 to 14:40, Tuesday, 28 September, 2010, Symposium 10

Photoswitching of Azobenzene-Containing Triazatriangulenium Adlayers on Au(111) Surfaces

Hans-Jürgen Engell Prize

Karl Mayrhofer, *Technische Universität München, Germany*

11:00 to 11:20, Wednesday, 29 September, 2010, Symposium 4

Identical-Location Microscopy for the Investigation of Corrosion Processes

Frumkin Memorial Medal

Oleg A. Petrii, *Moscow State University, Russia*

08:30 to 09:30, Wednesday, 29 September, 2010, Plenary

A Wide Variety of Electrochemistry as an Irresistable Attraction

Oronzio and Niccolò De Nora Foundation Prize of ISE on Environmental Electrochemistry

Carlos Martinez-Huitle, *Universidade Federal do Rio Grande do Norte, Brazil*

10:40 to 11:20, Wednesday, 29 September, 2010, Symposium 2

Application of BDD Electrodes for Electrochemical Oxidation of Organic Pollutants for the Wastewater Treatment

Oronzio and Niccolò De Nora Foundation Prize of ISE on Applied Electrochemistry

Dan Brett, *UCL, London, UK*

10:40 to 11:00, Tuesday, 28 September, 2010, Symposium 4

What Happens Inside a Fuel Cell? Developing an Experimental Functional Map of Fuel Cell Performance

and

Charles Delacourt, *Université de Picardie Jules Verne, Amiens, France*

11:20 to 11:40, Thursday, 30 September, 2010, Symposium 4

Life Prediction of Lithium-ion Batteries

Katsumi Niki Prize for Bioelectrochemistry

Serge Cosnier, *Université Joseph Fourier, Grenoble, France*

14:00 to 14:40, Tuesday, 28 September, 2010, Symposium 3

Bioelectrode Design for Biosensing Applications and Electricity Production : From Electrogenerated Polymers to Carbon Nanotubes

Oronzio and Niccolò De Nora Foundation Young Author Prize

Chih-Yu Hsu, *National Taiwan University, Taiwan*

Author of the article «A Study of Ion Exchange at the Poly(butyl viologen)-electrolyte Interface by SECM», published in Electrochimica Acta 53 (2008) 6244–6251.

Special Meetings

Monday, 27 September, 2010

Opening Ceremony

08:15 to 08:45, ▣ Apollon

Monday, 27 September, 2010

Division Officers Meeting- Luncheon Meeting

12:45 to 13:45, ▣ Risso 8

Monday, 27 September, 2010

Regional Representatives Meeting - Luncheon Meeting

12:45 to 13:45, ▣ Risso 7

Tuesday, 28 September, 2010

Council Meeting -Luncheon Meeting

12:45 to 13:45, ▣ Risso 8

Thursday, 30 September, 2010

General Assembly

11:45 to 12:45, ▣ Apollon

Division Luncheon Meetings

13:00 to 13:45

Division 1 Analytical Electrochemistry, ▣ Thalie
Division 2 Bioelectrochemistry, ▣ Euterpe
Division 3 Electrochemical Energy Conversion And Storage, ▣ Clio
Division 4 Electrochemical Materials Science, ▣ Uranie
Division 5 Electrochemical Process Engineering and Technology, ▣ Risso 6
Division 6 Molecular Electrochemistry, ▣ Risso 7
Division 7 Physical Electrochemistry, ▣ Risso 8

Friday 1, October, 2010

Closing Ceremony

11:40 to 12:00, ▣ Apollon

Overall Schedule by day

Monday 27 Sept.		Tuesday 28		Wednesday 29		Thursday 30		Friday 1 Oct.	
08:15-08:45	Opening								
08:45-09:45	Plenary	08:30-9:30	Plenary	08:30-9:30	Plenary	08:30-9:30	Plenary	08:30-9:30	Plenary
09:55-10:40	Oral presentations	09:40-10:20	Oral presentations	09:40-10:20	Oral presentations	09:40-10:20	Oral presentations	09:40-10:20	Oral presentations
10:40-11:00	Coffee Break	10:20-10:40	Coffee Break	10:20-10:40	Coffee Break	10:20-10:40	Coffee Break	10:20-10:40	Coffee Break
11:00-12:20	Oral presentations	10:40-12:20	Oral presentations	10:40-12:00	Oral presentations	10:40-11:40	Oral presentations	10:40-11:40	Oral presentations
12:20-14:00	Lunch	12:20-14:00	Lunch			11:40-12:40	ISE General Assembly	11:40-12:00	Closing Ceremony
	ISE Regional Rep. Meeting ISE Division Meeting		ISE Council Meeting			13:00-13:45	ISE Division Luncheons		
14:00-16:20	Oral presentations	14:00-16:20	Oral presentations	13:45	Excursions	14:00-16:20	Oral presentations		
16:20-16:40	Coffee Break	16:20-16:40	Coffee Break			16:20-16:40	Coffee Break		
16:40-18:20	Oral presentations	16:40-18:20	Oral presentations			16:40-18:20	Oral presentations		
18:20-20:00	Poster presentations	18:20-20:00	Poster presentations						
						19:00	Banquet		

Exhibitions

ALS CO., LTD, Bio-Logic SAS, DropSens, ELSEVIER, GAMRY, HEITO, Ivium Technologies, Materials Mates, OrigaLys, Palm Instruments, Princeton Applied Research/Solartron Analytical, Springer, Uniscan Instruments, Wiley-VCH, ZAHNER-elektrik

Monday:	10:00-20:00
Tuesday:	09:30-20:00
Wednesday:	09:30-12:00
Thursday	09:30-18:20
Friday:	09:30-11:00

Poster Session 1

Symposium 1, 2, 3, 4, 5, 6, 11 *(details on page 96)*

Poster set-up Monday 08:00-11:30 *See poster locations map on page 247*
Poster take-down Tuesday 14:00-16:00

Poster Presentations: Monday, 27 September: 18:20-20:00 ▣ Rhodes

Poster Session 2

Symposium 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 *(details on page 96)*

Poster set-up Tuesday 16:00-18:00 *See poster locations map on page 247*.
Poster take-down Thursday 14:00-16:00

Poster Presentations: Tuesday, 28 September: 18:20-20:00 ▣ Rhodes

General Information

The Registration Desk and ISE Desk will be located on the ground floor of the Acropolis Conference Center

Registration Hours during the Meeting

Sunday, 26 September 14:00-18:00
Monday, 27 September .....08:00-13:00 and 14:00-18:00
Tuesday, 28 September .....08:00-13:00 and 14:00-18:00
Wednesday, 29 September 08:00-12:00
Thursday, 30 September.....08:00-13:00 and 14:00-18:00
Friday, 1 October.....08:00-11:00

On site Registration Fees

Regular (ISE non-members) .....595 Euros
Regular ISE members .....485 Euros
Student (ISE non-members).....220 Euros
Student ISE members.....170 Euros
Regular and Student Registration fees include: Admission to all scientific and exhibition sessions, two lunches (Monday and Tuesday), welcome reception and exhibition reception, coffee breaks, conference bag, program book and abstract CD-ROM.

Lunches

Lunch will be provided in the conference center on Monday and Tuesday 12:20-13:50
ISE members participating at the Division meetings will receive lunch also on Thursday.

Coffee Breaks

Monday morning.....10:40-11:00
Tuesday to Friday.....10:20-10:40
Afternoons (except Wednesday) 16:20-16:40

Internet Service

Free wireless internet service is provided throughout the first floor of the conference center.

Publications

A special issue of the Society's journal, Electrochimica Acta, is planned based on selected original contributions made at the conference. Selection will be made by an international editorial Committee comprising the following Guest Editors, one for each of the Symposia in which the meeting is articulated:
Symposium 1: Alan Bond, Symposium 2: Chee-Seng Toh, Symposium 3: Lo Gorton, Symposium 4: Martin Winter, Symposium 5: Galina Tsirlina, Symposium 6: Francesco Di Quarto, Symposium 7: Stanko Brankovic, Symposium 8: François Lapicque, Symposium 9: Marcin Opallo, Symposium 10: Elena Savinova, Symposium 11: Fred Lisdat, Symposium 12: Vincent Vivier, Symposium 13: György Inzelt, Symposium 14: Alain Bergel, Symposium 15: Yann Bultel
The action of the editorial Committee will be co-ordinated by Sergio Trasatti, Editor-in-Chief of Electrochimica Acta.
The Special Issue will accommodate ca. 90 papers. Submission is only on invitation of one of the Guest Editors. Deadline for submission: 15 November 2010.

Accompanying Persons

Accompanying persons do not have to register but are not allowed to attend the lectures.

Social Program

Sunday, 26 September, 18:30-20:00
Welcome Reception

Monday, 27 September, 18:20-20:00
Exhibitor Reception

Tuesday, 28 September, 18:20-20:00
Tuesday Poster Reception

Wednesday, 29 September, departures from Nice Acropolis, 13.45 pm

Excursions

Grasse / Create your own perfume
At the heart of a region of lavender, roses, violets, jasmine and olives is Grasse, the perfume capital of the world, surrounded by charming landscapes and perched villages. We invite you to discover this vast natural and cultural amphitheatre, rich in fascinating historic and architectural treasures. Grasse has succeeded in making its industry an art, perceptible when you stroll along the alleys in the historic centre, and when you visit a perfumery, where you will be initiated in the art of creating your own perfume with professionnals.

Monte Carlo – Monaco / Eze
Enjoy the panoramic view of Nice and Villefranche over Cap Ferrat, Eze village, Beaulieu, Cap Ferrat.
Drive to the Old Town of Monaco. Free time to visit the Palace – Tour of the Principality following the amazing Formula 1 Grand Prix circuit !
Stop in Monte-Carlo and its luxurious casino, megayachts, chic boutiques. Return by Middle Corniche road and visit the charming medieval village of Eze.

Tourrettes / Loup / St Paul de Vence
Drive through the charming countryside of Provence, and taste Riviera specialty flower sweets in traditional Florian Confectionary.
Photo stop at a provencal jewel: Tourrettes/Loup. Visit the most visited village in France: Saint Paul de Vence, home of impressionist painters, with ancient cobblestone lanes, ramparts and art galleries.

Nice: Cimiez and Marc Chagall Museum
The tour starts in the Mont Boron area which possesses several outstanding villas. Amongst the elegant houses overlooking the sea, you'll find the surprising "Chateau de l'Anglais" with its Oriental inspiration, pink facade and crenellated tower. Then, you'll proceed to the hill of Cimiez where the English aristocratie built luxury residences like the Regina Palace and the Grand Hotel Victoria. Nearby, in the park of Château Valrose, former home of Baron Van der Wies, you'll see an amazing wooden iba (little hut) from Siberia. You will have the opportunity to discover the Chagall Museum in Cimiez. The Musée du Message Biblique Marc-Chagall (Marc Chagall Museum of Biblical Themes) stands out among French museums as one of the most interesting on the French Riviera.

Thursday, 30 September, 19:00

Banquet

Palais de la Méditerranée
Reception on the terrace of the Palais de la Méditerranée,
Three course dinner, wine and coffee in the salon «Le Vénitien» of the Palais de la Méditerranée.

Oral presentation program

Monday 27, September, 2010 - Morning

Plenary

Location: Apollon

Chaired by: Christian Amatore

08:45 to 09:45

Andrew Ewing (Department of Chemistry, University of Gothenburg, Gothenburg, Sweden)

Electrochemical Monitoring of Neurotransmitter Release: from Small to Smaller

Symposium 1: New Insights and Applications in Ionic Liquid Electrochemistry

Location: Risso 8

09:55 to 10:00 Introduction

Chaired by: Frank Endres and Paul Madden

10:00 to 10:40 **Keynote**

Paul Madden (Materials Department, University of Oxford, Oxford, United Kingdom)

Charge Transfer at the Metal/Ionic Liquid Interface

10:40 to 11:00

Coffee Break

11:00 to 11:20

Fernando Silva (Departamento de Química, Porto, Portugal), Renata Costa, Cristiana Gomes, Carlos M. Pereira, Fernando Silva

Double Layer in Room Temperature Ionic Liquids: Influence of temperature and ionic size on the differential capacitance and electrocapillary curves

11:20 to 11:40

Claudine Buess-Herman (Université Libre de Bruxelles, Faculté des Sciences Service CHANI, Bruxelles, Belgium), Stéphanie Vanderaspoilden, Jennifer Christophe

Interfacial behaviour of [BMIM][$N(Tf)_2$] ionic liquid at mercury and gold electrodes

11:40 to 12:00 **Invited**

Takashi Kakiuchi (Department of Energy and Hydrocarbon Chemistry, Kyoto University, Kyoto, Japan), Yukinori Yasui, Toshiyuki Motokawa, Yuki Kitazumi, Naoya Nishi

Significance and Generality of Ultraslow Relaxation of the Electrical Double Layer in the Ionic Liquid Side of the Interface in Electrochemistry of Ionic Liquids

12:00 to 12:20 **Invited**

Alexei Kornyshev (Department of Chemistry, Imperial College London, London, United Kingdom), Maxim Fedorov, Nikolaj Georgi, Svyatoslav Kondrat

The Anatomy of the Double Layer Structure and Capacitance in Ionic Liquids

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

09:55 to 10:00 Introduction
Chaired by: Lars J.C. Jeuken

10:00 to 10:40 **Keynote**
Nicolas Mano (Centre de Recherche Paul Pascal, UPR 8641, Pessac, France)

Engineering Enzymes for High Power Biofuel Cells

10:40 to 11:00
Coffee Break

11:00 to 11:20 **Invited**
Sergey Shleev (Malmö University, Malmö, Sweden)

Transistor-like behaviour of a fungal laccase

11:20 to 11:40 **Invited**
Maria Gabriela Almeida (REQUIMTE, CQFB, Caparica, Portugal)

Promising Strategies to Enhance the Direct Electron Transfer of Cytochrome c Nitrite Reductase - Towards the Implementation of an Electrochemical Biosensor

11:40 to 12:00
Wenzhi Jia (Analytische Chemie – Elektoanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Yvonne Ackermann, Chen Jin, Wei Xia, Martin Muhler, Wolfgang Schuhmann, Leonard Stoica

Hierarchically structured carbon nanomaterials with co-immobilized with glucose oxidase and horseradish peroxidase as a high potential biocathode

12:00 to 12:20
Barbara Kowalewska (Department of Chemistry, University of Warsaw, Warsaw, Poland), Pawel J. Kulesza

Enzymatic Carbon Nanotube Based Multi-Component Films for Oxidation of Ethanol in Biofuel Cells

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Supercapacitors

Location: Apollon

09:55 to 10:00 Introduction
Chaired by: John Miller and Francesca Soavi

10:00 to 10:40 **Keynote**
John Miller (Great Lakes Energy Institute, Case Western Reserve University and JME, Inc., Shaker Heights, USA), Ronald Outlaw, Brian Holloway

Graphene Double Layer Capacitor with ac Line Filtering Performance

10:40 to 11:00
Coffee Break

11:00 to 11:20 **Invited**
François Béguin (CRMD, University of Orléans, Orléans, France), Laurent Demarconnay, Roman Mysyk

High voltage carbon/carbon capacitors in protic electrolytic media

11:20 to 11:40
Robert Francke (Kekulé Institute for Organic Chemistry and Biochemistry, Bonn, Germany), Dario Cericola, Rüdiger Kötz, Siegfried Waldvogel

Novel Chelatoborates as Potential Conducting Salts for Electrochemical Double Layer Capacitors

11:40 to 12:00

John Owen (School of Chemistry, University of Southampton, Southampton, United Kingdom)

Optimisation of Supercapacitors Made from Battery Materials

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

09:55 to 10:00 Introduction

Chaired by: Kenichiro Ota

10:00 to 10:40 **KEYNOTE**

Masahiro Watanabe (Fuel Cell Nanomaterials Center, University of Yamanashi, Kofu, Japan)

Challenge to the development of new materials & structuresfor the next generation PEFCs

10:40 to 11:00

Coffee Break

11:00 to 11:20

Amanda Cristina Garcia (Instituto de Química de São Carlos, São Carlos, Brazil), Edson Antonio Ticianelli, Marian Chatenet

Kinetics of oxygen reduction in the presence of sodium borohydride in alkaline electrolyte

11:20 to 11:40

Shouzhong Zou (Department of Chemistry and Biochemistry, Miami University, Oxford, USA), Hongzhou Yang

Electrocatalysis on Facet-Controlled Pt-alloy Nanocrystals

11:40 to 12:00

Denis Kramer (Chemistry Department, Imperial College, London, United Kingdom), Byungchan Han, Kristin Persson, Tim Albrecht, Gerbrand Ceder, Anthony Kucernak

Assessing Stability of Binary Alloys in Aqueous Environments from First Principles

12:00 to 12:20

Bing-Joe Hwang (Chemical Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan), Shih-Hong Chang, Wei-Nien Su, Min-Hsin Yeh, Chun-Jern Pan, Kuan-Li Yu, Din-Goa Liu, Jyh-Fu Lee

Structural and Electronic Effects of Carbon-supported Pt_xPd_{1-x} Nanoparticles on Electrocatalytic Activity of Oxygen Reduction Reaction and Methanol Tolerance

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Battery Research

Location: Euterpe

09:55 to 10:00 Introduction
Chaired by: Takeshi Abe

10:00 to 10:40 **Keynote**
Takeshi Abe (Graduate School of Engineering, Kyoto University, Kyoto, Japan)

On the Interfacial Reactions of Graphite Electrode

10:40 to 11:00
Coffee Break

11:00 to 11:20 **Invited**
Ken Tasaki (Mitsubishi Chemical USA, Redondo Beach, USA)

New Insight into Electrochemical Differences in Cyclic Behaviors of a Lithium-Ion Battery Cell between the Ethylene Carbonate- and Propylene Carbonate-Based Electrolytes

11:20 to 11:40
Jean-Pierre Pereira-Ramos (CNRS, ICMPE UMR 7182, Thiais, France), Stéphane Bach, Jean-Baptiste Ducros, Patrick Willmann

Optimization of Cycling Properties of Layered Lithium Cobalt Nitrides as Negative Electrodes for Lithium-Ion Batteries

11:40 to 12:00
Alexander Skundin (Frumkin Institute of Physical Chemistry and Electrochemistry of the RAS, Moscow, Russia), Tatiana Kulova

Lithium-ion batteries: Negative electrodes tolerant to electrolyte humidity

12:00 to 12:20
Laure Monconduit (Institut Charles Gerhardt - AIME, Montpellier, France), Cyril Marino, Aurore Debenedetti, Frederic Favier

New Carbon-Phosphorous Composites as Negative Electrodes for Li-Ion Batteries

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

09:55 to 10:00 Introduction
Chaired by: Anna Lisowska-Oleksiak

10:00 to 10:20 **Invited**
Peter Pickup (Memorial Univ., St. Johns, Canada), Reza Moghaddam, Rodney Smith, Xiaorong Liu

Electrochemistry of High Surface Area Modified Electrodes

10:20 to 10:40 **Invited**
Pierre Audebert (PPSM, ENS Cachan, Cachan, France), Gilles Clavier, Fabien Miomandre, Valérie Alain, Clémence Allain

New functional electroactive tetrazine derivatives, and their application to electrofluorochromism

10:40 to 11:00
Coffee Break

11:00 to 11:20 **Invited**
Ari Ivaska (Process Chemistry Centre Laboratory of Analytical Chemistry, Åbo Akademi University, Turku, Åbo, Finland), Michal Wagner, Kai Yu, Carita Kvarnström

Electrochemical synthesis and spectroelectrochemical characterization of poly(benzopyrene)

11:20 to 11:40

Mieczyslaw Lapkowski (Faculty of Chemistry, Silesian University of Technology, Gliwice, Poland)

Unusual electrochemical and spectroscopic behaviour of some carbazole compounds during electropolymerization

11:40 to 12:20 **KEYNOTE**

Adam Pron (CEA, Grenoble, Grenoble, France), Pawel Gawrys, Anna Zoltowska, Malgorzata Zagorska, Guy Louarn, David Djurado

New arylene bisimide based organic semiconductors: Synthesis, electrochemical properties and application to field effect transistor fabrication

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

09:55 to 10:00 Introduction

Chaired by: Kurt Hebert and Vincent Maurice

10:00 to 10:40 **KEYNOTE**

Joris Proost (Université Catholique de Louvain, Louvain-la-Neuve, Belgium), Dimitri Mercier, Quentin Van Overmeere

The Growth of Anodic Oxide Films : Looking with New Eyes into Old Questions

10:40 to 11:00

Coffee Break

11:00 to 11:20

Xuegeng Yang (Technische Universitaet Dresden, Dresden, Germany), Kerstin Eckert, Stefan Odenbach

Potentiostatic Current Oscillations during Anodic Dissolution of Iron in Acidic Solution

11:20 to 11:40

Sandro Cattarin (Institute for Energetics and Interphases (IENI) CNR, Padova, Italy), Paolo Guerriero, Marco Musiani, Ausonio Tuissi, Lourdes Vázquez-Gómez

Anodic Etching of NiTi in a Low Hazard Neutral Fluoride Medium

11:40 to 12:00

Hiroki Habazaki (Faculty of Engineering, Hokkaido University, Sapporo, Japan), Yoshiki Konno, Aoki Yoshitaka

Growth Behaviour of Porous Anodic Films on Iron in Fluoride-Containing Ethylene Glycol Electrolyte

12:00 to 12:20

Delphine Veys-Renaux (Institut Jean Lamour, Nancy, Université, Dpt. Chemistry and Physics of Solids and Surfaces, Vandoeuvre les Nancy, France), Chems-Eddine Barchiche, Emmanuel Rocca

Plasma Electrolytic Coatings on Mg Alloys : Towards a Reasonable Process with a Simple Electrical Regime

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

09:55 to 10:00 Introduction

Chaired by: Catherine Debiemme-Chouvy

10:00 to 10:20

Philip Bartlett (School of Chemistry, University of Southampton, Southampton, United Kingdom), David Cook, Wenjian Zhang, William Levason, Gillian Reid, Jie Ke, Wenta Su, Michael George, James Wilson, David Smith, Kanad Mallik, Edward Barrett, Pier Sazio

The electrodeposition of copper from supercritical CO_2/acetonitile mixtures and from supercritical trifluoromethane

10:20 to 10:40

Tom Moffat (NIST, Gaithersburg, USA), C. H. Lee, L. Y. Ou Yang

Superconformal Film Growth: Mechanism and Quantification

10:40 to 11:00

Coffee Break

11:00 to 11:20 **Invited**

Robert Dryfe (University of Manchester, Manchester, United Kingdom), Daniela Plana, Samson Patole, Galyna Shul

Electrochemical Investigation of Electroless Deposition

11:20 to 11:40

Murilo Cabral (Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Valber Albuquerque Pedrosa, Sergio Antonio Spinola Machado

Deposition of selenium thin layers on gold surfaces from sulphuric acid media: Studies using electrochemical quartz crystal microbalance, cyclic voltammetry and AFM

11:40 to 12:00

Gerd Mutschke (Inst. Fluid Mech., Dresden University of Technology, Dresden, Germany), Kristina Tschulik, Tom Weier, Margitta Uhlemann, Andreas Bund, Jochen Fröhlich

On the action of magnetic gradient forces in micro-structured copper deposition

12:00 to 12:20

Patricia Paredes-Olivera (Dpto. de Matemática y Física, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Martín Patrito, Fermanda Juárez

First Stages of Metal Junction Formation on Grafted Si(111) Surface

Symposium 8: Electrochemical Process Engineering and Technology

Location: Risso 7

09:55 to 10:00 Introduction

Chaired by: F. Lapicque and M. Wessling

10:00 to 10:20 **Invited**

Kai Sundmacher (Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg, Germany), Richard Hanke-Rauschenbach, Sebastian Kirsch, Liisa Rihko-Struckmann

Electrochemical Preferential Oxidation (ECPrOx) of CO in a PEM-Reactor for the Production of Pure Hydrogen: Experimental and Model-based Process Analysis

10:20 to 10:40

Raissa El-Haddad (Department of Mechanical & Industrial Engineering, Concordia University, Montreal, Canada)

A Mechanistic Model of the Gas Film Dynamics during the Electrochemical Discharge Phenomenon

10:40 to 11:00

Coffee Break

11:00 to 11:40 **KEYNOTE**

Hervé Lavelaine de Maubeuge (ArcelorMittal Maizières Research, Maizières-lès-Metz, France), Antoine Allanore, Jean Pierre Birat

Iron electrowinning a process route for Ultra Low CO_2 in Steelmaking

11:40 to 12:00

Sascha Muehlenhoff (TU Dresden, Dresden, Germany), Xuegeng Yang

Lorentz-force-driven convection under pulsed current conditions

12:00 to 12:20

Cyril Renault (Laboratoire de Génie Chimique, Toulouse, France), Stéphane Colin, Patrick Cognet, Théodore Tzédakis, Stéphane Orieux, Hélène Chaumat, Sandrine Geoffroy, Christiane André-Barrès, Raluca Ciumag

A multi-channel microreactor dedicated to the electro-organic synthesis

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

09:55 to 10:00 Introduction

Chaired by: Jiri Ludvik and Bernd Speiser

10:00 to 10:20 **INVITED**

Armando Pombeiro (Instituto Superior Tecnico, Lisboa, Portugal)

Redox Potential-Structure Relationships and Activation of Coordination Compounds by Electron-Transfer

10:20 to 10:40

Irena Hoskovcová (Department of Inorganic Chemistry, Institute of Chemical Technology Prague, Prague, Czech Republic), Tomás Tobrman, Dalimil Dvorák, Stanislav Zális, Jirí Ludvík

Reduction of Cr and Fe Aminocarbene Complexes: Electronic Effect of Heterocyclic Substituent

10:40 to 11:00

Coffee Break

11:00 to 11:20 **INVITED**

Wolfgang Kaim (Institut für Anorganische Chemie, Universität Stuttgart, Stuttgart, Germany), Ralph Hübner, Jan Fiedler

Spectroelectrochemistry of a Reversible Intramolecular One-Electron Oxidative Addition

11:20 to 11:40

Lothar Dunsch (Center for Spectroelectrochemistry, Department of Electrochemistry and Conducting Polymers, IFWDresden, Dresden, Germany), Alexey Popov, Natalia Shustova, Mary Mackay, Curtis Coumbe, Paige Philips, Steven Stevenson, Steven Strauss, Olga Boltalina

ESR UV-Vis-NIR Spectroelectrochemistry of a derivatised endohedral fullerene: The special case of $Sc_3N@C_{80}(CF_3)_2$

11:40 to 12:00

Ornella Smila-Castro (University of Birmingham, Birmingham, United Kingdom), Richard Wiltshire, Neil Connelly, William Geiger, Trevor Rayment

X-ray Absorption Spectroscopy Studies of Electrochemical Intermediates

12:00 to 12:20

Viatcheslav Jouikov (UMR 6510, University Rennes 1, Rennes, France), Joceline Zeitouny

EPR Spectroelectrochemistry of Paramagnetic Intermediates *in situ* Produced by Reduction/Oxidation of Electrogenerated Species

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

09:55 to 10:00 Introduction

Chaired by: Marc Robert and Wolfgang Schmickler

10:00 to 10:40 **Keynote**

Sharon Hammes-Schiffer (Chemistry Department, Pennsylvania State University, University Park, USA)

Electrochemical Proton-Coupled Electron Transfer: Theory and Applications

10:40 to 11:00

Coffee Break

11:00 to 11:20 **Invited**

Eric Borguet (Department of Chemistry, Temple University, Philadelphia, USA)

Charge Transfer through Single Molecule at Interfaces

11:20 to 11:40 **Invited**

Eckhard Spohr (Faculty of Chemistry University of Duisburg-Essen, Essen, Germany)

Molecular Dynamics Modeling of Proton Discharge at the Aqueous/Metallic Interface

11:40 to 12:00

David Fermin (School of Chemistry, University of Bristol, Bristol, United Kingdom), Gabriela Kissling, Christa Bunzli

Size-Dependent Electrochemical Rectification Mediated by Two-Dimensional Assemblies of Quantum Dots

12:00 to 12:20 **Invited**

Axel Gross (Institute of Theoretical Chemistry, Ulm University, Ulm, Germany)

Structures and processes at the electrochemical solid/liquid interface studied from first principles

Symposium 11: Sensors and Biosensors

Location: Hermes

09:55 to 10:00 Introduction

Chaired by: Heinz-Bernhard Kraatz and Fred Lisdat

10:00 to 10:20 **Invited**

Heinz-Bernhard Kraatz (Department of Chemistry, University of Western Ontario, London, Canada)

New approaches to monitor protein kinase-catalyzed phosphorylation reactions

10:20 to 10:40

Emil Palecek (Institute of Biophysics, Academy of Sciences of the Czech Republic, v.v.i., Brno, Czech Republic), Veronika Ostatna, Mojmir Trefulka, Martin Bartosik, Hana Cernocka

New Trends in Protein and Polysaccharide Electrochemistry

10:40 to 11:00

Coffee Break

11:00 to 11:40 **Keynote**

Ernesto Julio Calvo (INQUIMAE, Departamento de Química Inorgánica Analítica y Química Física Facultad de Ciencias Exactas y Naturales, Buenos Aires, Argentina), Pablo David Scodeller, Victoria Flexer, Mario Tagliazucchi

Unique possibilities in amperometric enzyme electrodes with LbL organized multilayers

11:40 to 12:00

Benoît Piro (ITODYS, CNRS, UMR 7086, University Paris Diderot, Paris 7, Paris Cedex 13, France), Steeve Reisberg, Vincent Noël, Huynh-Thien Duc, Minh-Chau Pham

Direct and Rapid Electrochemical Immunosensing System based on a Conducting Polymer

12:00 to 12:20

Wlodzimierz Kutner (Department of Physical Chemistry of Supramolecular Complexes, Institute of Physical Chemistry of the Polish Academy of Sciences, Warsaw, Poland), Agnieszka Pietrzyk, Subramanian Suriyanarayanan, Raghu Chitta, Eranda Maligaspe, Melvin E. Zandler, Francis D'Souza, Francesco Sannicolò, Patrizia R. Mussini

Molecularly Imprinted Polymer (MIP) Films as Recognition Elements of Selective Piezoelectric Microgravimetry Chemosensors for Biogenic Amines

Symposium 13: Surface Functionalization

Location: Rhodes 9-2

09:55 to 10:00 Introduction

Chaired by: Jean Christophe Lacroix and Nongjian Tao

10:00 to 10:40 **Keynote**

Nongjian Tao (Center for Bioelectronics and Biosensors, Biodesign Institute Arizona State University, Tempe, USA)

Imaging local electrochemical current and interfacial impedance optically

10:40 to 11:00

Coffee Break

11:00 to 11:20

Outi Toikkanen (Department of Chemistry, Aalto University School of Science and Technology, Espoo, Finland), Nguyet Doan, Mikhail Erdmanis, Kyösti Kontturi, Harri Lipsanen, Babak Parviz

Controlling gold nanoparticle densities on electrode surfaces by combination of self assembly and electron beam lithography

11:20 to 11:40

Mariana Chirea (CIQ-UP L4, Faculdade de Ciências, Universidade do Porto, Porto, Portugal), Ana Cruz, Joao Borges, Carlos Pereira, A. Fernando Silva

Size and Density Dependent Electrochemical Properties of Gold Nanorods Self-assembled on Gold Electrodes

11:40 to 12:00

Jean-Marc Noel (UMR 6226 Sciences Chimiques de Rennes, Rennes, France), Dodzi Zigah, Philippe Hapiot, Jacques Simonet

Nanoparticles adsorption on glassy carbon surface modified by diazonium salts

12:00 to 12:20

Benjamin Corgier (Institut de Chimie et de Biochimie, Université Lyon 1, Villeurbanne, France), Loic Blum, Christophe Marquette, Daniel Bélanger

Aryldiazonium salts skill from surface nanopatterning to biomolecule electro-addressing

Symposium 15: Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells

Location: Rhodes 10

09:55 to 10:00 Introduction

Chaired by: Michael Eikerling, Alejandro A. Franco and Kourosh Malek

10:00 to 10:20 **Invited**

Wright Edward (Fuel Cell Research, Johnson Matthey Technology Centre, Reading, United Kingdom), Sarah Ball

Experimental Characterisation of Fuel Cell Electrocatalysts

10:20 to 10:40 **Invited**

Timo Jacob (Institute for Electrochemistry, Ulm University, Ulm, Germany), John A. Keith, Manuel Landstorfer

First principles modeling of PEMFC reactions

10:40 to 11:00

Coffee Break

11:00 to 11:40 **Keynote**

Ohma Atsushi (Nissan Research Center, Nissan Motor Co., Ltd., Yokosuka, Japan), Kazuhiko Shinohara

Analysis of PEMFC Catalyst Layers for Reduction of Pt Usage at Nissan

11:40 to 12:00 **Invited**

Jeffrey Greeley (Center for Nanoscale Materials, Argonne National Laboratory, Argonne, USA)

First principles investigations of electrocatalysis and corrosion

12:00 to 12:20

Alfred Anderson (Chemistry Department, Case Western Reserve University, Cleveland, USA), Feng Tian

Theoretical Study of Contributions to the Overpotential for Platinum Oxygen Cathodes

Monday, 27 September, 2010 - Afternoon

Symposium 1: New Insights and Applications in Ionic Liquid Electrochemistry

Location: Risso 8

Chaired by: Toshio Fuchigami and Marcin Opallo

14:00 to 14:20 **Invited**

Toshio Fuchigami (Department of Electronic Chemistry, Tokyo Institute of Technology, Yokohama, Japan)

Selective Electrochemical Fluorination of Organic Compounds in Ionic Liquid under Ultrasonication

14:20 to 14:40 **Invited**

Hisahiro Hagiwara (Graduate School of Science and Technology, Niigata University, Niigata, Japan)

Supported Ionic Liquid Catalyst (SILC) as a Soft Method to Immobilize Homogeneous Catalysts

14:40 to 15:00

Marie-Louise Saboungi (CRMD, Orléans cedex 2, France), Bachir Aoun, Miguel González, Margarita Russina, David Price, Andreas Goldbach, Shinji Kohara

Structure and Dynamics of Imidazolium-based Ionic Liquids

15:00 to 15:20

Susumu Kuwabata (Department of Applied Chemistry, Graduate School of Engineering, Suita, Japan)

In Situ Electron Microscope Observation of Electrochemical Reactions in Ionic Liquids

15:20 to 15:40

Peter De Vreese (Laboratory for Chemical Process Technology, Katholieke Hogeschool St.-Lieven, Gent, Belgium), Kurt Haerens, Edward Matthijs, Koen Binnemans

Reporting Electrode Potentials in Ionic Liquids

15:40 to 16:00

Mikhail Vorotyntsev (ICMUB, UMR 5260, Université de Bourgogne, Dijon, France), Veronika Zinovyeva, Dmitry Konev, Michel Picquet, Laurent Gaillon, Cécile Rizzi

Diffusional Transport in Ionic Liquids: Stokes-Einstein or "Sliding Sphere" Model? Ferrocene in Imidazolium Liquids

16:00 to 16:20

Coffee Break

16:20 to 17:00 **Keynote**

Philippe Hapiot (Sciences Chimiques de Rennes (Equipe MACSE), UMR CNRS, Universite de Rennes 1, N° 6226, Rennes, France)

Electrochemical Properties and Reactivity in Room Temperature Ionic Liquids

17:00 to 17:20

Roberto Torresi (Instituto de Química, Universidade de São Paulo, São Paulo, Brazil), Claude Deslouis, Catherine Debiemme-Chouvy, Tânia Benedetti, Lucas Carvalho

Hydrodynamic and electrochemical impedance study of ferrocene redox reaction in ionic liquids

17:20 to 17:40

Ronald Fawcett (Department of Chemistry, University of California, Davis, USA), Attila Gaal, Daniel Misicak

Electron Transfer Kinetics to the Metallocenes in Imidazolium Ionic Liquids and Their Mixtures with N.N-dimethylacetamide

17:40 to 18:00

Darren Walsh (University of Nottingham, Nottingham, United Kingdom)

Scanning Electrochemical Microscopy in Ionic Liquids

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

Chaired by: William Heineman, Christoph Nebel, Neil Pasco and Sergey Shleev

14:00 to 14:20 **Invited**

Tautgirdas Ruzgas (Department of Biomedical Laboratory Science and Technology, Faculty of Health and Society, Malmö University, Malmö, Sweden), Marius Dagys, Karolina Haberska, Thomas Arnebrant, Juozas Kulys, Sergey Shleev

Reduction of O_2 at laccase modified gold nanoparticles

14:20 to 14:40

Masato Tominaga (Graduate School of Science and Technology, Kumamoto University, Kumamoto, Japan), Yuichi Fukamichi, Hiroyuki Yamaguchi, Ayako Iwaoka, Shingo Sakamoto

Electron Transfer Reaction of Laccase with Single-Walled Carbon Nanotubes Modified Gold Electrode

14:40 to 15:00

Elisabeth Lojou (Bioénergétique et Ingéniérie des Protéines, CNRS, Marseille, France), Alexandre Ciaccafava, Pascale Infossi, Marie-Thérèse Giudici-Orticoni

Hyperthermophilic hydrogenases as catalysts for fuel cells: Strategies for an efficient immobilization at electrodes

15:00 to 15:20

Fred Lisdat (Biosystems Technology, Wildau University of Applied Sciences, Wildau, Germany), Christoph Tanne, Gero Göbel

Combination of two protein MWCNT electrodes for biofuel cell application

15:20 to 15:30

Yémima Bon Saint Côme (University of Bordeaux I, Institut des Sciences Moléculaires, site ENSCBP, Pessac, France), Rihab Nasraoui, Feng Li Qu, Janine Gajdzik, Etienne Mathieu, Rolf Hempelmann, Alain Walcarius, Alexander Kuhn

Bioelectrosynthesis on optimized electrodes for electrochemical reactors

15:30 to 15:40

Dongping Zhan (Department of Chemistry, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China), Allen Bard, Zhong-Qun Tian

Amperometric ISEs and Their Biochemical Applications

15:40 to 15:50

Anne Meunier (UMR 8640, Département de Chimie, Ecole Normale Supérieure, Paris, France), Isabelle Fanget, Rémy Fulcrand, Marine Bretou, Frédéric Lemaître, Manon Guille, Stéphane Arbault, François Darchen, Christian Amatore

Studies of Exocytosis Mechanism by Coupling Amperometry and Fluorescence Microscopy

15:50 to 16:00

Rabeay Hassan (Biological System Analysis, Helmholtz Centre for Infection Research, Braunschweig, Germany)

Direct Electron Transfer from Viable Yeasts, in Particular Candida albicans, to Electrodes

16:00 to 16:10

Lydie Berardo (Universite Montpellier 2, Montpellier, France), Sebastien Balme, Jean-Marc Janot, Francois Henn

Ion transport through a biological ionic-channel confined in a nanoporous membrane

16:10 to 16:20

Michael Kurczy (Department of Chemical and Biological Engineering, Göteborg, Sweden), Kelly L. Adams, Johan Engelbrektsson, Lisa Mellander, Marina Voinova, Roger Karlsson, Andrew G. Ewing, Ann-Sofie Cans

Steady-state Amperometry Shows that Lipid Membrane Composition Affects the Diameter of a Lipid Nanotube in an Artificial Cell Model for Exocytosis

16:20 to 16:40

Coffee Break

16:40 to 17:20 **Keynote**

Derek Lovley (Department of Microbiology, University of Massachusetts, Amherst, USA)

Electrically Conductive Biofilms: Mechanisms for Long-Range Electron Transfer

17:20 to 17:40 **Invited**

Lars J.C. Jeuken (Institute of Membrane and Systems Biology, University of Leeds, Leeds, United Kingdom), Sophie A. Weiss, Stephen D. Evans, Peter J. F. Henderson, Richard J. Bushby

Ubiquinol oxidase activity in lipid-membrane modified electrodes

17:40 to 18:00 **Invited**

Neil Pasco (Lincoln Ventures Ltd, Christchurch, New Zealand), Nick Glithero, Lo Gorton

Biosensor development for detecting lactose in dairy wastewater

18:00 to 18:20

Alexander Volkov (Department of Chemistry, Oakwood University, Huntsville, USA), Vladislav Markin

Biologically Closed Electrical Circuits in the Venus Flytrap and Mimosa Pudica

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

Chaired by: Deborah Jones and Robert Slade

14:00 to 14:20 **Invited**

Stephen Paddison (Chemical & Biomolecular Engineering, University of Tennessee, Knoxville, USA), Dongsheng Wu, Chen Wang, Jeffrey Clark

Multiscale Modeling of Structure & Transport in Polymer Electrolyte Membranes

14:20 to 14:40

Je-Deok KIM (Fuel Cell Materials Center, NIMS, Tsukuba, Japan), Toshiyuki Mori, Chikashi Nishimura

Highly flexible nafion-1,2,3-triazole membranes

14:40 to 15:00

Surya Subianto (Institut Charles Gerhardt, UMR 5253, Equipe AIME, Montpellier, France), Sara Cavaliere, Deborah Jones, Jacques Roziere

Electrospinning of Long- and Short-Side Chain PFSA Membranes for Fuel Cell Applications

15:00 to 15:20

Michihisa Koyama (Inamori Frontier Research Center, Fukuoka, Japan), Teppei Ogura, Takayoshi Ishimoto

Theoretical Study on Durability of Fuel Cell Materials

15:20 to 15:40

Pierre Oberholzer (Paul Scherrer Institut (PSI), Villigen, Switzerland), Pierre Boillat, Raphael Siegrist, Raffaella Perego, Anders Kästner, Bernhard Seyfang, Eberhard Lehmann, Günther G. Scherer, Alexander Wokaun

Neutron radiography of deuterium labeled water to study mass transport in the polymer electrolyte fuel cell (PEFC) membrane

15:40 to 16:00

Benoit Legros (LEPMI, Grenoble, France), Pierre-Xavier Thivel, Yann Bultel, Mickaël Boinet, Ricardo Nogueira

Acoustic Emission: Towards a Real Time Diagnosis Technique Solution for PEMFC

16:00 to 16:20 **Invited**

Keith Scott (CEAM, Newcastle-upon-Tyne, United Kingdom), M. Q. Li

Composite Polymer Electrolyte Membrane for High Temperature Fuel Cells

16:20 to 16:40

Coffee Break

16:40 to 17:00

Joël Pauchet (CEA, LITEN, LCPEM, Grenoble, France), Jenny Jonquille, Didier Jamet, Jean-Marc Beraud, Jean-Marc Senecot

New Materials for Gas Diffusion Layers of PEM Fuel Cells

17:00 to 17:20

Paola Gallo Stampino (Chimica, Materiali e Ingegneria Chimica, Milano, Italy), Luca Omati, Renato Pelosato, Cristiani Cinzia, Dotelli Giovanni

Design and Characterization of a Gas Diffusion Electrode (GDE) for a Polymer Electrolyte Membrane Fuel Cell (PEM-FC)

17:20 to 17:40

Torsten Knöri (German Aerospace Center (DLR), Institute of Technical Thermodynamics, Stuttgart, Germany)

Influence of the Start-Up Procedure on the Performance of Polymer Electrolyte Fuel Cells

17:40 to 18:00

Victor Rosca (ECN, PEMFC Group, Petten, Netherlands)

Propagation of performance losses in PEM fuel cells under high-temperature and low-humidity conditions

18:00 to 18:20

Botao Huang (Laboratoire Réactions et Génie des Procédés, CNRS, Nancy-University, Nancy, France), Caroline Bonnet, Yohann Chatillon, François Lapicque, Sébastien Leclerc, Melika Hinaje, Stéphane Raël

Effect of accelerated air relative humidity (RH) cycling tests on the cell aging of PEM fuel cells

18:20 to 18:40

Nicolas Caqué (LEPMI, Saint Martin d'Hères, France), Marion Paris, Marian Chatenet, Elisabeth Rossinot, Richard Bousquet, Eric Claude

Aging Analysis of a PEMFC Stack Using Uncoated Metallic Bipolar Plates

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Battery Research

Location: Euterpe

Chaired by: Robert Kostecki and Petr Novak

14:00 to 14:20 **Invited**

Robert Kostecki (Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory, Berkeley, USA), Laurence J. Hardwick, Ivan T. Lucas, Elad Pollak, Vijay A. Sethuraman

Li^+ Transport Mechanism in Graphite and Li-Me Alloys

14:20 to 14:40

Shinichi Komaba (Department of Applied Chemistry, Tokyo University of Science, Shinjuku, Japan), Tomoaki Ozeki, Keiji Shimomura, Naoaki Yabuuchi, Yui Hiroharu

Polyacrylate Binders for High Capacity Silicon-Based Negative Electrodes of Li-Ion Batteries

14:40 to 15:00

Claudia Ramirez-Castro (LGMPA, Polytech Nantes, Université de Nantes, Nantes, France), Cédric Martin, Olivier Crosnier, Richard Retoux, Daniel Bélanger, Pawel Nowakowski, Thierry Brousse, Frédéric Christien

Chemical grafting as a mean to improve cycling ability of silicon anode in lithium ion batteries

15:00 to 15:20

Jong-Pil Jegal (Department of Materials Science and Engineering, Yonsei University, Seoul, Korea), Jin Go Kim

Synthesis and electrochemical properties of $LiFePO_4$/carbon nanotube nanocomposite for high rate Li-ion batteries

15:20 to 15:40

Magdalena Graczyk-Zajac (Institute of Materials Science, Darmstadt University of Technology, Darmstadt, Germany), Andrzej Nowak, Claudia Fasel, Ralf Riedel

SiCN ceramic/graphite anodes: how to explain the high capacity of this composite?

15:40 to 16:00

Jolanta Swiatowska (Laboratoire de Physico-Chimie des Surfaces (UMR 7045) CNRS, Chimie ParisTech (ENSCP), Paris, France), Feng Liao, Vincent Maurice, Antoine Seyeux, Lorena Klein, Philippe Marcus

Thin films of transition metal sulfides as anodes of lithium ion batteries investigated by XPS and ToF-SIMS

16:00 to 16:20 **Invited**

Petr Novak (Paul Scherrer Institute, Villigen PSI, Switzerland), Andreas Hintennach, Holger Schneider, Pascal Maire

In situ Look at Electrodes of Lithium Batteries

16:20 to 16:40

Coffee Break

16:40 to 17:00

Ladislav Kavan (J. Heyrovsky Institute of Physical Chemistry, Prague 8, Czech Republic), Revathi Bacsa, Meltem Tunckol, Philippe Serp, Shaik M. Zakeeruddin, Florian Le Formal, Marketa Zukalova, Graetzel Michael

Activation of Phosphate Olivines $LiMPO_4$ (M = Fe, Mn) by Functionalized Carbon Nanotubes: Application for Cathode Materials of Li-Ion Batteries

17:00 to 17:20

Radostina Stoyanova (Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences, Sofia, Bulgaria)

Electron Paramagnetic Resonance Spectroscopy: *ex-situ* Method for Analysis of Local Structure of Transition Metal Ions in Layered Cathodes

17:20 to 17:40

Rita Baddour-Hadjean (CNRS-ICMPE, Thiais, France), Jean-Pierre Pereira-Ramos, Christelle Navone

In Situ Raman Evidence for the Nanosize Effect on the Structural and Electrochemical Behaviour of $Li_xV_2O_5$ Thin Films

17:40 to 18:00

Klemen Pirnat (National Institute of Chemistry, Ljubljana, Slovenia), Bostjan Genorio, Robert Dominko, Miran Gaberscek

Electroactive Organic Compounds in Li-ion Batteries

18:00 to 18:20

Viacheslav Barsukov (Department of Electrochemical Power Engineering & Chemistry, Kiev National University of Technologies & Design, Kiev, Ukraine), Volodymyr Khomenko

The Mockups of Lithium-Ion Batteries Based on Ionic Liquid Electrolytes

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

Chaired by: Christian Amatore and Mieczyslaw Lapkowski

14:00 to 14:20

Claude Chevrot (University of Cergy Pontoise, Cergy Pontoise, France)

Electroactive Interpenetrating Polymer Networks

14:20 to 14:40

Bjorn Winther-Jensen (Dept. Materials Engineering, Monash University, Clayton, Australia), Robert Kerr, Kevin Fraser, Chun Ong, Maria Forsyth, Douglas R. MacFarlene

Surprising properties of conducting / non-conducting polymer alloys

14:40 to 15:00

Delphine Schaming (Laboratoire de Chimie Physique, Orsay, France), Alain Giraudeau, Pierre Audebert, Laurent Ruhlmann

A new easy way for the electropolymerization of porphyrins

15:00 to 15:20

Matthias Heim (Université Bordeaux I, ISM, Groupe NSySA, Pessac, France), Stéphane Reculusa, Patrick Garrigue, Serge Ravaine, Alexander Kuhn, Nicolas Mano

Synthesis and characterization of macroporous conducting polymers

15:20 to 15:40

Nataliya Roznyatovskaya (Fraunhofer Institut of Chemical Technology, Pfinztal, Germany), Vladimir Roznyatovskiy, Karsten Pinkwart, Jens Tübke, Hubert Weyrauch, Jonathan Sessler

Naphthobipyrrole as a New Monomer Unit for Low Voltage Electrochromic Polymers

15:40 to 16:00

Christian Perruchot (Université Paris Diderot Paris 7, ITODYS, UMR 7086, Paris Cedex 13, France), Amani Chams, Nabiha Maslah, Gregory Dupeyre, Abderrahim Yassar, Mor Marieme Dieng, Abdou Koné, Mohammed Lemine Hametou Hamady

Terthiophene and Terthiophene Derivative Electroactive Polymers Synthesized in Aqueous Micellar Medium.

16:00 to 16:20 **Invited**

Rudolf Holze (Technische Universität Chemnitz, Institut für Chemie, AG Elektrochemie, Chemnitz, Germany)

Copolymers - A refined way to tailor intrinsically conducting polymers

16:20 to 16:40

Coffee Break

16:40 to 17:20 **Keynote**

Sampath Srinivasan (Inorganic and Physical Chemistry, Bangalore, India)

Nanoparticles Supported on Titanium Nitride: Efficient Electrocatalyst for Alcohol Oxidation and Implications in Direct Alcohol Fuel Cells

17:20 to 17:40 **Invited**

Jaroslav Stejskal (Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague 6, Czech Republic), Miroslava Trchova

Polyaniline Materials: Conducting, Responsive, and Functional

17:40 to 18:00

Yongfang Li (Institute of Chemistry, Chinese Academy of Sciences, Beijing, China), Youjun He, Guangjin Zhao, Maojie Zhang

Indene-Fullerene Adducts: Electrochemical Properties and Photovoltaic Applications as Acceptor in Polymer Solar Cells

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

Chaired by: Francesco Di Quarto and Hiroki Habazaki

14:00 to 14:40 **Keynote**

Ken-ichi Shimizu (Keio University, Yokohama, Japan)

Impact of Advanced Scanning Electron Microscopy for Corrosion Studies

14:40 to 15:00 **Invited**

Philippe Refait (Laboratoire d'étude des matériaux en milieux agressifs (LEMMA), EA 3167, Université de La Rochelle, La Rochelle, France), Dang dan Nguyen, Marc Jeannin, René Sabot, Sophie Sablé, Mikaël Langumier

Electrodeposition of green rusts in anoxic seawater-like solutions

15:00 to 15:20

Ping Qiu (Division of Surface and Corrosion Science, Stockholm, Sweden), Christofer Leygraf

Selective atmospheric corrosion of brass studied through a surface multi-analytical approach

15:20 to 15:40 **Invited**

Vincent Maurice (Chimie ParisTech, CNRS (UMR 7045), Paris, France), J. Swiatowska, M. Pisarek, A. Seyeux, L.H. Klein, P. Marcus, S.E. Potts, M.C.M. van de Sanden, W.M.M. Kessels, E. Härkönen, M. Ritala

Electrochemical and surface analysis of ultra-thin aluminium oxide coatings grown by ALD for corrosion protection of steel

15:40 to 16:00

Hidetaka Asoh (Department of Applied Chemistry, Faculty of Engineering, Kogakuin University, Tokyo, Japan), Sachiko Ono

Fabrication of Thick Crystalline Anodic Porous Alumina Membrane with Acid Resistance

16:00 to 16:20

Rimantas Ramanauskas (Metal Electrochemistry Department, Institute of Chemistry Centre of Physical and Technological Sciences, Vilnius, Lithuania), Laima Gudaviciute, Aleksandr Kosenko, Alius Sudavicius

Characterization of Oxide Films on Zn and Zn Alloy Surfaces

16:20 to 16:40

Coffee Break

16:40 to 17:00

Daria Tabatabai (DECHEMA e.V., Frankfurt am Main, Germany), Florian Feil, Guido Grundmeier, Sandra Janke, Peter Thissen, Wolfram Fürbeth

Modified anodizing coatings with self-healing properties for the corrosion protection of magnesium alloys

17:00 to 17:20

Godja Norica (Cest Center of Electrochemical Surface Technology, Wiener Neustadt, Austria), Löcker Christine, Schindel Andreas, Wendrinsky Josef, Gerhard E. Nauer

Mechanistic Investigations of Spark Anodization Procedures for Corrosion Protection of Al- und Mg-Alloys

17:20 to 17:40 **Invited**

Monica Santamaria (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Università di Palermo, Palermo, Italy), Francesco Di Quarto, Sandrine Zanna, Philippe Marcus

The Influence of Surface Treatment on the Kinetic of Growth of Anodic Films on Magnesium in Alkaline Solution

17:40 to 18:00

Aleksey Yerokhin (Department of Engineering Materials, University of Sheffield, Sheffield, United Kingdom), Evgeny Parfenov, Chen-Jui Liang, Allan Matthews

In-situ Impedance Spectroscopy of Plasma Electrolytic Oxidation Processes

18:00 to 18:20

Alessandra Beni (Empa- Materials Science & Technology, Duebendorf, Switzerland), Joern Luebben, Ewa Ura-Binczyk, James DeRose, Patrik Schmutz

Oxidation and Corrosion Mechanisms of Al-Cr-Fe Complex Metallic Alloys (CMA) and Their Influence on Functional Surface Properties

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

Chaired by: Eliane Sutter and Patrik Schmuki

14:00 to 14:20

Patrik Schmuki (University Erlangen, Erlangen, Germany)

Self-organizing Electrochemistry: Titania Nanotube- and Mesosponge Layers

14:20 to 14:40

Michele Ceotto (Università degli Studi di Milano, Milano, Italy)

Doped *versus* undoped titania nanocrystals: Theoretical bottom-up approach *vs*. experimental flatband potential studies

14:40 to 15:00

Ilie Hanzu (Aix-Marseille Université, Laboratoire Chimie Provence, Marseille, France), Thierry Djenizian, Gregorio Ortiz, Philippe Knauth

Mechanistic study of Sn nanowires electrodeposition on TiO_2 nanotube layers: Thermodynamics, kinetics, nucleation and growth modes

15:00 to 15:20

Peng Pu (Université Pierre et Marie Curie, Laboratoire Interfaces et Systèmes Electrochimiques UPR15 CNRS, Paris, France), Eliane Sutter, Hubert Cachet

Photo-induced effects on self-organized TiO_2 nanotube arrays. EIS characterization

15:20 to 15:40

Evangelia Pavlatou (Laboratory of General Chemistry, School of Chemical Engineering, National Technical University of Athens, Athens, Greece), Stella Spanou, Alexandros Zoikis-Karathanasis, Pinelopi Gyftou, Athanasios I. Kontos, Polykarpos Falaras

Electrolytic codeposition of TiO_2 nano-particles with Ni based matrices: Structural aspects, mechanical properties and self-cleaning character of the coatings

15:40 to 16:00

Christiane de Arruda Rodrigues (Department of Ciências Exatas e da Terra, UNIFESP-Campus Diadema, Diadema, Brazil), Camila Pedrosa Ferreira, Arthur Henrique Chaves Consulin, Rodnei Bertazzoli

Nanotubular Oxide Layer Growth on Ti and Ti_6Al_7Nb alloy: Influence of the Heat Treatment on the Photoelectrocatalytic Activity

16:00 to 16:20 **Invited**

Hafsa Korri-Youssoufi (ICMMO, University Paris-Sud XI, Orsay, France)

Electrodeposition of functionalized polypyrroles on micro-structured electrodes for immunosensor application

16:20 to 16:40

Coffee Break

16:40 to 17:20 **Keynote**

Jean Christophe Lacroix (ITODYS, UMR-CNRS 7086, University Paris Diderot, Paris, France), Verena Stockhausen, Jalal Ghilane, Pascal Martin, Gaelle Trippe-Allard, Hyacinthe Randraimahazaka

Ultrathin organic layers with on/off switching transport properties based on oligothiophene diazonium salts

17:20 to 17:40

Lydie Ribeaucourt (IRDEP (Institute of R&D on Photovoltaic Energy) UMR 7174 EDF, CNRS, Chimie-ParisTech, Chatou, France), Elisabeth Chassaing, Gregory Savidand, Nicolas Loones, Daniel Lincot

One-Step Cu-In-Ga Electrodeposition for CIGS Solar cells

17:40 to 18:00

Ivan Krastev (Inst. Phys. Chem. Bulg. Acad. Sci., Sofia, Bulgaria), Tsvetina Dobrovolska, Vladimir Jovic, Gesa Beck, Borka Jovic, Andreas Zielonka

Phase Identification in Electrodeposited Ag-Cd Alloys by ALSV and XRD Techniques

Symposium 8: Electrochemical Process Engineering and Technology

Location: Risso 7

Chaired by: K. Sundmacher and C. Comninellis

14:00 to 14:20 **Invited**

Paul Kenis (Chemical & Biomolecular Engineering, University of Illinois at Urbana-Champaign, Urbana, USA)

Membraneless Fuel Cells as Microscale Power Sources and Analytical Platforms

14:20 to 14:40

Heidi Van Parys (Vrije Universiteit Brussel, Research Group of Electrochemical and Surface Engineering, Brussels, Belgium), Steven Van Damme, Pedro Maciel, Johan Deconinck, Annick Hubin

Integrated experimental and modeling approach for the study of gas evolving reactions in electrochemical reactors

14:40 to 15:00

Manuel Andres Rodrigo (Department of Chemical Engineering, University of Castilla-la Mancha, Ciudad Real, Spain), Ángel Pérez, Pablo Cañizares, Javier Llanos

Electrodeposition as the key to develop an integrated heavy-metal recovery process of enhanced efficiency and selectivity

15:00 to 15:20

Henry Bergmann (Anhalt University, FB 6/7, Koethen, Germany)

Mechanistic consideration of OH radical behavior on BDD anodes

15:20 to 15:40

Karine Groenen Serrano (Laboratoire de Génie Chimique, CNRS, Toulouse, France), André Savall

Electrosynthesis of powerful oxidants: potentialities and limits of the BDD anode

15:40 to 16:20 **Keynote**

M. Wessling (University of Twente, Membrane Science & Technology, The Netherlands), P. Dlugolecki, S. Houseiney, M. Saakes, D.C. Nijmeijer

Ion Exchange Membranes in Energy Production and Storage

16:20 to 16:40

Coffee Break

16:40 to 17:00

Chike F. Oduoza (Engineering and The Built Environment, Wolverhampton, United Kingdom), M.E. Khan

Electroless nickel coating of pretreated aluminium alloys used as underlayer for chromium plating

17:00 to 17:20

Jérome Roche (Laboratoire de Génie Chimique, Toulouse, France), Karine Groenen Serrano, Olivier Reynes, Theodore Tzedakis

A comparison between enzymatic and indirect electroenzymatic regeneration of the pyridinic cofactor NADH in a micro-structured reactor

17:20 to 17:40

Ana Sánchez (Departamento de Ingeniería Química, Facultad de Ciencias Químicas, Universidad de Castilla La Mancha, Ciudad Real, Spain), Pablo Cañizares, Manuel Andrés Rodrigo, Cristina Sáez

Electrosynthesis of Perbromate using Conductive-Diamond Anodes

17:40 to 18:00

Mouna Cherifi (Faculty of Science Badji Mokhtar University, Annaba, Algeria), S. Hazouri, S. Pontvianne, J.-P. Leclerc, F. Lapicque

Electrokinetic removal of aluminium from water potabilizattion treatment sludge

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

Chaired by: Jean-Claude Moutet and Derck Schlettwein

14:00 to 14:20

Dennis Evans (Department of Chemistry, Purdue University, West Lafayette, Indiana, USA)

Reversible Dimerization of Ion Radicals as Studied by Cyclic Voltammetry

14:20 to 14:40

Michael Schmittel (Department of Chemistry and Biology, Universität Siegen, Siegen, Germany), Shu Qinghai

Tuning the Wavelength of Electrochemiluminescence by Anodic Potential: A Design Using Disjoint HOMO and LUMO Components in Multinuclear Systems

14:40 to 15:00

Sylvie Chardon-Noblat (Département de Chimie Moléculaire, Université Joseph Fourier, CNRS UMR-5250, Grenoble cedex 09, France), Frédéric Lafolet, Carole Duboc, Alain Deronzier, Florian P. Pruchnik, Magdalena Rak

Electrosynthesis and study of organometallic molecular wires based on extended Rh-Rh bonded chains

15:00 to 15:20

Jiri Ludvik (J. Heyrovsky Institute of Physical Chemistry, Czech Academy of Sciences, Prague 8, Czech Republic), Abdul Wahab, Jiri Klima, Brian Stepp, Michal Valasek, Jan Stursa, Josef Michl

Electrochemical Oxidation of Carborane Anions in Liquid SO_2

15:20 to 15:40

Ian Burgess (Department of Chemistry, University of Saskatchewan, Saskatoon, Canada), Wenbin Zhang, Scott Rosendahl

Electrochemical and IR Studies of Coupled Electron/Proton Transfer Studies in Benzoquinone Modified Monolayers

15:40 to 16:20 **Keynote**

William Geiger (University of Vermont, Burlington, USA)

New Directions in Anodic Reactions Based on Third-Generation Electrolyte Anions

16:20 to 16:40

Coffee Break

16:40 to 17:00

Marie-Laurence Abasq (Université de Rennes 1, Faculté de Pharmacie, 35043 Rennes, France), Alice René, Didier Hauchard, Philippe Hapiot

How do phenolic compounds react toward superoxide? A possible electrochemical method for evaluating their antioxidant capacity

17:00 to 17:20

Zdenek Samec (J. Heyrovsky Institute of Physical Chemistry of ASCR, v.v.i., Prague 8, Czech Republic), Antonin Trojanek, Jan Langmaier, Stanislav Zalis, Bin Su, Hubert H. Girault

Mechanism and Kinetics of the Oxygen Reduction at the Polarized Liquid-Liquid Interface Catalyzed by a Metal-Free Porphyrin

17:20 to 17:40

Armando Gennaro (Department of Chemical Sciences, University of Padova, Padova, Italy), Binbin Huang, Christian Durante, Abdirisak A. Isse

Electrocatalytic Dechlorination of Volatile Polychloroethanes on Various Metal Electrodes

17:40 to 18:00

Frantisek Hartl (Department of Chemistry, University of Reading, Reading, United Kingdom)

Soluble Polymetallic Ru(0) and Os(0) Catalysts of Carbon Dioxide Reduction: Spectro-Electrochemical and DFT Studies

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

Chaired by: Daniel Scherson and Eckhard Spohr

14:00 to 14:40

Alexander Kuznetsov Prize Lecture for Theoretical Electrochemistry

14:40 to 15:00

Katharina Klingan (Department of Physical Chemistry, University of Vienna, Vienna, Austria), Christoph Huber, Christian Zafiu, Guenter Trettenhahn, Wolfgang Kautek

Nanotribology of anion adsorption at a gold electrode: an *in-situ* electrochemical lateral force microscopy study

15:00 to 15:20 **Invited**

Galina Tsirlina (Dept. of Electrochemistry, Faculty of Chemistry, Moscow University, Moscow, Russia)

Double Layer Effects in Electron Transfer Kinetics as a Tool to Clarify Double Layer Structure

15:20 to 15:40

Monica Marinescu (Imperial College London, London, United Kingdom), Tomer Barnea, Alexei Kornyshev, Anthony Kucernak, Charles Monroe, Alice Sleightholme, Michael Urbakh

Slippery Electrochemical Interfaces through Pulse-facilitated Electrowetting

15:40 to 16:00

Scott M. Rosendahl (Department of Chemistry, University of Saskatchewan, Saskatoon, Canada), Ian J. Burgess

In-situ Spectroelectrochemistry Studies of 1,4-benzoquinone Modified Monolayers

16:00 to 16:20

Coffee Break

16:20 to 16:40 **Invited**

Mark Schlossman (Department of Physics, University of Illinois at Chicago, Chicago, USA)

Ion distributions at the electrified liquid-liquid interface studied with X-ray reflectivity

16:40 to 17:00

Annika Elsen (Institute for Experimental and Applied Physics, University of Kiel, Kiel, Germany), Bridget M. Murphy, Ben M. Ocko, Lilach Tamam, Moshe Deutsch, Ivan Kuzmenko, Matthias Greve, Benjamin Runge, Christian T. Koops, Oliver H. Seeck, Olaf M. Magnussen

Structural Investigation of the Liquid Mercury-Electrolyte Interface by X-Ray Reflectivity

17:00 to 17:20

Kei Murakoshi (Department of Chemistry, Faculty of Science Hokkaido, University, Sapporo, Japan), Tatsuya Konishi, Manabu Kiguchi, Mai Takase, Fumika Nagasawa, Hideki Nabika

Observation of a Single Molecule at Metal Nano-Gap in Solution

17:20 to 17:40

Sarah Horswell (School of Chemistry, University of Birmingham, Birmingham, United Kingdom), Elena Madrid, Andrew Burley

Electrochemical and Spectroscopic Studies of Phospholipid Layers Supported on Au(111) Surfaces

17:40 to 18:00

Manuela Rueda (Department of Physical Chemistry, University of Seville, Seville, Spain), Francisco Prieto, Antonio Rodes, Jose Manuel Delgado

In Situ Infrared Study of the Acid-Base Properties of Adsorbed Adenine on Gold Single Crystal and Thin-Film Electrodes

18:00 to 18:20

Akira Yamakata (Catalysis Research Center, Hokkaido University, Sapporo, Japan), Masatoshi Osawa

Kinetics of the destruction of hydration shells around tetraalkylammonium ions at the electrochemical interface

Symposium 11: Sensors and Biosensors

Location: Hermes

Chaired by: Ernesto Julio Calvo and Nicole Jaffrezic-Renault

14:00 to 14:20

Elena E. Ferapontova (Danish National Research Foundation, Centre for DNA Nanotechnology, Department of Chemistry and iNANO, Aarhus University, Aarhus, Denmark), Elaheh Farjami, Lilia Clima, Kurt V. Gothelf

"Off-On" Genosensors for Cancer Diagnostics Based on DNA Interactions with a Methylene Blue Redox Indicator

14:20 to 14:40

Hiroshi Aoki (National Institute of Advanced Industrial Science and Technology (AIST), Ibaraki, Japan), Akiko Kitajima, Hiroaki Tao

Label-free and Reagent-free DNA Detection Based on Supramolecular Electrochemistry

14:40 to 15:00

Tim Albrecht (Imperial College London, Department of Chemistry, London, United Kingdom), Mariam Ayub, Aleksandar Ivanov, Emanuele Instuli, Michael Cecchini, Fatma Dogan, Daniel Godfrey, Mattaka Khongkow, Joshua B. Edel

Electrochemistry in nanopore/electrode structures

15:00 to 15:20

Paul Kavanagh (School of Chemistry NUI Galway, Galway, Ireland)

Enzyme-amplified amperometric DNA hybridization assay based on bioelectrocatalysis using redox-polymer modified electrodes

15:20 to 15:40

Omotayo Arotiba (Department of Chemical Technology, University of Johannesburg, Doornfontein, South Africa), Makobetsa Khati, Bhekie Mamba

Towards TB Detection: Development of a Neopterin Aptasensor based on Dendrimer-Gold Nanocomposite Platform

15:40 to 16:20 **Keynote**

John Justin Gooding (School of Chemistry, Sydney, Australia), Ian Y. Goon, Leo M.H. Lai, Jarred B. Shein, Jonathan Dyne, Yu-Shan Lin, Erwann Luais, Rose Amal

Nanoparticle Based Electrochemical Biosensors: Conceptual Advanced in Biosensing Made Possible by Some Unique Properties of Nanoparticles

16:20 to 16:40

Coffee Break

Chaired by: John Justin Gooding

16:40 to 17:00

Valérie Stambouli (LMGP, CNRS, INP, Grenoble, France)

Label-free Electrochemical Detection of DNA : Electrical Characteristics Dependance of Working Electrode

17:00 to 17:20

Micheál Scanlon (Materials and Surface Science Institute, Limerick, Ireland), Urszula Salaj-Kosla, Edmond Magner

Bio-electrochemistry of redox enzymes immobilised on 3-D nanostructured electrodes

17:20 to 17:40

Ying Xu (The Department of Chemistry, East China Normal University, Shanghai, China), Hao Fan, Zhu Chang, Pingang He

Study on the Electrochemical DNA Sensor Based on Homogeneous Solution Phase Hybridization Strategy

Symposium 13: Surface Functionalization

Location: Rhodes 9-2

Chaired by: Gérard Bidan, Philippe Hapiot and Gaoquan Shi

14:00 to 14:20

Rihab Nasraoui (Laboratoire de Chimie Physique et Microbiologie pour l'Environnement, UMR 7564 CNRS-Universite Henri Poincare, Nancy, France), Fengli Qu, Alain Walcarius, Yemima Bon-Saint-Come, Alexander Kuhn, Janine Gajdzik, Rolf Hempelmann

Macroporous gold electrode modified with silica ultra-thin films for biomolecules encapsulation

14:20 to 14:40

Pascal Martin (ITODYS, Université de Paris Diderot, Paris, France), Luis Santos, Jalal Ghilane, Hyacinthe Randriamahazaka, Pierre Camille Lacaze, Luisa Abrantes, Jean Christophe Lacroix

Nanoporous Conducting Polymer Films on Oxydizable Metals by Nanosphere Lithography

14:40 to 15:00

Abdeslam Et Taouil (Université de Franche Comte, Besançon, France), Fabrice Lallemand, Loïc Hallez, Jean-Yves Hihn

Novel Selective Masking Technique Using HIFU During Electrosynthesis

15:00 to 15:20

Martin Kalbac (J. Heyrovsky Institute of Physical Chemistry, Prague, Czech Republic), Lothar Dunsch, Ladislav Kavan

Changes in the Electronic States of Single Walled Carbon Nanotubes: *In situ* Raman Spectroelectrochemical Study

15:20 to 15:40

Li Niu (Engineering Laboratory for Modern Analytical Techniques, State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China), Huafeng Yang, Changsheng Shan, Fenghua Li, Dongxue Han

Chemically Converted Graphene: Functionalization and Nanocomposites

15:40 to 16:20 **KEYNOTE**

Gaoquan Shi (Department of Chemistry, Tsinghua University, Beijing, China), Yuxi Xu, Hua Bai, Anran Liu

Synthesis and Electrochemical Applications of the Nanostructured Conducting Polymers and Graphene

16:20 to 16:40

Coffee Break

16:40 to 17:00
Giovanni Valenti (Department of Chemistry "G. Ciamician", University of Bologna, Bologna, Italy), Luca Bardini, Stefania Rapino, Massimo Marcaccio, Francesco Paolucci

Localized Micro-Activation of Silicon Substrates by Scanning Electrochemical Microscopy

17:00 to 17:20
Federico Grisotto (DSM, IRAMIS, SPCSI, Gif-sur-Yvette, France)

SECM localized modifications onto conducting and semi-conducting substrates. A new lithography technique

17:20 to 17:40
Charles Cougnon (Unité de Chimie Organique Moléculaire et Macromoléculaire (UCO2M, UMR CNRS 6011), Le Mans, France)

Electrochemical alternatives to adapt the conventional procedures of surface functionalization to the local scale

17:40 to 18:00
Fredrik Björefors (Dept. of Physics, Chemistry and Biology, Linköping, Sweden), Christian Ulrich, Olof Andersson, Leif Nyholm

Molecular Gradients on Bipolar Electrodes

18:00 to 18:20
Alain Pailleret (LISE (UPR 15 du CNRS), Paris, France), Catherine Debiemme-Chouvy, Samar Jribi, Suzanna Cordoba de Torresi, Claude Deslouis

Quantitative identification of surface functional groups on amorphous carbon nitride thin films using a one step grafting method and a redox probe

Symposium 15: Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells

Location: Rhodes 10

Chaired by: Ohma Atsushi, Timo Jacob and Jeffrey Greeley

14:00 to 14:40 **Keynote**
Michael Eikerling (Department of Chemistry, Simon Fraser University, Burnaby, Canada), Kourosh Malek, Karen Chan

Nanoscale Modeling of PEFC Catalyst Layers: Water, Protons and Pt Effectiveness

14:40 to 15:00 **Invited**
Gérard Gebel (INAC, SPrAM, UMR 5819 CEA, CNRS, UJF, Grenoble, France), Hakima Mendil-Jakani, Sandrine Lyonnard, Armel Guillermo, Arnaud Morin, Pascal Schott, Joël Pauchet

Structure and water transport properties in Nafion® membranes

15:00 to 15:20 **Invited**
Tetsuya Mashio (Advanced Materials Laboratory, Nissan Research Center, Nissan Motor Co., Ltd., Kanagawa, Japan), Kourosh Malek, Michael Eikerling, Kazuhiko Shinohara, Atsushi Ohma

A Molecular Dynamics Study of Ionomer and Water Adsorption at Carbon Support Materials

15:20 to 15:40
Valerie Parry (Grenoble Institute of Technology, Saint Martin d'Heres, France), Gregory Berthome, Jean-Charles Joud, Olivier Lemaire, Alejandro Franco

Detailed Chemical Characterization of the PEMFC Materials Aging: Identification of the Mitigating Role of an Anodic CO Contamination on Cathode Degradation

15:40 to 16:00 **Invited**
Adam Weber (Lawrence Berkeley National Laboratory, Berkeley, USA)

Modeling Agglomerates in Polymer-Electrolyte-Fuel-Cell Catalyst Layers

16:00 to 16:20

Mohamed El Hannach (CEA, LITEN, LCPEM, Grenoble, France), Joel Pauchet, Marc Prat

Pore Network Modelling, Application to the liquid water transport inside the cathode catalyst layer of the PEMFC

16:20 to 16:40

Coffee Break

16:40 to 17:00

Anil Virkar (Materials Science & Engineering, University of Utah, Salt Lake City, USA)

Core-Shell Catalysts for PEM and Mechanism of Cathode Catalyst Degradation

17:00 to 17:20

Serguei Martemianov (Institut Pprime UPR du CNRS 3346, Poitiers, France), Daniil Bograchev, Jean-Claude Grandidier

Mechanical stresses modeling in MEA of running fuel cell

17:20 to 17:40 **INVITED**

Heinz Pitsch (Mechanical Engineering Department, Stanford University, Stanford, USA), Venkatasubramanian Viswanathan, Frank Yi-Fei Wang

Effect of Particle Size on the Catalytic Activity of Platinum Nano-Particles for Oxygen Reduction Reaction

17:40 to 18:00

Maarten Biesheuvel (Dept. of Environmental Technology, Wageningen University, Wageningen, Netherlands), Michiel van Soestbergen, Martin Bazant

Microscopic modeling of porous electrodes for fuel cell applications including effects of diffuse space charge

18:00 to 18:20

Rodrigo Ferreira de Morais (DTH, LITEN, DEHT, LCPEM, CEA, Grenoble, France), David Loffreda, Philippe Sautet, Alejandro A. Franco

A multiscale modeling methodology for the prediction of the electro-activity of PEM Fuel Cells catalysts

18:20 to 18:40

Juergen Fuhrmann (Weierstrass Insitute for Applied Analysis and Stochastics, Berlin, Germany), Hong Zhao, Hartmut Langmach, Yvonne E. Seidel, Zenonas Jusys, Rolf J. Behm

Intermediate Products in Heterogeneous Electrocatalytic Reactions: Experimental and Model Observation of Transport Effects

Tuesday, 28 September, 2010 - Morning

Plenary

Location: Apollon

Chaired by: Tom Moffat

08:30 to 09:30

Gerald Frankel (Fontana Corrosion Center The Ohio State University, Columbus, USA)

Prevention of Corrosion and Cracking of Steel Tanks for High Level Radioactive Waste

Symposium 1: New Insights and Applications in Ionic Liquid Electrochemistry

Location: Risso 8

Chaired by: Shaojun Dong and Doug MacFarlane

09:40 to 10:20 **Keynote**

Doug MacFarlane (School of Chemistry, Monash University, Clayton, Australia)

When is an ionic liquid not an ionic liquid? Ion Association and its Impact on Electrochemical Properties

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

Bingwei Mao (State Key Laboratory of Physical Chemistry of Solid Surfaces and Department of Chemistry, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China), Jiawei Yan, Yuzhuan Su, Yongchun Fu, Yimin Wei

Interfacial Electrochemistry in Ionic Liquids – *In-Situ* STM Characterization

11:00 to 11:20

Bernhard Gollas (Institute for Chemistry and Technology of Materials, Graz University of Technology, Graz, Austria), Katharina Schmut, Adam Whitehead

Electrochemical behaviour of cobaltocenium hexafluorophosphate in the ionic liquids [C_4mim][PF_6], [C_4mim][BF_4] and [C_4mim][NTf_2] at variable temperature

11:20 to 11:40 **Invited**

Marcin Opallo (Institute of Physical Chemistry PAS, 01-224 Warsaw, Poland), Adam Lesniewski, Robert Lynch, Katarzyna Szot, Anna Celebanska, Joanna Niedziolka-Jonsson, Martin Jonsson-Niedziolka, Cecile Rizzi, Juliette Sirieix-Plenet, Laurent Gaillon

The use of ionic liquid sol-gel precursor for electrode modification

11:40 to 12:20 **Keynote**

Shaojun Dong (State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China), Li Niu, Erkang Wang

Recent Development of Room Temperature Ionic Liquids in Electrochemistry and Analytical Chemistry

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

Chaired by: Serge Cosnier

09:40 to 10:00

Sharon G. Roscoe (Department of Chemistry, Acadia University, Wolfville, Canada), Chunqing Zhou

Single-Molecule Nanofabrication with Biomolecules Using Bias Assisted Scanning Tunneling Microscopy

10:00 to 10:20

Renata Bilewicz (Faculty of Chemistry, University of Warsaw, Warsaw, Poland), Elzbieta Jablonowska, Agnieszka Wieckowska, Ewa Rogalska

Etching of Supported Lipid Membrane by Phospholipase A2 Monitored by Electrochemical Methods

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote**

Tomokazu Matsue (Graduate School of Environmental Studies, Tohoku University, Sendai, Japan), Zhenyu Lin, Kosuke Ino, Shiku Hotoshi

Bioelectrochemical Imaging with Micro/Nanostructured Addressable Microelectrode Arrays

11:20 to 11:40 **Invited**

Sean Elliott (Department of Chemistry, Boston University, Boston, USA), Clinton F. Becker, Göçke Su Pulcu, Benjmain Levin, Nicholas Watmough, Kara L. Bren

Voltammetric Studies of Heme Ligand Dynamics in Bacterial Cytochromes c: From Enzymes to Electron Transfer Proteins

11:40 to 12:00

Artavazd Badalyan (University of Potsdam, Institute for Biochemistry and Biology, Department of Molecular Enzymology, Potsdam (Golm), Germany), Meina Neumann-Schaal, Silke Leimkühler, Ulla Wollenberger

Electrochemical Characterization of a Novel Aldehyde Oxidoreductase from E.coli and Biosensor Development

12:00 to 12:20

Gregoire Herzog (Tyndall National Institute, Cork, Ireland), Patrycja Eichelmann-Daly, Marie-Therese Nolan, Damien W.M. Arrigan

The sensitivity of electrochemistry at the ITIES to protein tertiary structure

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Battery Research

Location: Apollon

Chaired by: Yoon-Sok Kang and Stefano Passerini

09:40 to 10:00 **Invited**

Stefano Passerini (Institute of Physical Chemistry, University of Muenster, Muenster, Germany), Miriam Kunze, Guk-Tae Kim, Sangsik Jeong, Giovanni B. Appetecchi, Martin Winter

Ionic Liquid-based Electrolytes for Lithium Batteries

10:00 to 10:20

Didier Devaux (Laboratoire Chimie Provence, Université Aix-Marseille I,II,III - CNRS, Marseille, France), David Glé, Trang Phan, Renaud Bouchet

Effect of architecture (linear or branched) and molecular weight of PEO based electrolytes on the ionic conductivity

10:20 to 10:40

Coffee Break

10:40 to 11:00

Ying Sing Fung (Department of Chemistry, Hong Kong University, Hong Kong, China), Derong Zhu

LiTFSI-Based Room Temperature Ionic Liquids for High Energy Secondary Lithium Ion Battery

11:00 to 11:20

Yoon-Sok Kang (Battery Group/Samsung Advanced Institute of Technology, Samsung Electronics Co., Ltd., Yongin-si, Korea), Jin-Hwan Park, Jaegu Yoon, Kyu-Sung Park, Seok-Gwang Doo

Biotemplated Lithium Cobalt Oxide as Cathode Materials for Lithium Ion Battery

11:20 to 11:40

Hideyuki Noguchi (Applied Chemistry, Saga University, Saga, Japan), Masataka Oyama, Shota En-nhoji

Synthesis and electrochemical properties of layered $Li_xCo_{1/3}Mn_{1/3}Ti_{1/3}O_2$

11:40 to 12:00

Thomas Richardson (Lawrence Berkeley National Laboratory, Berkeley, USA), Jun Liu

Visualization of Charge Distribution in Lithium Battery Electrodes

12:00 to 12:20

Daniel Abraham (Argonne National Laboratory, Argonne, USA)

Electrochemical Cycling of Lithium-ion cells in Propylene-Carbonate based Electrolytes

TUESDAY AM

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

Chaired by: Stephen Paddison

09:40 to 10:20 **Keynote**

Claude Lamy (University Poitiers, CNRS GDR 2985, PACTE, Poitiers, France), Deborah Jones, Christophe Coutanceau, Pascal Brault, Serguei Martemianov, Yann Bultel

Do not forget the characteristics of the Membrane-Electrode-Assembly when designing a PEMFC stack

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Oronzio and Niccolò De Nora Foundation Prize of ISE on Applied Electrochemistry**

Dan Brett (Chemical Engineering, London, United Kingdom), Anthony Kucernak, Particia Aguiar, Stephen Atkins, Nigel Brandon, Ralph Clague, Lesley Cohen, Gareth Hinds, Christos Kalyvas, Greg Offer, Bradley Ladewig, Robert Maher, Andrew Marquis, Nikos Vasileiadis, Velisa Vesovic

What Happens Inside a Fuel Cell? Developing an Experimental Functional Map of Fuel Cell Performance

11:00 to 11:20

Diego Úbeda Romero (Department of Chemical Engineering, University of Castilla-La Mancha, Ciudad Real, Spain), Pablo Cañizares Cañizares, Justo Lobato Bajo, Francisco Javier Pinar Pérez, Rocío Ramos Novillo, Manuel Andrés Rodrigo Rodrigo

Sensitivity Analysis in High Temperature Pem Fuel Cells using a Three-Dimensional Full-Cell Model

11:20 to 11:40

Alejandro A. Franco (CEA-Grenoble, LITEN, Laboratory of Components for Fuel Cells and Electrolysers, and of Modeling, Grenoble, France)

Resolving the impact of water management on competitive PEMFC MEA degradation mechanisms

11:40 to 12:00

Carl-Albrecht Schiller (Zahner-elektrik, Kronach, Germany), Norbert Wagner

Analysis of the Local Dependency *vs*. Time in a PEM Fuel Cell Stack after Process Parameter Transients by Means of Multi-Channel Synchronous Impedance Measurements

12:00 to 12:20

Leonardo De Silva-Munoz (Instituto de Investigaciones Eléctricas, Cuernavaca, Mexico), Luis Eduardo Castillo-Olalla, Ulises Cano-Castillo, Cesar Maldonado-Mercado

Dynamic performance tests of a commercial 1 kW fuel cell system

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Supercapacitors

Location: Euterpe

Chaired by: Yury Gogotsi and Patrice Simon

09:40 to 10:00 **Tajima Prize Award Lecture**

Patrice Simon (Université Paul Sabatier, CIRIMAT, UMR, CNRS 5085, Toulouse, France)

Ion Adsorption in Microporous Carbons: Towards High-Energy Density Electrical Double Layer Capacitors?

10:00 to 10:20

Dario Cericola (General Energy Research Department, Paul Scherrer Institut, Villigen PSI, Switzerland), Rüdiger Kötz, Petr Novák, Alexander Wokaun

Bi-material electrodes for hybrid electrochemical energy storage devices

10:20 to 10:40

Coffee Break

10:40 to 11:00

Thierry Brousse (LGMPA, Polytech Nantes, Université de Nantes, Nantes, France), Sanaz Ketabi, Cédric Martin, Olivier Crosnier, Laurence Athouël, Daniel Bélanger

Functionalized MnO_2 thin films as electrode for electrochemical supercapacitors

11:00 to 11:20

Quan-Hong Yang (Tianjin University, Tianjin, China), Sun Feng, Lv Wei

Layered graphene/NiO composites as supercapacitor electrodes

11:20 to 11:40

Claudia-Simona Stefan (Institut Charles Gerhardt Montpellier, Montpellier, France), Frederic Favier

Mn/Ru mixed oxides as positive electrode material for electrochemical capacitors

11:40 to 12:00

Francesco Lufrano (CNR-ITAE, Istituto di Tecnologie Avanzate per l'Energia "Nicola Giordano", Messina, Italy), Pietro Staiti

Manganese oxide and activated carbon materials for advanced hybrid supercapacitors

12:00 to 12:20

Krzysztof Fic (Institute of Chemistry and Technical Electrochemistry, Poznan University of Technology, Poznan, Poland), Grzegorz Lota, Elzbieta Frackowiak

A novel insight into electrochemical properties of supercapacitor operating in neutral aqueous electrolyte

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

Chaired by: Mohamed Jouini and Fritz Scholz

09:40 to 10:00 **Invited**

Robert Hillman (Department of Chemistry, University of Leicester, Leicester, United Kingdom), Joao Tedim, Cristina Freire

Solvation Control of Electrochemistry, Coordination and Viscoelasticity of Poly[Ni(3-Mesalophen-b15-c5)] films

10:00 to 10:20

Andreas Bund (Physikalische Chemie und Elektrochemie, Technische Universitaet Dresden, Dresden, Germany), Adriana Ispas, Igor Efimov

Electrodeposition of PEDOT layers studied by electro-acoustic impedance measurements

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

Emmanuel Maisonhaute (Ecole Normale Supérieure, Paris, France), Xiao-Shun Zhou, Liu Ling, Anna Serra-Muns, Anne-Sophie Lefevre, Philippe Fortgang, Nourredine Raouafi, Bernd Schöllhorn, Bingwei Mao, Christian Amatore

Steady state and transient electron transfer through molecules.

11:00 to 11:20 **Invited**

Toribio F. Otero (Center of Electrochemistry and Intelligent Materials, Universidad Politécnica de Cartagena, Cartagena, Spain), Joaquin Arias-Pardilla, Jose Gabriel Martinez

Electrochemical kinetics in dense, reactive and wet gels. Are conducting polymers model reactions for life?

11:20 to 11:40 **Invited**

Csaba Visy (Department of Physical Chemistry & Materials Science, University of Szeged, Szeged, Hungary), Péter S. Tóth, Csaba Janáky, Emese Peintler-Kriván, Emese Peintler-Kriván

Identification of the Charge Carrier, Primarily Responsiblefor the Development of the Name-giving Property of Conducting Polymers

11:40 to 12:20 **Keynote**

Juergen Heinze (Institute for Physical Chemistry, FMF, University of Freiburg, Freiburg, Germany), Ronald Alle, Pamela Espindola, Hermann John

Redox Polymers - Conducting Polymers, Two Models but One Consistent Concept

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

Chaired by: Christine Blanc and Philippe Refait

09:40 to 10:00 **Invited**

X. Ramon Novoa (ETSEI, ENCOMAT, Universidade de Vigo, Vigo, Spain), Belen Diaz, Beatriz Puga, Vincent Vivier

Chloride transport through cementitious membranes using pulsed current

10:00 to 10:20

Françoise Feugeas (INSA de Strasbourg LGECO-LISS, Strasbourg CEDEX, France), Bernard Tribollet, Gabriele Ferrari, Sébastien Roux

Protection against corrosion of concrete steel rebars by bacterial polymers

10:20 to 10:40

Coffee Break

10:40 to 11:00

Marc Jeannin (University of La Rochelle, LEMMA, La Rochelle Cedex 1, France), Daniel Calonnec, René Sabot, Philippe Refait

Role of a chlorite mineral deposit on the corrosion of carbon steel in three different media: 0.5 M NaCl, 0.1 M $NaHCO_3$ and artificial seawater

11:00 to 11:20 **Invited**

Hercilio G. de Melo (Chemical Engineering Department, University of São Paulo, São Paulo, Brazil), Rocio del P.B. Hernandez, Idalina V. Aoki, Bernard Tribollet

Electrochemical investigation of the corrosion behavior of copper samples coated with artificial patina layers in NaCl and in simulated rainwater solutions

11:20 to 11:40

Thiago José Mesquita (Corrosion Department of CRU (Ugitech Research Center) and LEPMI, St. Martin d'Hères, France), Eric Chauveau, Marc Mantel, Nicole Kinsman, Ricardo P. Nogueira

Pitting Corrosion Resistance in Alkaline Media: Role of Molybdenum Addition on Duplex, Austenitic And Ferritic SS

11:40 to 12:00

Vincent Proton (Univ. de Toulouse, CIRIMAT, UPS, CNRS, INPT, Toulouse Cedex 4, France), Joël Alexis, Eric Andrieu, Christine Baret-Blanc, Jérôme Delfosse, Loïc Lacroix, Grégory Odemer

Influence of a post-welding heat treatment T8 on the corrosion behaviour of 2050 aluminium – lithium alloy structures joined by Friction Stir Welding

12:00 to 12:20

Juan Tan (Norwegian University of Science and Technology, Trondheim, Norway)

Effect of Trace Element Tin on Anodic Activation of Aluminium

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

Chaired by: Olaf Magnussen

09:40 to 10:20 **Keynote**

Mu Wang (National Laboratory of Solid State Microstructures and Department of Physics, Nanjing University, Nanjing, China), Sheng Zhong, Bo Zhang, Zhe Wu, Xiao-Ping Huang, Tao Liu

Spontaneous Formation of Periodic Metallic Nanostructures: Electrodeposition Fabrication and Optoelectric Features

10:20 to 10:40

Coffee Break

10:40 to 11:00

Stanko Brankovic (Cullen College of Engineering, Univ. of Houston, Houston, USA), Burhanuddin Kagajwala, Adelanwa Adesanya, Jinnie George, Pamela Lantonkpode

Additive Effect on Magnetic, Corrosion and Mechanical Properties of 2.4 T CoFe Alloys

11:00 to 11:20

Adi Naor (The Materials Science and Engineering, Tel Aviv University, Tel Aviv, Israel), Noam Eliaz, Eliezer Gileadi

Study of the Electrodeposition Mechanism of Alloys of Rhenium with the Iron-Group Metal

11:20 to 11:40 **Invited**

Jay Switzer (Missouri University of Science and Technology, Rolla, USA), Rakesh Gudavarthy, Zhen He, Guojun Mu

Resistance Switching in Epitaxial Films and Superlattices in the Magnetite/Zinc Ferrite System

11:40 to 12:00 **Invited**

Giovanni Zangari (Department of Materials Science and Engineering and CESE, University of Virginia, Charlottesville, USA), Defu Liang, Jonathan J. Mallett

Electrodeposition and magnetic properties of Fe-Pt by underpotential co-deposition from citrate/glycine solutions

12:00 to 12:20

Paula Cojocaru (Politecnico di Milano, Milano, Italy), Elisa Valles, Elvira Gomez, Pietro Luigi Cavallotti, Luca Magagnin

Novel plating cell geometry for magnetic nickel cobalt / barium ferrite composites

Symposium 8: Electrochemical Process Engineering and Technology

Location: Risso 7

Chaired by: S. Deki and H. Bergmann

09:40 to 10:00 **Invited**

Christos Comninellis (Swiss Federal Institut of Technologie, EPFL, SB, ISIC, GGEC, Sation 6, CH-1015, Lausanne, Switzerland)

Induced mineralization of organics by molecular oxygen on BDD electrodes

10:00 to 10:20

Carlos Jiménez (Department of Chemical Engineering, University of Castilla La Mancha, Ciudad Real, Spain), Cristina Sáez, Pablo Cañizares, Manuel Andrés Rodrigo

Using of RSM to optimize a combined electrocoagulation-electroflotation reactor for waste water treatment

10:20 to 10:40

Coffee Break

10:40 to 11:00

Leonardo Lizarraga (Université de Lyon, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON), Villeurbanne, France), Stamatios Souentie, Linda Mazri, Philippe Vernoux

Soot Combustion on Electrochemical Solid-State Catalysts

11:00 to 11:20

Alexandros Katsaounis (Environmental Engineering, Technical University of Crete, Chania, Greece), Agnieszka Kapalka, Nina-Luisa Michels, Anna Leonidova, Christos Comninellis, Stamatis Souentie

Ammonia Oxidation to Nitrogen Mediated by Electrogenerated Active Chlorine on Ti/Pt-IrO_2

11:20 to 11:40 **Invited**

Yoshinori Nishiki (Permelec Electrode Ltd, Fujisawa-City, Japan)

Present Status of Electrode Materials for Industrial Electrolysis

11:40 to 12:00

Masao Sudoh (Department of Materials Science and Chemical Engineering, Sizuoka University, Hamamatsu, Japan), Kenji Arai, Tomohisa Suzuki, Masaharu Uno, Masashi Tanaka, Kazuhiro Hirao, Yoshinori Nishiki

Evaluation of Ag Electrode for Two-Compartment Cell in Novel Chlor-Alkali Membrane Process

12:00 to 12:20

Masatsugu Morimitsu (Department of Environmental Systems Science, Doshisha University, Kyo-tanabe, Japan), Tomohiro Yamaguchi

Voltage Reduction of Electrowinning by Smart Anodes

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

Chaired by: Dennis Evans and Keith Oldham

09:40 to 10:00 **Invited**

Richard Webster (School of Physical and Mathematical Sciences, Nanyang Technological University, Singapore 637371, Singapore)

The Unusual Electrochemical Behaviour of Vitamin E

10:00 to 10:20

Anne-Sophie Lefèvre (Département de Chimie, Ecole Normale Supérieure, Paris Cedex 05, France), Christian Amatore, Emmanuel Maisonhaute, Bernd Schöllhorn

Redox Active Ligands for the Electrochemically-Driven Release of Calcium Ions

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

Olivier Buriez (Ecole Normale Superieure, CNRS, Paris cedex 05, France), Eric Labbé, Elizabeth Hillard, Anne Vessières, Gerard Jaouen, Christian Amatore

Reactivity, Solubilisation, and Vectorisation of "Ferroccifen" Anticancer Drug Candidates

11:00 to 11:20

Michael Busch (Department of Chemistry, University of Gothenburg, Gothenburg, Sweden), Elisabet Ahlberg, Itai Panas

The Water Oxidation Reaction on Manganese(III)-oxides - From Dimers to Surfaces

11:20 to 11:40

Marc Robert (Chemistry Department, University Paris Diderot, Paris, France), Cyrille Costentin, Cyril Louault, Jean-Michel Savéant, Cédric Tard

Water and other Proton Acceptors in Concerted Proton-Electron Transfers

11:40 to 12:00

Jay Wadhawan (Department of Physical Sciences (Chemistry), The University of Hull, Kingston-upon-Hull, United Kingdom)

Voltammetric Characterisation of Multiple Electron Transfer Communication Embedded within Modified Electrodes

12:00 to 12:20

Carlos Frontana (Centro de Investigación y Desarrollo Tecnológico en Electroquímica, SC, Sanfandila, Pedro Escobedo, Mexico), Lindsay Hernández, Felipe González, Ignacio González, Antonio de Souza, Fabiane de Abreu, Claudia Pessoa, Bruno Coelho, Eufranio da Silva, Antonio Pinto, Marilia Goulart

Influence of the position of the nitro substituent in nitro-ortho-quinone system: Relationship between biradical dianion stability and citotoxicity

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

Chaired by: Eric Borguet and YuYe Tong

09:40 to 10:20 **Keynote**

Zhong-Qun Tian (State Key Laboratory of Physical Chemistry of Solid Surfaces and College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China), Jian-Feng Li, Yi-Fan Huang, Song-Bo Li, Feng-Ru Fan, Zhi-You Zhou, De-Yin Wu, Bin Ren

Shelled-Nanoparticle-Based SERS Studies on Structurally Well-Defined Pt and Au Electrodes and Silicon Substrates

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

Juergen Janek (Institute of Physical Chemistry, Justus Liebig University, Giessen, Germany), Bjoern Luerssen, Eva Mutoro, Hendrik Poepke

Pt(O_2)/YSZ electrode kinetics: Mechanisms, model systems and spectroscopic/microspectroscopic experiments

11:00 to 11:20

Nathalie Younan (Laboratoire d'Electrochimie Physique et Analytique (LEPA), Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland), Mohamad Hojeij, Hubert Girault

Electrochemical properties and Surface Plasmon Resonance of gold nanoparticles assemblies at liquidlliquid interfaces

11:20 to 11:40

Dianne Atienza (Chemistry Department, Georgetown University, Washington, USA), In-Su Park, Bingchen Du

In-situ ^{195}Pt and ^{13}CO NMR Investigation of Pt-Covered Ru and Au Nanoparticles

11:40 to 12:00 **Invited**

Clare Grey (Cambridge University, Cambridge, United Kingdom), Baris Key, Rangeet Bhattacharyya, Nicole Trease

In-situ NMR Studies of Intact, Functioning Lithium Ion Batteries

12:00 to 12:20

Jiamei Jin (School of Chemistry and Chemical Engineering, Queens University Belfast, Belfast, United Kingdom), W.F. Lin, C. Hardacre

Variable Temperature *in-situ* FTIR Studies of Fuel Cell Electro-catalysts: From Single Crystals to Nano-Materials

Symposium 11: Sensors and Biosensors

Location: Hermes

Chaired by: Féthi Bédioui and James Rusling

09:40 to 10:00 **Invited**

Christophe Demaille (Universite Paris Diderot, Paris, France), Agnes Anne, Edmond Cambril, Arnaud Chovin

Imaging the 2D-Distribution of Redox-Tagged Macromolecules Grafted onto Electrode Surfaces by Atomic Force Electrochemical Microscopy

10:00 to 10:20

Frederique Deiss (Department of Chemistry and Chemical Biology, Harvard University, Cambridge, USA), Christopher Lafratta, Timothy Blicharz, Matthew Symer, David R. Walt, Neso Sojic

Electrochemiluminescence imaging resolved at the single bead level as a readout mechanism for multiplexed sandwich immunoassays

10:20 to 10:40
Coffee Break

10:40 to 11:00
Vaskevich Alexander (Department of Materials and Interfaces, Weizmann Institute of Science, Rehovot, Israel), Ofer Kedem, Alexander B. Tesler, Israel Rubinstein
Reflection-mode localized surface plasmon resonance (LSPR) sensing: Towards *in-vivo* applications

11:00 to 11:20
Hong-Yuan Chen (Department of Chemistry, Nanjing University, Nanjing, China)
Electrochemiluminescence Biosensing Based on Energy Transfer

11:20 to 11:40 **Invited**
Vadim Lvovich (The Cleveland Clinic Foundation, Lerner Research Institute, Department of Biomedical Engineering, Cleveland, USA), Sowmya Srikanthan, Roy Silverstein, Rishi Singh
Electrochemical Impedance Characterization and Manipulation of Clinically Relevant Microparticles

11:40 to 12:00
Ritu Kataky (Department of Chemistry, Durham University, Durham, United Kingdom), Paula Lopes, Ruzniza Mohamud Zawawi, Alice Delcourt Lancon
Chirality in Healthcare and Medicine

12:00 to 12:20
Nicole Jaffrezic-Renault (Université de Lyon, Laboratoire des Sciences Analytiques, Université Claude Bernard, Lyon 1, Villeurbanne, France), Sondes Bourigua, Mouna Hnaien, Abdelhamid Errachid, Francois Bessueille, Sergei Dzyadevych, Abderrazak Maaref
A miniaturized immunosensor based on SWCNT-COOH using integrated microelectrodes for the detection of Deep Venous Thrombosis biomarker

Symposium 13: Surface Functionalization

Location: Rhodes 9-2

Chaired by: György Inzelt and Lo Gorton

09:40 to 10:00 **Invited**
Pascal Mailley (inac-SPraM (UMR, CNRS 5819, CEA, UJF) CEA, Grenoble cedex 9, France), Charles Agnes, Charles Agnès, Sébastien Ruffinatto, Emilie Vanhove, Raphael Kiran, Jean-Charles Arnault, Jacques de Sanoit, Franck Omnès, Philippe Bergonzo
Bioelectronic on diamond : satbilization of the electrochemical activity and surface derivatization for the design of electrochemical (bio)sensors

10:00 to 10:20
Vincent Noël (ITODYS,CNRS, UMR 7086, University Paris Diderot, Paris 7, PARIS Cedex 13, France), Grégory March, Steeve Reisberg, Benoît Piro, Claire Fave, Minh-Chau Pham
Hydroxynaphthoquinone Ultrathin Films Obtained by Diazonium Electroreduction: Toward Design of Biosensitive Electroactive Interfaces

10:20 to 10:40
Coffee Break

10:40 to 11:20 **Keynote**
Pawel J. Kulesza (University of Warsaw, Department of Chemistry, Warsaw, Poland)
Interfacial functionalization of nanostructured carbon and metal nanoparticles: From effective charge propagation and storage to enhancement of electrocatalytic and bioelectrocatalytic properties

11:20 to 11:40
Kohei Uosaki (International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), Tsukuba , Japan), Takuya Masuda, Yu Sun
Construction of Molecular Layer Directly Bonded to Hydrogen Terminated Si(111) Surface with Dispersed Catalyst for Photoelectrochemical Hydrogen Evolution and CO_2 Reduction

11:40 to 12:00

Laura Newton (Nottingham Trent University, Nottingham, United Kingdom), Emma Cowham, Duncan Sharp, Ray Leslie, James Davis

Combating Biofilm Formation with Superoxide Generating Smart Electro-Polymers

12:00 to 12:20

Alison Downard (Department of Chemistry, University of Canterbury, Christchurch, New Zealand), Joshua Lehr, David Garrett, Benjamin Flavel, Bryce Williamson, Paula Brooksby, Matthew Paulik

Single- and Two-Component Patterning of Carbon, Metal and Silicon Substrates by Microcontact Printing with Aryldiazonium Salt Inks

Symposium 15: Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells

Location: Rhodes 10

Chaired by: Wolfgang G. Bessler, Nigel Brandon and Dane Morgan

09:40 to 10:20 **Keynote**

Andrei Kulikovsky (Research Centre Juelich, IEF-3, Juelich, Germany)

Analytical Modelling of Fuel Cells

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

Clemens Fink (AVL List GmbH, Graz, Austria), Nicolas Fouquet, Reinhard Tatschl

D Simulation and Experimental Validation of PEM-FC

11:00 to 11:20

Maurizio Zaglio (Paul Scherrer Institut, Villigen PSI, Switzerland), Alexander Wokaun, John Mantzaras, Felix N. Büchi

Model-based Transient Analysis of Polymer Electrolyte Fuel Cells

11:20 to 11:40 **Invited**

Pierre Millet (Institut de Chimie Moléculaire et des Matériaux d'Orsay, Université Paris Sud 11, Orsay, France)

PEM Water Electrolysis

11:40 to 12:00 **Invited**

Robert Steinberger-Wilckens (Institute of Energy Research Forschungszentrum Jülich, Jülich, Germany)
European SOFC R&D – Status and Challenges

12:00 to 12:20 **Invited**

K. Andreas Friedrich (German Aerospace Center Institute of Technical Thermodynamics, Stuttgart, Germany)

Importance of Spatially Resolved Measurements for Model Validation

Tuesday, 28 September, 2010 - Afternoon

Symposium 1: New Insights and Applications in Ionic Liquid Electrochemistry

Location: Risso 8

Chaired by: Philippe Hapiot and Alexei Kornyshev

14:00 to 14:40 **Keynote**

Frank Endres (Clausthal University of Technology, Chair of Interface Processes, Clausthal-Zellerfeld, Germany)

The interface ionic liquid(s) / electrode(s): *In situ* STM and AFM measurements

14:40 to 15:00

Peter Bressers (TNO Netherlands Organisation for Applied Research, Eindhoven, Netherlands), Annalisa Branca, Maaike van der Leeden

Patterned aluminium deposition from ionic liquid solutions

15:00 to 15:20

Sophie Legeai (Institut Jean Lamour, UMR 7198 Université Paul Verlaine, Metz Cedex 3, France), Youssouf Traore, Sébastien Diliberto, Micheline Draye

Indium electrodeposition in a piperidinium-based ionic liquid

15:20 to 15:40

Emmanuel Billy (CNRS, ING, UJF, Saint Martin d Heres, France), Eric Chainet

Chemical and electrochemical dissolution of gold in ionic liquids

15:40 to 16:00

Virginie Lair (LECIME, UMR, CNRS, 7575, ENSCP, Chimie Paris, Tech, Paris, France), Juliette Sirieix-Plénet, Laurent Gaillon, Cécile Rizzi, Armelle Ringuedé

Influence of the electrolyte on ceria electrodeposition: From aqueous solution to ionic liquid

16:00 to 16:20

Coffee Break

16:20 to 16:40

Carmen M. Rangel (LNEG, Lisboa, Portugal), S. Eugénio, I. Baskaran, R. Vilar

Electrochemical aspects of black chromium electrodeposition in 1-butyl-3-methylimidazolium tetrafluoroborate ionic liquid

16:40 to 17:00

Adriana Ispas (Physikalische Chemie und Elektrochemie, Technische Universitaet Dresden, Dresden, Germany), Andreas Bund

Tantalum electrodeposition from ionic liquids studied by microgravimetry and square wave voltammetry

17:00 to 17:20

Karl Ryder (Department of Chemistry, University of Leicester, Leicester, United Kingdom), Emma Smith, Andrew Abbott

Immersion Process in Ionic Liquids: Applications in Functional Coatings for the PCB Industry

17:20 to 17:40

Annette Foelske-Schmitz (Paul Scherrer Institut, Villigen, Switzerland), Daniel Weingarth, Izabela Czekaj, Rüdiger Kötz, Alexander Wokaun

XPS and DFT study of imidazolium based ionic liquids as electrolytes for high energy electrochemical double layer capacitors

17:40 to 18:00

Yunhua Chen (Laboratoire de Réactivité et Chimie des Solides, CNRS UMR 6007, Université de Picardie Jules Verne, Amiens, France), Jean-Marie Tarascon, Claude Guéry

Electrochemically-Assisted Synthesis of $LiFePO_4$ in Ionic Liquid Media for Li-ion Batteries

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

Chaired by: Maria Gabriela Almeida, Renata Bilewicz, Nicolas Mano and Sharon G. Roscoe

14:00 to 14:40 **Katsumi Niki Prize for Bioelectrochemistry Award Leccture**
Serge Cosnier (Département de Chimie Moléculaire UMR CNRS 5250, Grenoble Cedex 9, France)

Bioelectrode Design for Biosensing Applications and Electricity Production : from Electrogenerated Polymers to Carbon Nanotubes

14:40 to 15:00
Ramaraja P. Ramasamy (The University of Georgia, Athens, USA)

Enzyme Immobilization on Functional Nanomaterials for Bioelectrochemical Applications

15:00 to 15:20
Sevil Zengin Cekic (DECHEMA e.V. Karl-Winnacker-Institut, Frankfurt am Main, Germany), Dirk Holtmann, Klaus-Michael Mangold, Jens Schrader

Mediator driven bioelectrocatalysis with P450cin

15:20 to 15:40
Dina Fattakhova-Rohlfing (Department of Chemistry and Center for NanoScience (CeNS), University of Munich (LMU), Munich, Germany), Vesna Mueller, Jiri Rathousky

Mesoporous transparent electrodes as high area conducting platforms for grafting of redox moieties

15:40 to 16:00
Frank Nelson Crespilho (Universidade Federal do ABC, Santo André, Brazil)

One-Dimensional Nanostructures Applied in Biodevices: Measurements at Low Current Conditions (Sub-pico-Ampere) and Electrochemical Properties

16:00 to 16:20 **Invited**
Christine Mousty (Laboratoire des Matériaux Inorganiques (UMR 6002), Université Blaise Pascal, Clermont-Ferrand, France), Claude Forano

Nanostructurated Hybrid Enzyme-Layered Double Hydroxides: From Biosensors to Biofuel Cells

16:20 to 16:40
Coffee Break

16:40 to 17:20 **Keynote**
Itamar Willner (Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel)

Nanostructured Electrodes for Bioelectronic Applications

17:20 to 17:40 **Invited**
Yoon-Bo Shim (Department of Chemistry, Pusan National University, Busan, Korea), Kyung-Sun Lee, Mi-Sook Won, Hui-Bog Noh

Triggering the Redox Reaction of Cytochrome c on the Biomimetic Layer and Elimination of Interferences for NADH Detection

17:40 to 18:00
Seiya Tsujimura (Graduate School of Agriculture, Kyoto University, Kyoto, Japan), Kenji Kano, Nicolas Mano

Mesoporous carbon gels for enzymatic biofuel cells based on direct electron transfer

18:00 to 18:20
Sungmo Moon (Korea Institute of Materials Science, Changwon, Korea), Byungjo Kim, Cheolnam Yang, Yongsoo Jeong

Adhesion of TiO_2 Nanotubes Formed on Ti Electrochemically

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

Chaired by: Daniel Scherson

14:00 to 14:20 **Invited**

Kenichiro Ota (Chemical Energy Laboratory, Yokohama National University, Yokohama, Japan), Shigenori Mitsushima, Koichi Matsuzawa, Akimitsu Ishihara

Development of Non-Precious Metal Oxide-Based Cathode for Polymer Electrolyte Fuel Cell

14:20 to 14:40

Ulrike I. Kramm (Institut National de la Recherche Scientifique, Énergie Matériaux et Télécommunications, Varennes, Canada), Juan Herranz, Thomas Arruda, Peter Bogdanoff, Sebastian Fiechter, Irmgard Abs-Wurmbach, Sanjeev Mukerjee, Frédéric Jaouen, Michel Lefèvre, Jean-Pol Dodelet

Fe-based Catalysts for the Reduction of Oxygen in PEM Fuel Cells: Structural Investigation of Fe/N/C Catalytic Sites

14:40 to 15:00

Kenneth Ozoemena (Energy and Processes Unit, Materials Science and Manufacturing, CSIR, Pretoria, South Africa), Tendamudzimu Ramulifho, Solomon Mamuru, Mmalewane Modibedi, Mkhulu Mathe

Carbon Nanotube-Modified Metallophthalocyanines and Metal Nanoparticles as Efficient Platforms for Fuel Cells

15:00 to 15:20

Hebe Mercedes Villullas (Instituto de Química, Universidade Estadual Paulista, Araraquara (SP), Brazil), Felipe I. Pires, Joelma Perez

Carbon supported PdNi Catalysts for Oxygen Reduction: Activity and Stability Studies

15:20 to 15:40

Hiroshi Fukunaga (Shinshu University, Ueda, Japan), Ryo Shishido, Yoshio Takasu

Silk-Derived Activated Carbon as Non-Precious Metal Catalyst for Oxygen Reduction Reaction of PEFC

15:40 to 16:00

In-Su Park (Department of Chemistry, Georgetown University, Washington, USA), Dianne Atienza, Augusta Hofstead-Duffy

Effect of adsorbed sulfur (S) on electrocatalytic behavior of Pt-based nanoparticles

16:00 to 16:20

Shuhui Sun (Department of Mechanical and Materials Engineering, University of Western Ontario, London, Canada), Gaixia Zhang, Ruying Li, Dongsheng Geng, Yu Zhong, Mei Cai, Xueliang Sun

Ultrathin Single-Crystal Pt Nanowire-based 3D Electrodes for Fuel Cell Applications

16:20 to 16:40

Coffee Break

16:40 to 17:00

Sandra Rondinini (Dipartimento di Chimica Fisica ed Elettrochimica, Università di Milano, Milano, Italy), Silvia Ardizzone, Paola Cava, Giuseppe Cappelletti, Cristina Locatelli, Alessandro Minguzzi, Alberto Vertova

Multiphase Matrices based on Nanostructured Mixed Metal Oxides for Oxygen Reduction: The Combined Effect of Particles Hydration and pH

17:00 to 17:20

Julien Bernard d'Arbigny (Institut Charles Gerhardt, CNRS UMR 5253, Laboratoire Agregats, Interfaces et Materiaux pour l Energie, Montpellier, France), Gilles Taillades, Mathieu Marrony, Rob Hui, Deborah Jones, Jacques Rozière

Novel porous tungsten carbide / carbon microspheres as catalyst support for high temperature PEMFC

17:20 to 17:40

Josimar Ribeiro (Química, Universidade Federal do Espírito Santo, Vitória, Brazil), Adalgisa R. de Andrade, Germano Tremiliosi-Filho

Development of PtSn-M/C (M = Ru, Ir or W) electrocatalysts for Fuel Cells that operate at low temperature

17:40 to 18:00

Michele Tague (Chemistry and Chemical Biology, Cornell University, Ithaca, USA), John Gregoire, Anna Legard, Francis DiSalvo, Bruce van Dover, Héctor Abruña

Combinatorial Screening of Metal Alloy Libraries for Rapid Discovery of PEM Anode Electrocatalysts

18:00 to 18:20

Atsushi Nishikata (Department of Metallurgy and Ceramics Science, Tokyo Institute of Technology, Tokyo, Japan), Yuu Sugawara, Tooru Tsuru

Dissolution of Platinum under Potential Cycles in Sulfuric Acid Solution Studied by Channel Flow Double Electrode

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Supercapacitors

Location: Euterpe

Chaired by: Elzbieta Frackowiak

14:00 to 14:20 **Invited**

Yury Gogotsi (Department of Materials Science and Engineering, Drexel University, Philadelphia, USA), Patrice Simon

Advanced Carbon Materials for Electrochemical Capacitors

14:20 to 14:40

Thomas Thomberg (Institute of Chemistry, University of Tartu, Tartu, Estonia), Heisi Kurig, Alar Jänes, Enn Lust

Supercapacitors Performance Based on Micro- and Mesoporous Vanadium and Molybdenum Carbide Derived Carbon

14:40 to 15:00 **Invited**

Yves Scudeller (University of Nantes, Ecole Polytechnique, Nantes, France), Yann Dandeville, Philippe Guillemet, Olivier Crosnier, Thierry Brousse

Electrothermal Analysis of Supercapacitors

15:00 to 15:20

Shunzo Suematsu (Research Center, Nippon Chemi-Con Corporation, Takahagi-shi, Japan), Daisuke Horii, Kenji Tamamitsu

Electrochemical Capacitors Utilizing Single-Walled Carbon Nanotubes Suitable for Electrode Materials

15:20 to 15:40

Jean-Baptiste Ducros (Laboratoire de Génie des Matériaux et Procédés Associés, EA 2664, Ecole Polytechnique de Nantes, Nantes, France), Jean-François Pierson, Fabien Capon, Thierry Brousse

Metal nitride thin films as possible electrodes for supercapacitors

15:40 to 16:00

Mohd Asyadi Azam (School of Materials Science, Japan Advanced Institute of Science and Technology, Nomi, Japan), Mohd Ambri Mohamed, Eiji Shikoh, Akihiko Fujiwara, Tatsuya Shimoda

Direct Growth of Single Walled Carbon Nanotubes on Metal Substrates using Alcohol Catalytic CVD Technique and its Application to Electrochemical Capacitor

16:00 to 16:20

Sebastien Lagoutte (Laboratoire de Physicochimie des Polymères et des Interfaces, Cergy Pontoise cedex, France), Pierre Henri Aubert, François Tran Van, Martine Mayne, Mathieu Pinault, Christian Sarazzin, Claude Chevrot

Electropolymerisation of thiophene derivatives on aligned carbon nanotubes for electrochemical storage

16:20 to 16:40

Coffee Break

16:40 to 17:00

Anthony Rennie (University of Strathclyde, Department of Chemical & Process Engineering, Glasgow, United Kingdom), Fiona Sillars, Peter J. Hall

Nitrogen-enriched Carbon Electrodes in Electrochemical Capacitors

17:00 to 17:20

Xiaogang Zhang (College of Material Science and Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China), Changzhou Yuan, Bo Gao, Li Chen, Qingbin Fu

Preaparation and Electrochemical Capacitance of Nanocomposites Based on Functionalized Carbon Nanotubes

17:20 to 17:40

Elzbieta Frackowiak (Poznan University of Technology, Poznan, Poland), Krzysztof Fic, Grzegorz Lota

Supercapacitor Based on the Two Redox Couples

17:40 to 18:00

Cesar A. Barbero (Department of Chemistry, Universidad Nacional de Rio Cuarto, Rio Cuarto, Argentina), Juan Balach, N. Gustavo Cotella, Diego F. Acevedo

Synthesis and Assembling of Carbon Micro/nanoparticles as Electrode Materials of Electrochemical Double Layer Capacitors

18:00 to 18:20

Li-Chyong Chen (Center for Condensed Matter Sciences, National Taiwan University, Taipei, Taiwan), Ying-Ying Horng, Yi-Chen Lu, Yu-Kuei Hsu, Chia-Chun Chen, Kuei-Hsien Chen

High Capacitive Performance of Conducting Polymers/Carbon-nanotubes Composite Electrodes

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

Chaired by: Andreas Bund and Juergen Heinze

14:00 to 14:20 **Invited**

Susana Cordoba de Torresi (Instituto de Quimica, Universidade de São Paulo, São Paulo, Brazil), Leonardo T. Silveira, Fernanda F. Camilo, Luciano Caseli, Osvaldo N. Oliveira Jr.

Optimizing thin film deposition and electrolytic media in the search of stable electroactive polymers

14:20 to 14:40 **Invited**

Oleg Semenikhin (Department of Chemistry, The University of Western Ontario, London, Canada)

Nanoscale Inhomogeneity of Conducting and Semiconducting Polymers

14:40 to 15:00

Peter Rapta (Department of Physical Chemistry, Slovak University of Technology, Bratislava, Slovakia), Lothar Dunsch

New Developments of the *in situ* ESR/UV-vis-NIR Spectroelectrochemistry of Extended Pi-Systems

15:00 to 15:20 **Invited**

Hubert Perrot (LISE UPR 15 du CNRS, Université P. et M. Curie, Paris, France), Loan Thi Kim To, Claude Gabrielli, Alain Pailleret

Ion-exchange properties and swelling/deswelling process in hexasulfonated calix[6]arene doped polypyrrole films : ac-electrogravimetry and EC-AFM investigations

15:20 to 15:40

Verena Stockhausen (ITODYS Paris 7, Denis Diderot, Paris, France), Martin Pascal, Jalal Ghilane, Hyacinthe Randriamahazaka, Jean Christophe Lacroix

Giant Plasmon Resonance Shift using PEDOT Electrochemical Switching

15:40 to 16:00

Alexander Nekrasov (Frumkin Institute of Physical Chemistry and Electrochemistry, Moscow, Russia), Oxana Gribkova, Victor Ivanov, Anatoly Vannikov

On the Nature of Near-Infrared Absorption in Polyaniline Films Prepared by Different Methods

16:00 to 16:20

Iwona A. Rutkowska (Department of Chemistry, University of Warsaw, Warsaw, Poland), Dorota Szymanska, Pawel J. Kulesza

Effective charge propagation and storage in hybrid films of tungsten oxide and conducting polymers

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**

Fritz Scholz (University of Greifswald, Institute of Biochemistry, Greifswald, Germany)

Electrochemical Studies of the Interaction of Reactive Oxygen Species (ROS) with Electrode Surfaces and Compounds on Electrode Surfaces

17:00 to 17:20

Sotiris Sotiropoulos (Chemistry Department, Aristotle University of Thessaloniki, Thessaloniki, Greece), Jenia Georgieva, Stephan Armyanov, Eugenia Valova, Ioannis Poulios

Electrosynthesized and powder TiO_2-WO_3 anodes for the photooxidation of organic vapors in an all-solid photoelectrochemical cell.

17:20 to 17:40

Sergey Vassiliev (Department of Electrochemistry, Chemical Faculty, Moscow State University, Moscow, Russia)

Ex situ STM/STS approaches to characterization of nanoheterogeneous electrode materials

17:40 to 18:00

Rezan Demir-Cakan (Jules Verne Laboratoire de Réactivité et Chimie des Solides, Université de Picardie, Amiens, France), Thi Le Anh Nguyen, Alexandra Fateeva, Thomas Devic, Christian Serre, Franck Millange, Gerard Férey, Jean-Marie Tarascon, Mathieu Morcrette

Metal Organic Frameworks (MOFs) towards Lithium Storage

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

Chaired by: Philippe Marcus and Nadine Pébère

14:00 to 14:40 **Keynote**

Changjian Lin (Xiamen University, Xiamen, China), Chenqing Ye, Yan Li, Bin Lin, Ronggang Hu

Electrochemical Imaging in One and Two-Dimensions for Studying Localized Corrosion

14:40 to 15:00

Jinshan Pan (Chemistry, Stockholm, Sweden), Fan Zhang, Odd Sandberg

Electrochemical and *in-situ* AFM Study of Localized Corrosion of Tooling Alloys

15:00 to 15:20

Artjom Maljusch (Elektroanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Ceylan Senöz, Michael Rohwerder, Wolfgang Schuhmann

SKP-SECM: System Development, Optimization and First Applications

15:20 to 15:40

Maike Pähler (Analytische Chemie - Elektroanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Hajo Gugel, Werner Theisen, Wolfgang Schuhmann

Corrosion analysis of laser-welded NiTi/steel plates by AC-SECM and a scanning droplet cell

15:40 to 16:00

Fouad Maroun (Laboratoire de Physique de la Matière Condensée, CNRS, Ecole Polytechnique, Palaiseau, France), Alexis Damian, Isabelle Braems, Fabienne Berthier, Philippe Allongue

In-situ STM Studies and Monte Carlo Simulations of the Electrochemical Dissolution of an Atomic Alloy Layer Deposited on Au(111)

16:00 to 16:20

Toni Massoud (Chimie ParisTech, CNRS, UMR 7045), Paris, France), V. Maurice, F. Wiame, L.H. Klein, A. Seyeux, P. Marcus

Nanoscale investigation of the electronic structure of passivated nickel surfaces by scanning tunneling spectroscopy

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**

Fatima Montemor (ICEMS - Instituto Superior Técnico, Lisboa, Portugal), Darya Snihirova, Maryna Taryba, Sviatlana Lamak, Mario Ferreira, Wim Wijting, Guido Grundmeier, Ekaterina Skorb, Dmitry Shchukin

Investigation of Self-Repair Corrosion Processes in Coated Substrates Using a Combination of Spatially-Resolved Electrochemical Techniques with Conventional Electrochemistry, Standard Corrosion Tests

17:00 to 17:20

Sylvain Amand (CIRIMAT, ENSIACET, Toulouse, France), Maëlenn Aufray, Alain Lamure, Nadine Pébère

Characterization of organosilane-based coatings by electrochemical impedance spectroscopy

17:20 to 17:40

Hang To Thi Xuan (Laboratory for Protective Coatings, Institute for Tropical Technology, VAST, Hanoï, Viet Nam), Truc Trinh Anh, Nadine Pébère, Marie-Georges Olivier

Protection mechanisms of carbon steel by indole-3 butyric acid modified clay in an epoxy resin

17:40 to 18:00

Cécile Motte (Materia Nova asbl, Mons, Belgium), Mireille Poelman, Aline Roobroeck, Michele Fedel, Flavio Deflorian, Marie-Georges Olivier

Improvement of corrosion protection offered to galvanized steel by incorporation of lanthanide modified nanoclays in silane layer

18:00 to 18:20

Christophe Aucher (EA 2664 - Laboratoire Génie des Matériaux et Procédés Associés, Nantes, France), Daniel Bélanger, Thierry Brousse, Daniel Guay

Anodic Protection of Lead by Polyaniline

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

Chaired by: Philippe Allongue and Jay Switzer

14:00 to 14:20

Diana Iselt (IFW Dresden, Institute for Metallic Materials, Dresden, Germany)

Electrodeposition of Fe-Ga thin films for magnetostrictive applications

14:20 to 14:40

Robert Lacasse (IREQ, Hydro-Quebec, Varennes, Canada), Estelle Potvin, Julian Cave, Michel Trudeau

Electrodeposition : A promising technique for the production of thick amorphous material for magnetic cores

14:40 to 15:00

Takanari Ouchi (Department of Applied Chemistry, Waseda University, Tokyo, Japan), Yohei Konishi

Analysis of Nano-patterned Electrodeposition of Co-Pt at Initial Deposition Stage

15:00 to 15:20

Laura Cattaneo (Politecnico di Milano, Milano, Italy), Silvia Franz, Franca Albertini, Massimo Fumagalli, Antonello Vicenzo, Massimiliano Bestetti

Structural and Magnetic Investigation of Electrodeposited Co Nanowires into AAO Membranes

15:20 to 15:40

Stéphane Bastide (Institut Chimie et Matériaux Paris-Est CNRS, UPEC, Thiais, France), Tetyana Nychyporuk, Zhou Zhan, Alain Fave, Mustapha Lemiti

A New Electroless Technique for the Deposition of Ag Nanoparticles on SiNx:H Dielectric Layers

15:40 to 16:00

James Rohan (Tyndall National Institute, University College Cork, Cork, Ireland), Sanjay Patil, Nicolas Holubowitch, Maksudul Hasan, Tamjid Chowdhury

Metal nanotube architectures for energy conversion and storage

16:00 to 16:20

Ahmed Shawky Ghareeb (Department of Chemistry, Faculty of Science, Hokkaido University, Sapporo, Japan), Yasuda Satoshi, Kei Murakoshi

Electrochemical Synthesis of Single-Walled Carbon Nanotubes at Room Temperature

16:20 to 16:40

Coffee Break

16:40 to 17:00

Aleksey Lisenkov (University of Aveiro, Aveiro, Portugal), Syargei Poznyak, Mikhail Zheludkevich, Mário G.S. Ferreira

Preparation of rare earth-doped anodic films on light metals by powerful pulsed discharge in electrolyte

17:00 to 17:20

Cyrille Lecoeur (Laboratoire de Réactivité et Chimie du Solide, Université de Picardie Jules Verne, Amiens, France), Jean-Marie Tarascon, Claude Guéry

Electrochemical syntheses of architectured aluminium current collectors for Li-ion batteries

17:20 to 17:40

Sylvia Sanchez (CEA-Grenoble, LETI-Minatec Department of Nanotechnology, Grenoble, France), Claude Lévy-Clément

ZnO buffer layer deposition for extremely thin absorber solar cell

17:40 to 18:00

Bernabé Marí (Departament de Física Aplicada-IDF, València, Spain), Mariola Tortosa, Mustapha Sahal, Miguel Mollar

Electrochemical synthesis of p-type ZnO thin films

Symposium 8: Electrochemical Process Engineering and Technology

Location: Risso 7

Chaired by: J. Weidner and S.Yoshihara

14:00 to 14:20 **Invited**

Shigenori Mitsushima (Chemical Energy Laboratory, Yokohama National University, Yokohama, Japan), Fumiya Hiraoka, Kazuki Shinkoda, Koichi Matsuzawa, Ken-ichiro Ota

Degradation of Pt/C cathode under potential cycling

14:20 to 14:40

Simonetta Palmas (Dipartimento di Ingegneria Chimica e Materiali, Università degli Studi di Cagliari, Cagliari, Italy), Anna Maria Polcaro, Anna Da Pozzo, Michele Mascia, Annalisa Vacca, Andrea Ardu

Photoelectrochemical Properties of TiO_2 nanotubes as anodes for the electrically enhanced water splitting

14:40 to 15:00

Diogo Santos (Department of Chemical and Biological Engineering, Instituto Superior Tecnico, Lisboa, Portugal), Cesar Sequeira, Jose Luis Figueiredo

Influence of Iron and Vanadium on the Performance of Nickel Electrodes for Hydrogen Evolution in Alkaline Water Electrolysis

15:00 to 15:20

Stamatios Souentie (Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON, UMR 5256, CNRS) and Université Claude Bernard Lyon 1, Lyon, France), Leonardo Lizarraga, Evangelos Papaioannou, Philippe Vernoux

Permanent electrochemical promotion (P-EPOC) of C_3H_8 oxidation over Pt thin films

15:20 to 15:40

Constantinos Vayenas (Chemical Engineering, University of Patras, Patras, Greece), Michail Tsampas

On the negative impedance region and proton transfer mechanism in fully hydrated Nafion membranes

15:40 to 16:20 **Keynote**

Shigehito Deki (Kobe University, Kobe, Japan)

Electrochemical Process Engineering and Technology of the Liquid Phase Deposition for the Preparation of Metal Oxide Thin Films

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**

Yann Bultel (LEPMI, Saint Martin d'Hères, France), Sylvain Tant, Pierre-Xavier Thivel, Florence Druart, Van Man Tran

EIS fitting approach for PEMFC Stack diagnosis

17:00 to 17:20

Martin Paidar (Department of Inorganic Technology, Institute of Chemical Technology Prague, Prague, Czech Republic), Karel Bouzek, Petr Mazur

PEM Water Electrolysis at Elevated Pressure

17:20 to 17:40

Leonard Stoica (Elektroanalytik und Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Julia Finger, Xingxing Chen, Michael Bron, Wolfgang Schuhmann

Visualization of the local reactivity of gas-diffusion electrodes used as cathodes in brine electrolysis by means of scanning electrochemical microscopy (SECM)

17:40 to 18:00

Hidenori Yahiro (Ehime University, Matsuyama, Japan), Muku Nakasato, Makiko Asamoto, Syuhei Yamaguchi, Tsuyoshi Yamaji

Electrolysis of Various Alcohols using Polymer Electrolyte Membrane

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

Chaired by: Lothar Dunsch and Richard Webster

14:00 to 14:20 **Invited**
Elizabeth Santos (Institut of Theoretical Chemistry, Ulm University, Ulm, Germany), Frederik Tielens

Ab-initio studies of self-assembled monolayers on silver and gold surfaces

14:20 to 14:40
Paul Low (Department of Chemistry, Durham University, Durham, United Kingdom)

Studies of Intramolecular Electron Transfer in Ligand Bridged Bimetallic Complexes: From Electrochemistry and Spectroelectrochemistry to TD-DFT

14:40 to 15:00
Eduardo Laborda (Departamento de Quimica Fisica, Universidad de Murcia, Murcia, Spain), Angela Molina, Francisco Martinez-Ortiz, Richard G. Compton

Reverse Pulse Voltammetry for characterization of electrode kinetics

15:00 to 15:20 **Invited**
Leslaw Bieniasz (Institute of Physical Chemistry, Polish Academy of Sciences, Cracow, Poland)

Automation of the Theoretical and Computational Modelling of Electroanalytical Experiments

15:20 to 15:40
Bernd Speiser (Institut für Organische Chemie, Universität Tübingen, Tübingen, Germany)

How to Define an Electrochemical Experiment within a Computer Program - An Object-Oriented Analysis of Experimental Molecular Electrochemistry

15:40 to 16:20 **Keynote**
Keith Oldham (Dept. of Chemistry, Trent University, Peterborough, Canada)

Digital Simulation is not the Only Way of Modelling Cyclic Voltammetry

16:20 to 16:40
Coffee Break

16:40 to 17:00
Massimo Marcaccio (Dipartimento di Chimica "G. Ciamician" Università di Bologna, Bologna, Italy), Giovanni Valenti, Carlo Bruno, Francesco Paolucci, Lawrence T. Scott, Claudio Fontanesi

Electrochemiluminesce and Redox Properties of Corannulene and its Electrochemically-Generated Film

17:00 to 17:20
Ruhlmann Laurent (Université Paris-Sud 11, Orsay, France), Schaming Delphine, Alain Giraudeau

Electro- and spectroelectro-chemical properties of the non planar porphyrin $[ZnOEP(Py)_4^{4+},4Cl^-]$ in solution and in nanocomposite films containing Dawson polyanions.

17:20 to 17:40
Derck Schlettwein (Institute of Applied Physics, Justus- Liebig University Gießen, Gießen, Germany), Stefanie Nagel, Christopher Keil, Sergiu Gorun, Robert Gerdes

Electrochromic Redox Reactions of Highly Fluorinated Phthalocyanine Thin Films

17:40 to 18:00
Dominique Lucas (ICMUB - UMR 5260 Université de Bourgogne, Dijon, France), Charles Devillers, Abdou Dime, Mikhail Vorotyntsev, Dmitry Konev, Yoann Rousselin, Hélène Cattey, Igor Bezverkhyy, Olivier Heintz

Redox reactivity of magnesium(II) porphine

18:00 to 18:20 **Invited**
Jean-Claude Moutet (Université Joseph Fourier, Grenoble cedex 9, France), Mihai Buda, Charles Devillers, Adriana Iordache, Patricia Melfi, Jonathan Sessler

Electrochemically Driven Synthetic StrategiesTowards Expanded Porphyrins

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

Chaired by: Clare Grey and David Schiffrin

14:00 to 14:40 **Keynote - Prix Jacques Tacussel Award Lecture**

Olaf Magnussen (Institut für Experimentelle und Angewandte Physik, Universität Kiel, Kiel, Germany)

Trends and challenges in atomic-scale studies of electrochemical interfaces

14:40 to 15:00 **Invited**

Angel Cuesta (Instituto de Química Física, Madrid, Spain), María Escudero, Gema Cabello, Cristina Vaz, Asier Aranzábal

Combined Use of Electrochemical Techniques, Spectroscopy and Scanning Tunneling Microscopy in Interfacial Electrochemistry

15:00 to 15:20

Ryosuke Jinnouchi (Toyota Central R&D Labs., Inc., Nagakute, Japan), Yu Morimoto, Tatsuya Hatanaka

First principles model predicting electrochemical properties of (bi)sulfate anion adsorption on Pt(111)

15:20 to 15:40 **Invited**

Shi-Gang Sun (Department of Chemistry, Xiamen University, Xiamen, China)

Investigation of electrochemical reactions by development of *in situ* FTIR spectroscopy

15:40 to 16:00

Wen-Bin Cai (Department of Chemistry, Fudan University, Shanghai, China), Jin-Yi Wang

Infrared Spectroscopic Study of the Origin of CO Formed at Pd Electrodes in Formic Acid Solution at Open Circuit Potentials

16:00 to 16:20

Coffee Break

16:20 to 16:40

Daniel Scherson (Department of Chemistry, Case Western Reserve University, Cleveland, USA), Denis R. de Godoi, Youjiang Chen, Huanfeng Zhu

The Oxidation of Hydroxylamine on Au in Aqueous Acidic Electrolytes: *In situ* Spectroelectrochemical Studies

16:40 to 17:00

Matteo Duca (Leiden Institute of Chemistry, Leiden University, Leiden, Netherlands), Marc Koper

Electrocatalytic reduction of nitrite: A comparative study

17:00 to 17:20

Enrique Herrero (Instituto de Electroquímica, Universidad de Alicante, Alicante, Spain), Vitali Grozovski, José Solla-Gullón, Víctor Climent, Juan M. Feliu

Formic acid oxidation reaction on Pt nanoparticles studied by ATR-FTIRS

17:20 to 17:40 **Invited**

Masatoshi Osawa (Catalysis Research Center, Sapporo, Japan), Kei-ichi Komatsu, Samjeske Gabor, Taro Uchida, Tamio Ikeshoji, Angel Cuesta, Claudio Gutiérrez

Role of bridge-bonded formate in the electrocatalytic oxidation of formic acid on platinum

17:40 to 18:00

Björn Braunschweig (Department of Chemistry, University of Illinois at Urbana Champaign, Urbana, USA), Robert Kutz, Prabuddha Mukherjee, Dana D. Dlott, Andrzej Wieckowski

Broadband Sum-Frequency Generation of Ethanol Oxidation Intermediates in Acidic and Basic Electrolytes

18:00 to 18:20

Bruno Batista (Physical Chemistry, Instituto de Química de São Carlos (IQSC - USP), São Carlos, Brazil), Hamilton Varela

Autocatalysis During Formic Acid Interaction With Platinum Oxides: An FTIRs and Simulation Study

Symposium 11: Sensors and Biosensors

Location: Hermes

Chaired by: Christophe Demaille and George Wilson

14:00 to 14:40 **Keynote**
Yuehe Lin (Pacific Northwest National Laboratory, Richland, USA)

Biofunctionalization of Nanomaterials for Biomedical Applications

14:40 to 15:00
James Rusling (University of Connecticut, Storrs, USA), Bhaskara Chikkaveeraih, Vignesh Mani, Vyomesh Patel, Gutkind J. Silvio, Malhotra Ruchika

Nanoscience-Enhanced Multiplexed Detection of Cancer Biomarker Proteins

15:00 to 15:20
Ilaria Palchetti (Department of Chemistry, Sesto Fiorentino, Firenze, Italy), Francesca Berti, Serena Laschi, Sonia Centi, Sara Tombelli, Giovanna Marrazza, Marco Mascini

Electrochemical Biosensors Coupled to Magnetic Beads for the Detection of Clinical Biomarkers

15:20 to 15:40
Jeyong Yoon (School of Chemical and Biological Engineering, Seoul National University (SNU), Seoul, Korea), Junil Kang, Taeyoung Kim

The application of electrochemical techniques for monitoring adsorbed microorganisms and biofilms

15:40 to 16:00
Kumi Y. Inoue (Graduate School of Environmental Studies, Tohoku University, Sendai, Japan), Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

Zymogen-based Electrochemical Sensor for Endotoxin Using Recombinant Factor C

16:00 to 16:20
Kohji Mitsubayashi (Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, Tokyo, Japan), Ming Xing Chu, Daishi Takahashi, Takahiro Arakawa, Hiroyuki Kudo

Contact-lens Type Glucose Sensor Fabricated Using Bionic-MEMS Techniques for Monitoring of Tear Sugar

16:20 to 16:40
Coffee Break

Chaired by: Yuehe Lin

16:40 to 17:00
George Wilson (Departments of Chemistry and Pharmaceutical Chemistry, Lawrence, USA), Erik Naylor, Daniel Aillon, Seth Gabbert, Hans Harmon, Greg Osterhaus, David Johnson

Real-time *In-vivo* Monitoring: Linking Brain Activity with Neurobiology

17:00 to 17:20
Martyn Boutelle (Department of Bioengineering, Imperial College London, London, United Kingdom), Michelle Rogers, Agnes Leong, Xize Niu, Andrew de Mello

On-line Potentiometric and Amperometric Analysis of Clinical Microdialysis Samples Using Digital Microfluidics

17:20 to 17:40 **Invited**
Gerd-Uwe Flechsig (Dept. of Chemistry, University of Rostock, Rostock, Germany), Heiko Duwensee, Maren Mix

Hot Wires for Thermo-convective PCR with Electrochemical Product Detection

Symposium 13: Surface Functionalization

Location: Rhodes 9-2

Chaired by: Daniel Bélanger and Claude Chevrot

14:00 to 14:20 **Invited**

Fetah Podvorica (Physicochimie des Electrolytes, des Colloides et Sciences Analytiques,UMR7195, CNRS, ESPCI Paris Tech, Paris, France), Catherine Combellas, Frederic Kanoufi, Jean Pinson, Avni Berisha

Radicals Generated by H Atom Abstraction, their Attachment to Metallic Surfaces: the case of acetonitrile

14:20 to 14:40

Yann Leroux (Equipe Matière Condensée et Systèmes Electroactifs (MaCSE), Sciences Chimiques de Rennes, UMR 6226 CNRS-Université Rennes1, Rennes, France), Philippe Hapiot, Jean-Marc Noël

En Route to Active Molecular Strainer Surfaces

14:40 to 15:00

Kaido Tammeveski (Institute of Chemistry, University of Tartu, Tartu, Estonia), Risto Reilson, Marko Kullapere

Blocking Behavior of Covalently Attached Anthraquinone

15:00 to 15:20

Megan Coates (Department of Chemistry, Rhodes University, Grahamstown, South Africa), Edith Antunes, Eva Cabet, Sophie Griveau, Fethi Bedioui, Tebello Nyokong

Covalent Modification of Carbon Electrode Surfaces by Electrochemical Grafting and Azide-Alkyne Click Chemistry

15:20 to 15:40

Gaëlle Trippé-Allard (ITODYS, UMR 7086 Université Paris Diderot, Paris, France), Laure Fillaud, Verena Stockhausen, Jalal Ghilane, Pascal Martin, Emmanuel Allard, Hyacinthe Randriamahazaka

Surface modification combining diazonium reduction and click chemistry: Bottom up approach

15:40 to 16:20 **Keynote**

Hans Joachim Lewerenz (Institute for Solar Fuels and Energy Storage Materials, Helmholtz Center Berlin for Materials and Energy, Berlin, Germany)

Self-Organized and Induced Nanotopographies for Photoelectrochemical Energy Conversion

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**

Tim McCormac (Electrochemistry Research Group, Dundalk Institute of Technology, Dundalk, Ireland)

Surface Immobilisation Strategies for Polyoxometallates

17:00 to 17:20

Galina Dubacheva (University Joseph Fourier, DCM, Grenoble, France), Liliane Coche-Guérente, Pierre Labbé, Pascal Dumy, Rachel Auzély, Pierre Schaaf, Fouzia Boulmedais, Loïc Jierry

Electrochemically controlled adsorption/desorption of polymer films based on multivalent host-guest interactions

17:20 to 17:40

Tony Breton (University of Angers, Angers, France), Olivier Alévêque, Christelle Gautier, Marylène Dias, Eric Levillain

Molecular organization on electroactive mixed SAMs: Electrochemical and electrocatalytical behaviours

17:40 to 18:00

Ulrich Jung (Institut für Experimentelle und Angewandte Physik, Christian-Albrechts-Universität zu Kiel, Kiel, Germany), Sonja Kuhn, Mathias Müller, Olena Filinova, Belinda Baisch, Jens Kubitschke, Rainer Herges, Olaf Magnussen

Photoswitching of azobenzene-containingtriazatriangulenium adlayers on Au(111) surfaces

18:00 to 18:20

Maria Elena Vela (INIFTA, Fac. Ciencias Exactas, Univ.Nac. de La Plata, La Plata, Argentina), Roberto Urcuyo, Emiliano Cortes, Mavis Montero, Aldo Rubert, Guillermo Benitez, Roberto Salvarezza

The effect of the terminal groups in the redox properties of Cu acetate complexes immobilized on aromatic and aliphatic thiols

Symposium 15: Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells

Location: Rhodes 10

Chaired by: Alejandro A. Franco, Andrei Kulikovsky, Kourosh Malek and Adam Weber

14:00 to 14:40 **Keynote**

Nigel Brandon (Energy Futures Lab, London, United Kingdom), Claire Adjiman, Qiong Cai, Paul Shearing

Modelling Solid Oxide Fuel Cells - from electrodes to stacks

14:40 to 15:00

Qiong Cai (Imperial College London, London, United Kingdom)

Modelling the 3D microstructure and the performance of solid oxide fuel cell electrodes

15:00 to 15:20

Alexander Opitz (Institute of Chemical Technologies and Analytics, Vienna University of Technology, Vienna, Austria), Arno Schintlmeister, Herbert Hutter, Jürgen Fleig

Determination of the Three Phase Boundary Width of Pt Cathodes on Solid Electrolytes

15:20 to 15:40 **Invited**

Wolfgang G. Bessler (German Aerospace Center, Stuttgart, Germany)

Model anodes and anode models for understanding the mechanism of H_2 oxidation in solid oxide fuel cells

15:40 to 16:00

Gérard Delette (CEA, LITEN, DEHT, LPCE, Grenoble, France), Xiaoxing Liu, Christophe Martin, Stéphane Di Iorio, Didier Bouvard

Understanding of the role of the microstructure on the properties of SOFC electrodes with discrete simulations

16:00 to 16:20

Lei Wang (Max Planck Institute for Solid State Research, Stuttgart, Germany), Rotraut Merkle, Joachim Maier

Kinetics and Mechanism of Oxygen Incorporation into (Ba,Sr)(Co,Fe)$O_{3-\delta}$ Mixed Conducting SOFC Cathodes

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**

Dane Morgan (Department of Materials Science and Engineering, University of Wisconsin, Madison, USA), Yueh-Lin Lee, Jesper Kleis, Jan Rossmeisl

Ab-initio Modeling of Solid Oxide Fuel Cell Cathode Electrocatalysts

17:00 to 17:20

Misbah Sarwar (Johnson Matthey Technology Centre, Reading, United Kingdom), Sonia Garcia, Alejandro Martinez-Bonastre, Sam French, Dave Thompsett, Jacob Gavartin, Gerhard Goldbeck-Wood, George Fitzgerald, Alexander Perlov

Materials discovery with *ab initio* high throughput calculations

17:20 to 17:40

Jérôme Laurencin (CEA, LITEN, DTBH, LTH, Grenoble, France)

Solid Oxide Electrolysis Cell (SOEC) modelling: A sensitivity analysis of operating conditions on electrolyser response

17:40 to 18:20 **KEYNOTE**

Robert Kee (Colorado School of Mines, Golden, USA), Huayang Zhu, Andrew Colclasure, Borhan Sanandaji, Tyrone Vincent

Model-Based Design and Control of Solid-Oxide Fuel Cells

18:20 to 18:40 **INVITED**

Marie-Liesse Doublet (Institut Charles Gerhardt, CNRS 5253, Université Montpellier 2, Montpellier, France)

Design of electrode materials for Li-ion batteries from first-principles

Wednesday, 29 September, 2010 - Morning

Plenary

Location: Apollon

Chaired by: Juan Feliu

08:30 to 09:30 **Frumkin Memorial Medal Award Lecture**

Oleg Petrii (Department of Chemistry Moscow State University, Moscow, Russia)

A wide variety of Electrochemistry as an irresistible attraction

Symposium 2: Environment, Water and Analytical Electrochemistry

Location: Risso 8

09:35 to 09:40 Introduction

Chaired by: Nicole Jaffrezic-Renault

09:40 to 10:00 **Invited**

Edward Roberts (School of Chemical Engineering and Analytical Science, University of Manchester, Manchester, United Kingdom), Syed Nadir Hussain, Hafiz Anwar Asghar, Fadhil Mohammed, Michael Conti-Ramsden, Andrew Campen, Nigel Brown

Water Treatment by Adsorption and Electrochemical Regeneration

10:00 to 10:20

Maurice Comtat (Vivelys, Villeneuve lès Maguelone, France), Vincent Cantaignède, Benjamin Huerta Ortega

Old electrochemical tools for monitoring young wines aging

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote Oronzio and Niccolò De Nora Foundation Prize of ISE on Environmental Electrochemistry**

Carlos Alberto Martinez-Huitle (Department of Chemistry, Universidade Federal do Rio Grande do Norte, CCET, Natal, Brazil), Sergio Ferro

Application of BDD electrodes for electrochemical oxidation of organic pollutants for the wastewater treatment

11:40 to 12:00

Ilje Pikaar (Advanced Water Management Centre, Brisbane, Australia), René Rozendal, Zhiguo Yuan, Jurg Keller, Korneel Rabaey

High rate electrochemical sulfide removal from synthetic feed and real domestic wastewater

11:20 to 11:40

Xiuping Zhu (Department of Environmental Engineering, Peking University, Beijing, China), Jinren Ni

The improvement of boron-doped diamond anode system in electrochemical degradation of p-nitrophenol by zero-valent iron

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

Chaired by: Yoon-Bo Shim

09:40 to 10:00

Stephen Fletcher (Department of Chemistry, Loughborough University, Loughborough, United Kingdom)

Application of the Theory of Electron Transfer to the Photosynthetic Reaction Centre

10:00 to 10:20

Arkady Karyakin (Chemistry Faculty of M.V. Lomonosov Moscow State University, Moscow, Russia)

Improved Protocol to Form Enzyme Containing Membranes: Towards Advanced Biosensors

10:20 to 10:40

Coffee Break

10:40 to 11:00

Xing-Hua Xia (School of Chemistry and Chemical Engineering, Nanjing University, Nanjing, China), Su-Juan Li, Chen Wang, Wei Chen, Hui Yu

Application of nanochannels based devices in electrochemical bioanalysis

11:00 to 11:20 **Invited**

Christoph Nebel (Fraunhofer Institut for Applied Solid State Physics, Freiburg, Germany), Nianjun Yang, Rene Hoffmann, Armin Kriele, Waldemar Smirnov, Oliver Ambacher

Diamond for Biosensing

11:20 to 12:00 **Keynote**

William Heineman (Department of Chemistry, University of Cincinnati, Cincinnati, USA), H. Brian Halsall, Carl Seliskar, Hideki Kuramitz

Spectroelectrochemistry as a Strategy for Improving Selectivity of Biosensors

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Supercapacitors

Location: Apollon

Chaired by: Elzbieta Frackowiak

09:40 to 10:00 **Invited**

Francesca Soavi (Dipartimento di Scienza dei Metalli, Elettrochimica e Tecniche Chimiche, Università di Bologna, Bologna, Italy), Mariachiara Lazzari, Marina Mastragostino

Ionic Liquids as Green Electrolytes for Supercapacitors

10:00 to 10:20

Alar Jänes (Institute of Chemistry, University of Tartu, Tartu, Estonia), Heisi Kurig, Tavo Romann, Enn Lust

Novel Electrolyte for Double Layer Capacitors

10:20 to 10:40

Coffee Break

10:40 to 11:00
Encarnacion Raymundo-Piñero (CRMD, CNRS, University of Orléans, Orléans, France), Roman Mysyk, Meriem Anouti, Daniel Lemordant, François Béguin

Protic ionic liquids as electrolytes for carbon based supercapacitors

11:00 to 11:20
Di Wei (Nokia Research Centre c/o University of Cambridge, Cambridge, United Kingdom)

Electrochemical energy storage device based on room temperature ionic liquids

11:20 to 11:40
Fiona Sillars (University of Strathclyde, Glasgow, United Kingdom), Isobel Fletcher, Mojtaba Mirzaeian, Peter Hall

Ionic Liquid Electrolytes for Electrochemical Capacitors: Effect of Physical Properties

11:40 to 12:00
Emmanuelle Perricone (LEPMI/CNRS/UJF/Grenoble INP, Domaine Universitaire, St. Martin d'Hères, France), Fannie Alloin, Jean-Claude Lepretre

Organic electrolytes for supercapacitors: Electrochemical and physicochemical investigations

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

Chaired by: Robert Savinell

09:40 to 10:20 **Keynote**
Radoslav Atanasoski (3M, St. Paul, USA)

Durability of Thin Film Catalysts for PEM Fuel Cells

10:20 to 10:40
Coffee Break

10:40 to 11:00
Yang Shao-Horn (Department of Materials Science and Engineering and Department of Mechanical Engineering, MIT, Cambridge, USA)

Oxygen Reduction Reaction Kinetics on Select Catalysts in Aqueous and Nonaqueous Solutions and Implications for Fuel Cells and Li-Air Batteries

11:00 to 11:20 **Hans-Jürgen Engell Prize Award Lecture**
Karl Mayrhofer (Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf, Germany), Katrin Hartl, Josef Meier, Matthias Arenz

Identical-Location Microscopy for the investigation of corrosion processes

11:20 to 11:40
Francisco Jose Perez-Alonso (Center for Individual Nanoparticle Functionality, Department of Physics, Technical University of Denmark, Lyngby, Denmark), Christian F. Elkjær, Billie L. Abrams, Ifan E. L. Stephens, Ib Chorkendorff

Corrosion study of Pt/C based Oxygen-Reduction Electrocatalysts Using Identical Locations Transmission Electron Microscopy

11:40 to 12:00
Laetitia Dubau (Laboratoire d'Electrochimie et de Physico-Chimie des Matériaux et des Interfaces, UMR 5631 CNRS/Grenoble Université, Saint Martin d'Hères, France), Frédéric Maillard, Marian Chatenet, Johan André, Elisabeth Rossinot

Degradation mechanisms of Pt_3Co/C electrocatalysts in a 16 cells PEMFC stack

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Battery Research

Location: Euterpe

Chaired by: Jean-Marie Tarascon, Christophe Coutanceau

09:40 to 10:00

Keith Scott (Chemical Engineering and Advanced Materials, University of Newcastle, Newcastle upon Tyne, United Kingdom), H. Cheng, Oloniyo Paul Olubukun, L. Hardwick, S. Freunberger, P. Bruce

Catalysts and Electrodes for Li Air Rechargeable Batteries

10:00 to 10:20

Alberto Vertova (Università degli Studi di Milano - Dipartimento di Chimica Fisica ed Elettrochimica, Milano, Italy), Silvia Ardizzone, Gabriele Aricci, Giuseppe Cappelletti, Cristina Locatelli, Alessandro Minguzzi, Sandra Rondinini

Li/air batteries: New nanostructured materials for oxygen electrodes

10:20 to 10:40

Coffee Break

10:40 to 11:00

Zhangquan Peng (School of Chemistry, St. Andrews, United Kingdom), Yuhui Cheng, Stefan Freunberger, Laurence Hardwick, Vincent Giordani, Petr Novák, Jean-Marie Tarascon, Peter Bruce

Oxygen Electrode Reactions in the Non-aqueous Li-Air Battery

11:00 to 11:40 **Keynote**

Jean-Marie Tarascon (LRCS, UPJV, Amiens, France), Nadir Recham, Prabeer Barpanda, Mohamed Ati, Sylvie Grugeon, Stephéne Laruelle, Phillip Poizot, Wesley Walker, Michel Armand

Inorganic and organic electrode materials made via eco-efficient processes for sustainable Li-ion batteries

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

Chaired by: Adam Pron and Sampath Srinivasan

09:40 to 10:00 **Invited**

Wolfgang Schuhmann (Analytische Chemie - Elektroanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Justus Masa, Tharamani Chikka Nagaiah, Wei Xia, Michael Bron, Martin Muhler

Noble-metal free electrocatalysts based on modified carbon nanotubes, pyrolysed poly-metalloporphyrin films and transition metal/N-containing polymer composites

10:00 to 10:20 **Invited**

Christopher Brett (Departamento de Quimica Faculdade de Ciencias e Tecnologia, Universidade de Coimbra, Coimbra, Portugal)

Polyazine Based Nanostructured Redox Polymers for Electrochemical Sensors and Biosensors

10:20 to 10:40

Coffee Break

10:40 to 11:00

Paul Kilmartin (Department of Chemistry, University of Auckland, Auckland, New Zealand), Olga Makhotkina, Jing Sui, Lijuan Zhang, Nicolas Beaumont, Alexander Türke, Jadranka Travas-Sejdic

Polyphenols and Conducting Polymers as Redox Mediators for the Analysis of Small Molecule Antioxidants

11:00 to 11:20

Nicola Cioffi (Department of Chemistry, University of Bari, Bari, Italy), Luisa Torsi

Electronic detection of pollutants by means of electrosynthesized gold nanostructures

11:20 to 11:40 **Invited**

Sophie Demoustier-Champagne (Institute of Condensed Matter and Nanosciences - Bio & Soft Matter (IMCN/BSMA), Université Catholique de Louvain, Louvain-la-Neuve, Belgium), Vincent Callegari

From Nanoporous Templates toward the Synthesis of Diverse Hybrid Functional Nanowires

11:40 to 12:00 **Invited**

Vladimir Mirsky (BCV-Nanobiotechnology, Lausitz University of Applied Sciences, Senftenberg, Germany), Ulrich Lange

Integrated Electrochemical Chemotransistors: A New Strategy for Chemical Sensors for Non-conducting Media

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

Chaired by: Annick Hubin and X. Ramon Novoa

09:40 to 10:00 **Invited**

Mark Orazem (University of Florida, Gainesville, USA), Bryan Hirschorn, Bernard Tribollet, Vincent Vivier, Isabelle Frateur, Marco Musiani

Constant-Phase Element (CPE) Behavior Caused by Resistivity Distributions in Films

10:00 to 10:20

Francesco Di Quarto (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Università di Palermo, Palermo, Italy), Francesco Di Franco, Monica Santamaria, Hiroki Habazaki

Characterization of Anodic Oxides on Magnetron Sputtered Ta-Nb Alloys by Photocurrent Spectroscopy and Differential Admittance Measurements

10:20 to 10:40

Coffee Break

10:40 to 11:00

Yves Van Ingelgem (SURF, Vrije Universiteit Brussel, Brussel, Belgium), Annick Hubin

Further implementation of a toolbox containing Odd Random Phase Multisine Electrochemical Impedance Spectroscopy to study complex electrochemical systems

11:00 to 11:20

Fabio La Mantia (Stanford University, Stanford, USA), Hiroki Habazaki, Monica Santamaria, Francesco Di Quarto

A Critical Analysis on the Use of Mott-Schottky Plots to Characterise the Passive Film/Electrolyte Junction

11:20 to 12:00 **Keynote**

Annick Hubin (Department of Electrochemical and Surface Engineering, Vrije Universiteit Brussel, Brussel, Belgium), Tom Breugelmans, Tom Hauffman, Jean-Baptiste Jorcin, Els Tourwé, Yves Van Ingelgem

New trends in the use of Electrochemical Impedance Spectroscopy for the study of corrosion processes at the micro- and nano-scale

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

Chaired by: Claude Levy-Clement

09:40 to 10:00

Amy C. Cruickshank (Department of Materials and London Centre for Nanotechnology, Imperial College London, London, United Kingdom), Benoit N. Illy, Raffaello da Campo, Stefan Schumann, Tim S. Jones, Sandrine Heutz, Martyn A. McLachlan, David W. McComb, D. Jason Riley, Mary P. Ryan

Electrodeposition of Nanostructured ZnO Films for Photovoltaic Applications

10:00 to 10:20

Thierry Pauporte (LECIME, CNRS, ENSCP, Paris, France), Oleg Lupan, bruno Viana, Robert Cortès

Epitaxial Electrodeposition of ZnO Nanowire Arrays on p-GaN for Efficient UV-Light Emitting Diode Fabrication.

10:20 to 10:40

Coffee Break

10:40 to 11:00

Servane Haller (IRDEP, Chatou, France), Jean Rousset, Laure Dupuy, Franco Decker, Gilles Renou, Jean-François Guillemoles, Frédérique Donsanti, Daniel Lincot

Electrodeposition of nanoporous zinc oxide on sputtered Al: ZnO as TCO toward full ZnO-based dye-sensitized solar cells

11:00 to 11:20

Jamil Elias (Laboratory for Mechanics of Materials and Nanostructures Empa, Swiss Federal Laboratories for Materials Testing and Research, Thun, Switzerland), Claude Lévy-Clément, Mikhael Bechelany, Johann Michler, Laetitia Philippe

ZnO nanostructures from 1D to 3D obtained by Electrodeposition for photovoltaic applications

11:20 to 12:00 **Keynote**

Yasuhiro Fukunaka (ISAS, JAXA & Waseda University, Tsukuba, Japan), Hiroshi Osaki, Takao Wakatsuki

Gravitational Level Effects on Optical Properties of Electrodeposited ZnO Nanowire Arrays

Symposium 8: Electrochemical Process Engineering and Technology

Location: Risso 7

Chaired by: C. Vayenas and T. Tzedakis

09:40 to 10:20 **Keynote**

John Weidner (Department of Chemical Engineering, University of South Carolina, Columbia, USA)

Electrochemical Hydrogen Production

10:20 to 10:40

Coffee Break

10:40 to 11:00

Jaromir Hnat (Institute of Chemical Technology in Prague, Prague, Czech Republic), Martin Paidar, Karel Bouzek, Jan Schauer

Novel Heterogeneous Anion Exchange Membrane for the Alkaline Water Electrolysis with Enhanced Conductivity

11:00 to 11:20

Petr Mazur (Department of Inorganic Technology, Institute of Chemical Technology Prague, Prague, Czech Republic), Martin Paidar, Karel Bouzek, Jan Schauer

Ionic liquid based membranes for the high temperature PEM type fuel cell [xx] fuel cell testing

11:20 to 11:40

Luc Bertier (DRT, LITEN, DTBH, LTH CEA, Saint Paul les Durance, France), Thierry Gilardi, Pierre Baurens, François Lapicque

Methodology for the Modeling of High Temperature Steam Electrolysis Process Devoted to Hydrogen Production

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

Chaired by: Wolfgang Kaim and Marcin Opallo

09:40 to 10:00

Elise Deunf (Ecole Normale Supérieure Département de Chimie, Paris, France)

Design, Electrochemical Characterization and Reactivity of Original Metallo-Capped Cyclodextrin Complexes

10:00 to 10:20 **Invited**

Francesco Paolucci (Dipartimento di Chimica, Università di Bologna, Bologna, Italy), Stefania Rapino, Matteo Iurlo, Maurizio Prato, Massimo Marcaccio, Giovanni Valenti, Alain Pénicaud

Electrochemistry of carbon nanostructures: From pristine materials to molecular devices

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote**

Daniel Bélanger (Chimie Université du Québec à Montréal, Montréal, Canada)

Chemical and Electrochemical Modification of Surfaces with the Diazonium Chemistry

11:20 to 11:40

Dan Bizzotto (Department of Chemsitry, AMPEL, University of British Columbia, Vancouver, Canada), Jannu Casanova-Moreno, Amanda Musgrove

Studying the heterogeneity of electrode surfaces modified with adsorbed organic monolayers using fluorescence microscopy

11:40 to 12:00 **Invited**

Richard McCreery (National Institute for Nanotechnology, University of Alberta, Edmonton, Canada), Haijun Yan, Jie Ru, Bryan Szeto, Adam Bergren

Modified Electrodes as Microelectronic Components

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

Chaired by: Andrew Gewirth and Timo Jacob

09:40 to 10:20 **Keynote**
Wolfgang Schmickler (Theoretical Chemistry, Ulm, Germany), Elizabeth Santos, Paola Quaino

Theory of Hydrogen Electrocatalysis

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**
Nenad Markovic (Materials Science Division, Argonne, USA)

Surface Electrochemistry at Two and Three Phase Interfaces

11:00 to 11:20 **Invited**
Marc Koper (Leiden University, Leiden, Netherlands)

Co-adsorption of O and H_2O on nano-structured platinum surfaces: does OH form at steps?

11:20 to 11:40 **Invited**
Helmut Baltruschat (University of Bonn, Electrochemistry, Bonn, Germany), A. A. Abd-El-Latif, N. Bogolowski, I. Kilicci

Oxidation Reactions at Pt(S)[n(100)x(111)] Surfaces

11:40 to 12:00 **Invited**
Harry E. Hoster (Institute of Surface Chemistry and Catalysis, Ulm University, Ulm, Germany), R. Juergen Behm, Albert Engstfeld, Otávio B. Alves, Andreas Bergbreiter, Christoph Lorenz

Electrochemical properties of planar model electrodes with low Pt loading

Symposium 11: Sensors and Biosensors

Location: Hermes

Chaired by: Dermot Diamond and Alain Walcarius

09:40 to 10:20 **Keynote**
Dermot Diamond (CLARITY, Centre for Sensor Web Applications, Dublin, Ireland)

New Strategies for Enhancing the Reliability and Performance of Ion-Selective Electrodes

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**
Johan Bobacka (Åbo Akademi University, Process Chemistry Centre, Laboratory of Analytical Chemistry, Åbo/Turku, Finland), Sylwia Rabiej, Ulriika Mattinen

EIS Study of Ion-to-Electron Transduction in Potentiometric Ion Sensors

11:00 to 11:20
Jean-Noël Chazalviel (Physique de la Matière Condensée, Ecole Polytechnique, CNRS, Palaiseau, France), Long Nguyen Le Thang, A. Cavanna, U. Gennser, Yong Jin, Damien Aureau, Catherine Henry de Villeneuve, Philippe Allongue, François Ozanam

Hybrid Field-Effect Chemical Sensor

11:20 to 11:40

Alexandre Kisner (Institute of Bio-Nanosystems -2, Forchungszentrum Jülich, Jülich, Germany), Regina Stockmann, Andreas Offenhäusser, Lauro Tatsuo Kubota, Yulia Mourzina

Sensing Biological and Chemical Species with Nanoporous Gated Ion-Sensitive Field Effect Transistors

11:40 to 12:00

Jun Kondoh (Graduate School of Science and Technology, Shizuoka University, Hamamatsu-shi, Japan), Yutaro Nakayama, Takaaki Sugita

Novel digital micro fluidic system using surface acoustic wave device

Symposium 12: Electrochemistry on a Local Scale

Location: Rhodes 9-2

09:35 to 09:40 Introduction

Chaired by: Emmanuel Maisonhaute

09:40 to 10:00

Fabien Miomandre (PPSM, ENS, CACHAN, Cachan, France), Robert Pansu, Pierre Audebert, Sorin Munteanu, Rachel Méallet-Renault, Jean-Frédéric Audibert

Coupling electrochemistry with time resolved fluorescence microscopy : A new powerful tool to investigate the properties of 'electrofluorochromic' compounds

10:00 to 10:20 **Invited**

Katharina Krischer (Physik-Department E19a, Technische Universität München, Garching, Germany), Vladimir Garcia-Morales, Tahmineh Pourrostami

Fluctuation Enhanced Electrochemical Reaction Rates at the Nanoscale

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote**

Serge G. Lemay (MESA+ Institute for Nanotechnology, University of Twente, Enschede, Netherlands), Marcel A. G. Zevenbergen, Pradyumna S. Singh, Edgar D. Goluch

Electrochemical nanofluidics: Mesoscopic and single-molecule limits

11:20 to 11:40

Sean Branagan (Department of Chemical and Biomolecular Engineering, University of Notre Dame, Notre Dame, USA), Paul Bohn

Optical Characterization of Electrochemical Double Layer Reorganization Dynamics by Concurrent Nanoelectrochemistry and Monochromatic Spectral Imaging

11:40 to 12:00

Edmund Dickinson (Physical & Theoretical Chemistry Laboratory, University of Oxford, Oxford, United Kingdom), Leon Freitag, Kristopher Ward, Richard Compton

Dynamic Theory of Liquid Junction Potentials

Symposium 14: Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel cells

Location: Rhodes 10

09:35 to 09:40 Introduction

Chaired by: Lital Alfonta and Shelley Minteer

09:40 to 10:00

Yvonne Beyl (Analytische Chemie – Elektroanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Dimitrii Guschin, Thomas Erichsen, Sergey Shleev, Wolfgang Schuhmann

Multicopper oxidase cathodes basedon mediated electron transfer for biofuel cells

10:00 to 10:20 **Invited**

Lo Gorton (Dept. of Biochemistry, Institute of Chemistry, Lund University, Lund, Sweden), Federico Tasca, Muhammad Nadeem Zafar, Roland Ludwig, Oliver Spadiut, Clemens K. Peterbauer, Dietmar Haltrich

Nonconventional Sugar Oxidising Redox Enzymes for Biofuel Cells Applications

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote**

Plamen Atanassov (Center for Emerging Energy Technologies, Department of Chemical & Nuclear Engineering, University of New Mexico, Albuquerque, USA), Carolin Lau, Constantine Khripin, Dmitri Ivnitski, Ramaraja Ramasamy, Heather Luckarift, Glenn Johnson

Direct Bio-electrocatalysis by Multicopper Oxidases

11:20 to 11:40 **Invited**

Sophie Tingry (Institut Européen des Membranes, Montpellier, France), Christophe Innocent, Marc Cretin, Louis Renaud, Rosaria Ferrigno, Abdelkader Zebda

Enzyme patterning for a microfluidic methanol/oxygen biofuel cell

11:40 to 12:00 **Invited**

Marcos Pita (Biocatalysis Department, Catalysis and Petroleum-Chemistry Institute, Spanish Research Council (CSIC), Madrid, Spain)

Switchable Biofuel Cells Controlled by Logically Processed Biochemical Signals

Thursday, 30 September, 2010 - Morning

Plenary

Location: Apollon

Chaired by: Rob Hillman

08:30 to 09:30

Allen Bard (The University of Texas, Austin, USA), Hongjun Zhou, Seong Jung Kwon, Fu-Ren Fan

Electrochemistry of Single Molecules and Particles

Symposium 2: Environment, Water and Analytical Electrochemistry

Location: Risso 8

Chaired by: Salvatore Daniele

09:40 to 10:20 **Keynote**

Constant van den Berg (Earth and Ocean Sciences, Liverpool University, Liverpool, United Kingdom), Pascal Salaun, Kristoff Gibbon-Walsh, Zhaoshun Bi

Metal speciation in natural waters by voltammetry using a vibrating gold microwire electrode

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

Sylvia G. Sander (Department of Chemistry, University of Otago, Dunedin, New Zealand), Mona Wells

Revisiting Complexometric Metal-ligand Titrations – A New Approach for Multi Ligand Systems

11:00 to 11:20

Eric Bakker (Department of Inorganic, Analytical and Applied Chemistry, University of Geneva, Geneva, Switzerland), Ewa Grygolowicz-Pawlak, Apon Numnuam

Hollow Fiber Membranes Based on Ion-Selective Materials for Permeation Sampling, Electrochemical Sample Manipulation and Detection

11:20 to 11:40

Florence Geneste (University of Rennes, Rennes, France), Rihab Nasraoui, Didier Floner

Flow Electrochemical Sensor for Preconcentration and Stripping Voltammetry of Lead

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

Chaired by: Arkady Karyakin

09:40 to 10:20 **Keynote**

Kevin W. Plaxco (Department of Chemistry and Biochemistry, University of California, Santa Barbara, Santa Barbara, USA)

Folding-based Electrochemical Biosensors

10:20 to 10:40

Coffee Break

10:40 to 11:00

Osamu Niwa (National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan), Dai Kato, Keisuke Goto, Mayuri Komoriya, Ryoji Kurita, Shigeru Hirono

Direct electrochemical detection of DNA and damaged DNA using sputter deposited nanocarbon film

11:00 to 11:20

Ana Maria Oliveira-Brett (Departamento de Química, Universidade de Coimbra, Coimbra, Portugal), Victor Constantin Diculescu, Ana-Maria Chiorcea-Paquim, Ramon Eritja

Guanosine-quadruplex Structures in Thrombine Binding Aptamer - AFM and Voltammetric Characterization

11:20 to 11:40

Kateryna Muzyka (Kharkiv National University of Radio Electronics, Departament of Biomedical Engineering, Laboratory of Analytical Optochemotronics, Kharkiv, Ukraine), Mykola Rozhitskii, Olena Bilash

Electrochemical/Electrogenerate Chemiluminescent-based Sensors Element for Endotoxin Determination

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Supercapacitors

Location: Apollon

Chaired by: François Béguin

09:40 to 10:00

David Pech (LAAS-CNRS, Toulouse Cedex 4, France), Magali Brunet, John McDonough, Teresa Ubieto, Vadym Mochalin, Yury Gogotsi, Pierre-Louis Taberna, Patrice Simon

Influence of the architecture of micro-supercapacitors on their electrochemical performances

10:00 to 10:20

Magdalena Skunik (Department of Chemistry, University of Warsaw, Warsaw, Poland), Pawel J. Kulesza

Development of hybrid organic-inorganic materials for efficient charging/discharging in electrochemical capacitors

10:20 to 10:40

Coffee Break

10:40 to 11:00

Masayuki Morita (Graduate School of Science and Engineering, Yamaguchi University, Ube, Japan), Tomoki Ohta, In-Tae Kim, Nobuko Yoshimoto, Minato Egashira

Effects of the Electrolyte Composition on the Electrochemical Activation of Alkali-treated Soft Carbon as an Electric Double Layer Capacitor Electrode

10:00 to 11:20

Andriy Kovalenko (National Institute for Nanotechnology, Edmonton, Alberta, Canada), Sergey Gusarov

Statistical-Mechanical, Molecular Theory of Solvation for Electrochemistry in Nanoporous Electrodes

11:20 to 11:40

Carlos Perez (Materials Science and Engineering, Drexel University, Philadelphia, USA), Sun-Hwa Yeon, Patricia Reddington, John E. Fischer, Yury Gogotsi

Characterization of Carbide Derived Carbons Synthesized from Titanium Carbide Nanoparticles

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

Chaired by: Radoslav Atanasoski

09:40 to 10:20 **Keynote**

Robert Slade (Chemistry, University of Surrey, Guildford, United Kingdom), Jamie Kizewski, Simon Poynton, John Varcoe

The alkaline membrane electrolyte approach to low temperature fuel cells – a breakthrough technology

10:20 to 10:40

Coffee Break

10:40 to 11:00

Morihiro Saito (Department of Molecular Chemistry and Biochemistry, Kyotanabe-shi, Japan), Masato Akiyoshi, Tatsuya Takakuwa, Yu Matsui, Akimasa Tasaka, Minoru Inaba, Takeo Hatai, Jun Kuwano

Manganese Oxide-Based Cathode Catalysts for Alkaline Membrane Fuel Cells

11:00 to 11:20

Mário Simões (Université de Poitiers, Poitiers, France), Stève Baranton, Christophe Coutanceau

Carbon supported Pd based nanocatalysts: Application in Direct Glycerol Fuel Cell (DGFC) for the cogeneration of energy and chemicals

11:20 to 11:40

Enrico Verlato (IENI-CNR, Padova, Italy), Sandro Cattarin, Nicola Comisso, Marco Musiani, Lourdes Vázquez-Gómez

Preparation of Anodes for Methanol Oxidation by Spontaneous Deposition of Pd onto Porous Ni or Co

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Battery Research

Location: Euterpe

Chaired by: Bruno Scrosati and Charles Delacourt

09:40 to 10:00

Hiromori Tsutsumi (Yamaguchi University, Ube, Japan), Ryo Shibutani

Fire-retardant poly(oxetane)-based electrolytes for lithium batteries

10:00 to 10:20

Frieder Scheiba (IFW Dresden, Dresden, Germany), Andy Fiedler, Steffen Oswald, Helmut Ehrenberg

Stability of electrolyte salts for lithium-oxygen-battery applications

10:20 to 10:40

Coffee Break

10:40 to 11:00
Bruno Scrosati (Dept. Chemistry, University Rome Sapienza, Rome, Italy), Jusef Hassoun

Sulphur Lithium Ion Power: A novel, high performance polymer tin/sulphur lithium-ion battery

11:00 to 11:20
Renaud Cornut (Laboratory for Functional Materials, Montreal, Canada), David Lepage, Steen Brian Schougaard

Simple Methods to Evaluate the Limiting Processes in New Lithium-Ion Batteries Material

11:20 to 11:40 **Oronzio and Niccolò De Nora Foundation Prize of ISE on Applied Electrochemistry**
Charles Delacourt (Laboratoire de Réactivité et de Chimie des Solides, UMR CNRS 6007, Université de Picardie Jules Verne, Amiens, France), Mohammadhosein Safari, Anna Teyssot, Mathieu Morcrette

Life Prediction of Lithium-ion Batteries

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

Chaired by: Alain Deronzier and Emilia Morallon

09:40 to 10:20 **Keynote**
Renato Seeber (Department of Chemistry, University of Modena and Reggio Emilia, Modena, Italy)

The Role of Metals in Oligo- and Polythiophene Based Hybrid Materials as Electrode Systems for Sensing

10:20 to 10:40
Coffee Break

10:40 to 11:00 **Invited**
Luisa Abrantes (CQB, Departamento de Química e Bioquímica, Faculdade de Ciências da Universidade de Lisboa, Lisboa, Portugal), Ana Mourato

Embeddement of Noble Metal Nanoparticles into Polypyrrole – Role of the Electropolymerization conditions

11:00 to 11:20 **Invited**
György Inzelt (Department of Physical Chemistry, Eötvös Loránd University, Budapest, Hungary)

Preparation and characterization of RuO_2/polyaniline composite electrodes

11:20 to 11:40 **Invited**
Daniel Mandler (Institute of Chemistry, Jerusalem, Israel)

Formation and Characterization of Conducting Polymers/Nanoparticles Thin Films

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

Chaired by: Mark Orazem and Joris Proost

09:40 to 10:00

Britta Tigges (Dechema e. V., Frankfurt am Main, Germany), Christoph Lämmel, Michael Schneider, Wolfram Fürbeth

Innovative wear and corrosion protection of aluminium by formation of nanoparticle-reinforced hard anodizing layers

10:00 to 10:20

Dimitra Sazou (Aristotle University of Thessaloniki, Thessaloniki, Greece), Maria Pavlidou, Michael Pagitsas

Potential Oscillations Induced by the Local Breakdown of Passive Iron in Sulfuric Acid Media: Effect of Inhibiting Anions

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote**

Kurt Hebert (Department of Chemical and Biological Engineering, Iowa State University, Ames, USA)

Origin of Interface Instability During the Formation of Porous Anodic Oxide Films

11:20 to 11:40

Francesca Muratore (Corrosion and Protection Centre, School of Materials, The University of Manchester, Manchester, United Kingdom), Aleksandra Baron-Wiecheæ, Peter Skeldon, George Thompson

Influence of water on growth of anodic zirconium oxide nanotubes in glycerol/fluoride electrolytes

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

Chaired by: Stanko Brankovic

09:40 to 10:00

Noam Eliaz (School of Mechanical Engineering, Tel Aviv University, Tel Aviv, Israel)

Electrodeposition of Calcium Phosphates for Biomedical Applications

10:00 to 10:20 **Invited**

Alexander Kuhn (ENSCBP, University Bordeaux, Pessac, France)

Bipolar electrodeposition for tailoring unconventional nanoobjects

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote**

Daniel Schwartz (Electrochemical Materials and Interfaces Lab, Department of Chemical Engineering, Seattle, USA)

Orchestrated Structure Evolution for Electrochemical Nano/Micro-Manufacturing

11:20 to 11:40

Carlos Ponce De Leon (Electrochemical Engineering Laboratory, School of Engineering Sciences, University of Southampton, Southampton, United Kingdom), C. T. John Low, Phil N. Bartlett

Advanced and Diverse Coatings Electrodeposited from Methanesulphonic Acid

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

Chaired by: Mahito Atobe and Hans Schäfer

09:40 to 10:00

Zagal José (Department of Chemistry of Materials, Faculty of Chemiustry and Biology, University of Santiago de Chile, Santiago, Chile), J. Francisco Silva, Mamie Sancy, Jorge Pavez, Maritza Páez

N4-Macrocyclic Complexes, Versatile Materials for Multiple Applications in Electrocatalysis and Sensors

10:00 to 10:20

Patrizia Romana Mussini (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Francesco Sannicolò, Giovanni Rampinini, Letizia Colella, Tiziana Benincori, Simona Rizzo, Wlodzimierz Kutner, Krzysztof Noworyta, Valentina Bonometti

Electrochemistry of 3-D, inherently chiral thiophene-based monomers

10:20 to 10:40

Coffee Break

10:40 to 11:00

Corinne Lagrost (Sciences Chimiques de Rennes, UMR CNRS, Université de Rennes 1, n°6226, Rennes, France), Yifei Liu, Karine Costuas, Stéphane Rigaut

Multifunctional Organometallic Switches with Carbon-Rich Ruthenium and Diarylethene Units

11:00 to 11:20

Carita Kvarnström (University of Turku, Department of Chemistry, Turku, Finland), Mikael Wasberg, Nianxing Wang, Beatriz Meana Esteban, Timo Ääritalo, Jouko Kankare, Jukka Lukkari

Polyviologens, electrosynthesis and characterization

11:20 to 11:40

Tatiana Magdesieva (Lomonosov Moscow State University, Chemistry Department, Moscow, Russia), Oleg Nikitin, Alexey Goryunkov, Alexey Ryubalchenko, Lev Sidorov, Juergen Heinze

New electronegative fullerene-based materials and their electrochemical investigation

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

Chaired by: Brian Hayden

09:40 to 10:20 **Keynote**

David Schiffrin (University of Liverpool, Liverpool, United Kingdom)

Electrocatalysis and Electron Transfer at Nanostructured Surfaces

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

Brian Hayden (School of Chemistry, University of Southampton, Southampton, United Kingdom)

Particle Size and Support Effects in Electrocatalysis

11:00 to 11:20

Pavel Ruvinskiy (Laboratoire des Matériaux, Surfaces et Procédés pour la Catalyse, Ecole de Chimie, Polymères et Matériaux, Université de Strasbourg, UMR 7515 du CNRS-UDS, Strasbourg, France), Antoine Bonnefont, Matthieu Houllé, Cuong Pham-Huu, Elena Savinova

Electrocatalysis on 3D electrodes based on aligned carbon nano-filaments

11:20 to 11:40

Petr Krtil (J. Heyrovsky Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, Prague, Czech Republic), Valery Petrykin, Jiri Franc

Mechanistic Aspects of Electrocatalysis on Doped RuO_2

Symposium 11: Sensors and Biosensors

Location: Hermes

Chaired by: Damien Arrigan and Alexander Vaskevich

09:40 to 10:00

Salvatore Daniele (Dept. of Physical Chemistry, University of Venice, Venice, Italy), Dario Battistel, Giancarlo Battaglin, Maria-Antonietta Baldo, Carlo Bragato

Modification of Thin Films of Amorphous Alumina with Metals and Composites and Applications in Sensor Technology

10:00 to 10:20 **Invited**

Damien Arrigan (Nanochemistry Research Institute, Department of Chemistry, Curtin University of Technology, Perth, Australia), Micheal Scanlon

Improvement in the sensitivity of the electroanalytical response with nanoscale-ITIES arrays

10:20 to 10:40

Coffee Break

10:40 to 11:00

Jean Gamby (CNRS, UPR 15, Laboratoire Interfaces et Systèmes Electrochimiques, Paris, France), Mathilde Faure, Bernard Tribollet

Contactless Impedance technique in polymer microchip for following enzymatic reaction

11:00 to 11:20

Lauro Tatsuo Kubota (Institute of Chemistry, Unicamp, Campinas, Brazil), Rafaela Carvalhal, Marta Kfouri, Maria Helena Piazetta, Angelo Gobbi

Electrochemical Detection on a Paper-based Separation Device

11:20 to 11:40

Taketomo Sato (Research Center for Integrated Quantum Electronics, Hokkaido University, Sapporo, Japan)

High-Sensitive ISFETs based on InP Porous Structures

Symposium 12: Electrochemistry on a Local Scale

Location: Rhodes 9-2

Chaired by: Vincent Vivier

09:40 to 10:20 **Keynote**

Isabelle Frateur (CNRS, Chimie Paris Tech, Paris, France)

Incentives for using local electrochemical impedance spectroscopy (LEIS)

10:20 to 10:40

Coffee Break

10:40 to 11:00

Holger Wolfschmidt (Physik Department E19, Technische Universität München, Garching, Germany), Claudia Baier, Ulrich Stimming

STM, SECPM, AFM and Electrochemistry on Single Crystalline Surfaces

11:00 to 11:20 **Invited**

Andrea Russell (School of Chemistry, University of Southampton, Southampton, United Kingdom), Jonathon Speed, Suzanne Cintra, Jeremy Baumberg, Mamdouh Abselsalm, Philip Bartlett

Sphere segment void SERS substrates: enhancing sensitivity by controlling substrate structure

11:20 to 11:40

Beom Jin Kim (Department of Chemistry, Seoul National University, Seoul, Korea), Sung Yul Lim

Hybrid Probe for *in situ* Electrochemical SERS

Symposium 14: Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel cells

Location: Rhodes 10

Chaired by: Plamen Atanassov, Lo Gorton, Bert Hamelers and Jurg Keller

09:40 to 10:20 **Keynote**

Kylie A. Vincent (Department of Chemistry, Inorganic Chemistry Laboratory, University of Oxford, Oxford, United Kingdom)

Lessons from Hydrogenases: Direct Electrochemical and IR Spectroelectrochemical Approaches for Understanding and Exploiting Biological H_2 Oxidation and Production

10:20 to 10:40

Coffee Break

10:40 to 11:00

Eileen Yu (School of Chemical Engineering and Advanced Materials, Newcastle University, Newcastle upon Tyne, United Kingdom), J. Moretra, R. Prodanovic, G. Güven

Electrochemical Characterisation of Mutant Glucose Oxidase Obtained from Directed Evolution

11:00 to 11:20

Victoria Flexer (Centre de Recherche Paul Pascal, Université de Bordeaux, CRPP-UPR 8641-CNRS, Pessac, France), Nicolas Brun, Olivier Courjean, Rénal Backov, Nicolas Mano

Three-Dimensional Carbonaceous Porous Electrodes for Efficient Biofuel Cells

11:20 to 11:40

Fabien Giroud (Département de Chimie Moléculaire, UMR-5250, ICMG FR-2607, CNRS, Université Joseph Fourier, Grenoble, France), Chantal Gondran, Karine Gorgy, Serge Cosnier, Philippe Cinquin, François Boucher, Jean-Pierre Alcaraz

New biofuel cell implanted in rats

Symposium 16: General Session

Location: Risso 7

09:35 to 09:40 Introduction

Chaired by: Eric Vieil

09:40 to 10:00

Magdalena Warczak (Institute of Physical Chemistry of the Polish Academy of Sciences, Warsaw, Poland), Andrzej Sadkowski

Current oscillations on Ti at a high anodic potentiostatic polarization

10:00 to 10:20

Renaud Bouchet (Laboratoire Chimie Provence, UMR 6264 Université Aix-Marseille I,II,III, CNRS, Marseille, France), Didier Devaux, Véronique Wernert, Renaud Denoyel

Bulk conductivity *versus* "surface" conductivity in porous systems

10:20 to 10:40

Coffee Break

10:40 to 11:00

Georg Bauer (Institute for Computational Mechanics, Technische Universität München, Garching, Germany), Volker Gravemeier, Wolfgang A. Wall

A Novel Computational Approach for the Numerical Simulation of Electrochemical Systems Coupled to Fluid Flow

11:00 to 11:20

Michel Rosso (LPMC, CNRS, Ecole Polytechnique, Palaiseau Cédex, France), Kei Nishikawa, Elisabeth Chassaing

In-situ Concentration Measurements around the Transition between two Dendritic Growth Regimes

11:20 to 11:40

Alexey Emelyanov (Federal State Unitary Enterprise, State Research Center of Russian Federation "Troitsk Institute for Innovation and Fusion Research", Troitsk, Russia)

Investigation in high-velocity stream influence on breakdown characteristics and formation of electrical discharge in liquid

Thursday, 30 September, 2010 - Afternoon

Symposium 2: Environment, Water and Analytical Electrochemistry

Location: Risso 8

Chaired by: Hubert Perrot and Chee-Seng Toh

14:00 to 14:40 **KEYNOTE**
Catherine Debiemme-Chouvy (LISE, UPR 15 CNRS, Paris, France), Hubert Cachet

Electrochemical treatments to prevent biofouling

14:40 to 15:00 **INVITED**
Hyunseok Kim (Samsung Advanced Institute of Technology, Yongin-si, Korea), Chang-Hyun Kim, Hojung Yang, Hyorang Kang

A capacitive deionization system based on an asymmetric manganese oxide/activated carbon electrodes

15:00 to 15:20
Giuseppe Cappelletti (Dipartimento di Chimica Fisica ed Elettrochimica, Università di Milano, Milan, Italy)

Electrochemistry as a tool for nano-TiO_2 deposition and for photoremediation pollutant monitoring

15:20 to 15:40
Justyna Jonca (Laboratoire d'Etudes en Géophysique et Océanographie Spatiales, UMR 5566, Toulouse, France), Ludovic Lesven, Danièle Thouron, Pierre Gros, Maurice Comtat, Véronique Garçon

Electrochemical methods for autonomous phosphates monitoring in the ocean

15:40 to 16:00
Ricardo Salazar (University of Santiago of Chile, Santiago, Chile)

Mineralization textile wastewater by Electro-Fenton and Photo Electro-Fenton

16:20 to 16:40
Coffee Break

16:40 to 17:00 **INVITED**
Laurent Authier (CNRS, LCABIE, UMR 5254 IPREM, Université de Pau et des Pays de l'Adour, Pau, France), Olivier Zaouak, Cugnet Cyril, Eric Normandin, Daniel Champier, Marc Rivaletto, Martine Potin Gautier

Development of an Electroanalytical Device for Cadmium Speciation in Waters

17:00 to 17:20
Thi Thanh Binh Nguyen (Department of Chemistry, Faculty of Science, National University of Singapore, Singapore), Xin Zhan Andrew Lee, Jin Qiang Ang

Applications of iron hexacyanoferrate nanotubes and membranes on ions detection and ions transport in water environment

17:20 to 17:40
William Giraud (Chêne et Compagnie, Saint André de Cubzac, France), Marie Mirabel, Maurice Comtat

Electrochemical behaviour of some compounds found in biotechnological process of vanillin

17:40 to 18:20 **KEYNOTE**
Mary-Lou Tercier-Waeber (Analytical and Biophysical Environmental Chemistry, Dept. of Inorganic, Analytical and Applied Chemistry, University of Geneva, 1211 Geneva 4, Switzerland)

Dynamics of Trace Metal Speciation and Biogeochemical Cycles in Aquatic Systems: New Insights from Remote High Resolution *in situ* Voltammetric Monitoring

18:20 to 18:40
Ligia Maria Moretto (Department of Physical Chemistry, University of Venice, Venice, Italy), Massimo Tormen, Paolo Ugo

Comparative evaluation of the electroanalytical characteristics of arrays and ensembles of nanoelectrodes

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

Chaired by: Stephen Fletcher, Christine Mousty and Seiya Tsujimura

14:00 to 14:20

Jonathan Ellis (Life Science Interface Group, Tyndall National Institute, Cork City, Ireland), Gregoire Herzog, Barry Glynn, Damien Arrigan

Electrochemical Characterisation of Regularly-aligned Nanopore Array Membranes Filled with Electrolyte Solutions and their use for Detection of Nucleic Acid Hybridisation

14:20 to 14:40

Pawel Krysinski (Department of Chemistry, University of Warsaw, Warsaw, Poland), Dorota Nieciecka, Krzysztof Nawara, Anna Nowicka, Agata Kowalczyk, Mikolaj Donten, Zbigniew Stojek

Electrochemical and spectroscopic studies on the interactions of doxorubicin with model biomimetic systems

14:40 to 15:00

Qi Dong Zhang (ITODYS, CNRS, UMR 7086, University Paris Diderot, Paris 7, Paris cedex 13, France), Benoît Piro, Vincent Noël, Steeve Reisberg, Minh-Chau Pham

Single-Walled Carbon Nanotubes (SWCNT) Modified by a Redox Transducer and a DNA Probe: Application to a Reagentless and Direct DNA Sensor

15:40 to 16:00

Christian Zafiu (Department of Physical Chemistry, University of Vienna, Vienna, Austria), Guenter Trettenhahn, Dietmar Pum, Uwe B. Sleytr, Wolfgang Kautek

Structural control and *in-situ* study of Surface Layer Proteins at electrified interfaces

16:00 to 16:20

Yukari Sato (National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan), Kyoko Yoshioka, Teiichi Murakami, Mutsuo Tanaka, Osamu Niwa

Galectin Recognition on the Carbohydrate and Tri (ethylene glycol)-Alkanethiol Densified Hybrid Monolayer

16:20 to 16:40

Coffee Break

16:40 to 17:00

Daren Caruana (University College London, London, United Kingdom)

Effect of Peptide Orientation on Electron Transfer

17:00 to 17:20

Qijin Chi (Department of Chemistry, Technical University of Denmark, Lyngby, Denmark), Eduardo Della Pia, J. Emyr Macdonald, Jens Ulstrup

Electron Transport and Mapping in Heme Metalloprotein Monolayers

17:20 to 17:40

Patrícia Paes de Sousa (Requimte, Departamento de Química, Caparica, Portugal), Sofia Pauleta, Maria de Lurdes Simões Gonçalves, Graham Pettigrew, Isabel Moura, José Moura, Margarida Correia dos Santos

Haem Proteins and Graphite Electrodes – A Tricky Interaction?

17:40 to 18:00

Cans Ann-Sofie (Department of Chemical and Biological Engineering, Gothenburg, Sweden), Michael Kurczy, Lisa Simonsson, Carina Berglund, Andrew Ewing

Amperometric Modeling of Exocytosis with Artificial Cells

18:00 to 18:20

Vladimir Vetterl (Faculty of Medicine, Masaryk University, Brno, Czech Republic), Stanislav Hason

Discovery of Two-dimensional Condensation of Nucleic Acids Components at the Mercury Electrodes – 45 Years' History

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

Chaired by: Claude Lamy

14:00 to 14:20

Germano Tremiliosi-Filho (Instituto de Quimica de Sao Carlos, Universidade de Sao Paulo, Sao Carlos, Brazil), Cesar Augusto Duarte Rodrigues, Boniface Kokoh, Jean-Michel Léger, Christophe Coutanceau, Steve Baranton, Jairo Assis, Germano Tremiliosi-Filho

Performance of the C/Ni-Au-(Pt/Os) Catalyst in a Core-Shell Configuration for the Direct Ethanol Fuel Cell Application

14:20 to 14:40

Domnik Bayer (Dept. Applied Electrochemistry, Fraunhofer-Institute for Chemical Technology ICT, Pfinztal, Germany), Martin Joos, Carsten Cremers, Helmut Baltruschat, Siegfried Ernst, Jens Tübke

Electro-oxidation of Ethanol in Alkaline Medium: A Mechanistic Study at Platinum as Model Catalyst

14:40 to 15:00

Belen Molina Concha (LEPMI, UMR 5631 CNRS, Grenoble-INP/UJF, Saint Martin d'Hères, France), J. Francisco Rivera Zambrano, Marian Chatenet, Nicolas Sergent, Edson Ticianelli, Fabio H. B. Lima, Roberto B. de Lima

In situ spectroscopic studies of the mechanism of borohydride oxidation reaction on gold electrode.

15:00 to 15:20

Fabio H. B. Lima (Instituto de Química de São Carlos, São Carlos, Brazil), Walter F. Ambrosio

Electro-oxidation of ethanol on Pt/Rh/C nanoparticles investigated by on line DEMS

15:20 to 15:40

Chia-Liang Sun (Dept. of Chemical and Materials Eng., Chang Gung Univ., Tao-Yuan, Taiwan), Meng-Chi Lin, Shin-Shien Lee

Investigation of graphene-supported and size-selected Pt nanoparticles for methanol oxidation reaction

15:40 to 16:00

Ernesto Rafael Gonzalez (Instituto de Quimica de Sao Carlos, Universidade de Sao Paulo, Sao Carlos, Brazil), Eduardo G. Ciapina, Sydney F. Santos

The Influence of the Support and the Catalyst Microstructure on the Ethanol Electro-oxidation on Platinum Nanoparticles

16:00 to 16:20

Antonio C. D. Angelo (Departamento de Quimica Faculdade de Ciencias, UNESP, Bauru, Brazil)

Ordered Intermetallics PtSn/C and PtSb/C nanoparticles: A Multi-Purpose Electroactive Materials for Alcohol Oxidation in Alkaline Medium

16:20 to 16:40

Coffee Break

16:40 to 17:00

Qing Mao (Group Portable Energy Systems, Max Planck Institute for Dynamics of Complex Technical Systems, 39106, Germany), Ulrike Krewer, Richard Hanke-Rauschenbach

Total Harmonic Distortion Analysis for DMFC Anode

17:00 to 17:20

Patricia Hernandez-Fernandez (Dpto. Quimica-Fisica Aplicada, Facultad de Ciencias, Universidad Autonoma de Madrid (UAM), Madrid, Spain), Steve Baranton, Sergio Rojas, Jean Michel Leger, Jose Luis G. Fierro, Pilar Ocon

Effect of the functional groups on carbon nanotubes for the electrooxidation of methanol

17:20 to 17:40

Elena A. Baranova (Department of Chemical and Biological Engineering, University of Ottawa, Ottawa, Canada), Tariq Amir, Yvon Le Page, Patrick Mercier, Boussaraporn Patarachao

Ethanol electro-oxidation on carbon-supported Pt_7Sn_3 nano-catalysts of well defined alloy vs. bi-phase structure

17:40 to 18:00

Krzysztof Miecznikowski (Department of Chemistry, University of Warsaw, Warsaw, Poland), Adam Lewera, Piotr J. Barczuk, Pawel J. Kulesza

Tungsten Oxide as Matrix for Dispersed of PtSn Nanoparticles as a Tool to Enhancement of the Electrocatalytic Oxidation of Ethanol

18:00 to 18:20

Mikhail Tsypkin (Department of Materials Science and Technology, Norwegian University of Science and Technology, Trondheim, Norway), Jose L. Gomez de la Fuente, Piotr Ochal, Frode Seland, Svein Sunde

Methanol electrooxidation on Ptcore-Rushell nanoparticles

18:20 to 18:40

Richard Burkitt (School of Chemical Engineering and Advanced Materials, Newcastle University, Newcastle upon Tyne , United Kingdom), Eileen Hao Yu

Non-Platinum ORR catalyst for a Microbial Fuel Cell

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Battery Research

Location: Euterpe

Chaired by: Andrzej Czerwiński

14:20 to 14:40

Arnulf Latz (Fraunhofer-Institute for Industrial Mathematics ITWM, Kaiserslautern, Germany), Jochen Zausch

Electro-thermal Modeling and Simulation of Li-Ion Batteries

14:40 to 15:00

Seong Mu Jo Jo (Polymer Hybrid Research Center, Korea Institute of Science and Technology, Seoul, Korea), Jung Woo Son, Cheolmin Park, Dong Young Kim, Sung-Yeon Jang

Electrospun PI/PVdF composite fibrous membranes with high heat resistance for lithium ion batteries of electric vehicles

15:00 to 15:20

Marketa Zukalova (Electrochemical Materials JHIPCH AS CR vvi, Prague 8, Czech Republic), Jan Prochazka, Zdenek Bastl, Jiri Duchoslav, Lukas Rubacek, David Havlicek, Ladislav Kavan

Nanofibrous TiO_2-based materials for batteries and dye-sensitized solar cells

15:20 to 15:40

Jae-Joon Lee (Department of Advanced Technology Fusion, Department of Applied Chemistry, Konkuk University, Chungju, Korea), Narayan Chandra Deb Nath, Subrata Sarker

A Novel Binary-Redox Couple System For High Voltage Dye-Sensitized Solar Cells

15:40 to 16:00

Sangaraju Shanmugam (School of Advanced Science and Engineering, Waseda University, Tokyo, Japan), Hiroki Nara

Nanocomposite based on TiO_2 and Carbon as aAnode Material for Lithium Batteries

16:00 to 16:20

Gunars Bajars (Institute of Solid State Physics, University of Latvia, Riga, Latvia), Gints Kucinskis, Janis Smits, Janis Kleperis, Martins Vanags

Kinetic Behavior of $LiFePO_4$/C Thin Film Cathode Material for Lithium-Ion Batteries

16:20 to 16:40
Coffee Break

16:40 to 17:00
Zbigniew Rogulski (Industrial Chemistry Research Institute, Warsaw, Poland), Andrzej Czerwiñski

Electrochemical Properties Of Modified AB5 Type Hydrogen Storage Alloy

17:00 to 17:20
Andrzej Czerwiñski (Industrial Chemistry Research Institute, Warsaw, Poland), Mariusz Lukaszewski, Katarzyna Hubkowska, Katarzyna Drazkiewicz

Electrochemical Absorption And Oxidation of Hydrogen into/on Palladium-based Alloys

17:20 to 17:40
Mickael Dolle (Center for Materials Elaboration and Structural Studies, CEMES, CNRS, Toulouse Cedex 4, France), Gaelle Delaizir, Vincent Seznec, Abdelmaula Aboulaich, Laurence Tortet, Patrick Rozier, Jean-Marie Tarascon, Mathieu Morcrette, Renaud Bouchet, Virginie Viallet

A New Approach to Develop Bulk-Type All Solid State Batteries

17:40 to 18:00
Manuel Landstorfer (Institute of Numerical Mathematics, Ulm University, Ulm, Germany), Stefan Funken, Timo Jacob

Transport equations for a solid electrolyte lithium ion battery cell incorporating first principles parameters

18:00 to 18:20
Motohiro Nagao (Department of Applied Chemistry, Graduate School of Engineering, Osaka Prefecture University, Sakai, Japan), Akitoshi Hayashi, Masahiro Tatsumisago

Characterization of all-solid-state lithium secondary batteries using Li_2S as a positive electrode material

18:20 to 18:40
Sun-il Mho (Div. Energy Systems Research, Ajou University, Suwon-si, Korea), Hahn-Mok Song, Quang-Thao Ta, In-Hyeong Yeo, Won Il Cho

Inorganic Oxides and Conducting Polymer Composite Electrodes for Enhanced Rechargeable Batteries

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

Chaired by: Krystyna Jackowska and Renato Seeber

14:00 to 14:20 **Invited**
Claude Deslouis (UPR 15 CNRS, Laboratoire Interfaces et Systèmes Electrochimiques, Paris, France), Hubert Cachet, Catherine Debiemme-Chouvy, Jean Gamby, Alain Pailleret, Priscila Tamiasso-Martinhon, Susana Ines Cordoba de Torresi, Samar Jribi, Vincent Vivier

Carbon nitrides as electroactive materials: Achievements and prospects

14:20 to 14:40
Nargis Anwar (Dundalk Institute of Technology, Louth, Ireland), Timothy McCormac, Jean Daniel Compain, Anne Dolbecq, Pierre Mialane

Electrochemical Investigations and Applications of Surface Immobilised Nanostructured Polyoxometalates

14:40 to 15:00
Roger Mortimer (Department of Chemistry, Loughborough University, Loughborough, United Kingdom), Thomas Varley

Synthesis, Electrochromism and Display-Device Application of Electroactive Ruthenium Purple Films prepared by 'Directed Assembly' and Electrochemical Precipitation Techniques

15:00 to 15:20

Patrick Steegstra (Department of Chemistry, Department of Physics, University of Gothenburg, Gothenburg, Sweden), Elisabet Ahlberg

Redox Properties of Electrodeposited Iridium Oxide Films

15:20 to 15:40

Valery V. Malev (Department of Chemistry, St. Petersburg State University, Petrodvoretz, St. Petersburg, Russia)

Electrical Currents Resulted From Reduction/Oxidation Processes of Testing Particles on Electrodes Modified with Pristine or Metal-composite Polymer Films

15:40 to 16:00

Vessela Tsakova (Institute of Physical Chemistry, Bulgarian Academy of Sciences, Sofia, Bulgaria), Svetlozar Ivanov, Aneliya Stoyanova, Vladimir Lyutov, Andreas Bund

Metal Nanoparticles - Polyaniline Composite Layers for Electroanalytic Applications in Neutral Solutions

16:00 to 16:20

Mikolaj Donten (Department of Chemistry, University of Warsaw, Warsaw, Poland), Marianna Gniadek, Sylwia Malinowska, Tomasz Rapecki, Zbigniew Stojek

Conducting polymer – metal nanoparticle materials. Comparative characteristics of composites obtained by various methods

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**

Magdalena Skompska (Faculty of Chemistry, University of Warsaw, Warsaw, Poland), Agata Tarajko-Wazny

Application of Poly(1,8-diaminocarbazole) as Chemical Senor – Perspectives and Problems

17:00 to 17:20

Klaus-Michael Mangold (Karl-Winnacker-Institut, DECHEMA e.V., Frankfurt am Main, Germany), Jürgen Schuster, Claudia Weidlich

Synthesis and Properties of Magnetite/Polypyrrole Core-Shell Nanocomposites and Polypyrrole Hollow Spheres

17:20 to 17:40

Veronika Zinovyeva (Université de Bourgogne, Dijon, France), Mikhail A. Vorotyntsev, Jean-Cyrille Hierso, Igor Bezverkhyy, Remi Chassagnon, Olivier Heintz, Denis Chaumont, Dmitry V. Konev

One-Step Chemical Synthesis of Pd/Polypyrrole Nanocomposites in Water and their Applications in Catalysis

17:40 to 18:00

Beatriz Meana-Esteban (Laboratory of Materials Chemistry and Chemical Analysis, Department of Chemistry, Åbo/Turku, Finland), Abidin Balan, Derya Baran, Helmut Neugebauer, Levent Toppare, Niyazi Serdar Sariciftci

Electrochemical and spectroelectrochemical methods as useful tools for the study of the energetic levels of a Donor-Acceptor (D-A) conjugated material

18:00 to 18:20

Seong-Min Bak (Department of Material Science and Engineering, Yonsei University, Seoul, Korea)

Synthesis and Electrochemical Properties of Managanese Oxide/Graphene and Lithium Manganese Oxide/Graphene Nano-Hybrid Materials for Supercapacitor Applications

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

Chaired by: Hercilio Gomes de Melo and Fatima Montemor

14:00 to 14:20

Hisasi Takenouti (LISE, UPR15 du CNRS, Paris Cedex 05, France), Katarina Marusic, Helena Otmacic-Curkovic

Inhibiting Effect of 4-Methyl-1-p-Tolylimidazole to the Corrosion of Bronze Patinated in a Sulfate Medium

14:20 to 14:40

Lila Chaal (Département de génie des Procédés, Faculté de la Technologie, Béjaïa, Algeria), Kahina Aoudia, Naima Brinis, Claude Deslouis, Alain Pailleret, Boualem Saidani

Behaviour of copper oxides in low chloride media: Influence of a drag reducing surfactant solution

14:40 to 15:00

Beatriz Valcarce (División Corrosión, INTEMA, Facultad de Ingeniería, Universidad Nacional de Mar del Plata, Mar del Plata, Argentina), Lucia Yohai, Raúl Procaccini, Wido Schreiner, Marcela Vázquez

Surface Films on Cu and Brass Grown in Contact with Tap Water Containing Phosphate Ions

15:00 to 15:20

Sunjung Kim (School of Materials Science and Engineering, University of Ulsan, Ulsan, Korea), Kye-Sun Park, Luda Lee

Corrosion Study of Ni-Al Bronze Alloy Protected with Thermally Sprayed Anti-Corrosive Coatings

15:20 to 16:00 **Keynote**

Masayuki Itagaki (Tokyo University of Science, Noda, Japan), Akiyoshi Inukai, Isao Shitanda, Kunihiro Watanabe

Channel Flow Electrode Study on Effect of BTA on Anodic Dissolution of Copper

16:20 to 16:40

Coffee Break

16:40 to 17:00

Ewa Ura-Binczyk (Faculty of Materials Science and Engineering, Warsaw University of Technology, Warsaw, Poland), Halina Garbacz, Malgorzata Lewandowska, Krzysztof Jan Kurzydlowski

Corrosion resistance of nanocrystalline titanium and 7475 aluminium alloy

17:00 to 17:20

Saad Ghareba (Department of Chemical Engineering, McGill University, Montreal, Canada)

12-aminododecanoic Acid as Carbon Steel Corrosion Inhibitor

17:20 to 17:40

Luis Caceres (Chemical Engineering Department, Universidad de Antofagasta, Antofagasta, Chile), Alvaro Soliz, Tomas Vargas

The role of flow in pit pattern formation in the corrosion of carbon steel exposed to distilled water

17:40 to 18:00

Ying Li (State Key Lab for Corrosion and Protection, Institute of Metal Research, CAS, Shenyang, China), Yanbing Tang, Li Liu, Fuhui Wang

Evidence for the occurrence of electrochemical reactions and their interaction with chemical reactions during the corrosion of pure Fe with solid NaCl deposit in water vapor at 600 °C

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

Chaired by: James Cox and Pedro Gomez-Romero

14:00 to 14:20

Shunsuke Yagi (Dpt. Mater. Sci. Eng., Kyoto University, Kyoto, Japan), Makoto Kawamori, Eiichiro Matsubara

Application of QCM for Synthesis Control of Metallic Nanoparticles in Organic Solvent

14:20 to 14:40

Young-Uk Kwon (Department of Chemistry, Sungkyunkwan University, Suwon, Korea), Eun-Sun Lee, U-Hwang Lee, Yong-Tae Kim

Electrochemical Growth of Nanostructured Thin Films of Pt with a Feature Size of 10 nm by Using Mesoporous Thin Films as Templates

14:40 to 15:00

Stefanie Schwamborn (Analytische Chemie Elektroanalytik & Sensorik Ruhr, Universität Bochum, Bochum, Germany), Leonard Stoica, Wolfgang Schuhmann

PtAg core-shell particles with Ag-enriched shell for oxygen reduction in alkaline media

15:00 to 15:20

Maria Montes de Oca (School of Chemistry, University of Bristol, Bristol, United Kingdom), Maria Montes de Oca

Te Underpotential Deposition at 3D Networks of Metal Nanostructures

15:20 to 15:40

Cédric Frantz (Institut Jean Lamour Equipe Electrochimie des Matériaux, Metz, France), Yudong Zhang, Clotilde Boulanger

Insights into the electrodeposition of bismuth telluride nanowires in polycarbonate membrane

15:40 to 16:00

Jon Ustarroz (Research Group of Electrochemical and Surface Engineering (SURF), Vrije Universiteit Brussel, Brussel, Belgium), Uma Gupta, Annick Hubin, Sara Bals, Herman Terryn

Template-free electrodeposition of silver nanoparticles on different substrates

16:00 to 16:20

Zhi-You Zhou (Department of Chemistry, Xiamen University, Xiamen, China), Neng–Fei Yu, Na Tian, Shi-Gang Sun

Electrochemical Synthesis of Pd Nanocubes and Their Enhanced Electrocatalytic Activity

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**

James Cox (Department of Chemistry and Biochemistry, Miami University, Oxford, USA), David Ranganathan, Silvia Zamponi, Mario Berrettoni, Beata Mehdi

Silica-based Electrocatalytic Composites for Surface Modification of Electrodes

17:00 to 17:20

Alain Walcarius (LCPME-CNRS, Villers-les-Nancy, France), Mathieu Etienne, Emilie Sibottier, Aurélie Goux

Electro-assisted generation of highly ordered and oriented mesoporous silica thin films

17:20 to 17:40

Salvatore Piazza (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Università di Palermo, Palermo, Italy), Rosalinda Inguanta, Germano Ferrara, Carmelo Sunseri

Fabrication of Metal Oxide Nano-structured Electrodes by Template Electrosynthesis

17:40 to 18:00

Leonard Berlouis (P & A Chemistry, University of Strathclyde, Glasgow, United Kingdom), William Cameron, Alastair Wark, Pierre-Francois Brevet

Reflectance, SERS and nonlinear optical studies of Au nanorod arrays

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

Chaired by: Anny Jutand and Jean Lessard

14:00 to 14:40 **Keynote**

Kevin Moeller (Department of Chemistry, Washington University in St. Louis, St. Louis, USA)

From Natural Products to Microelectrode Arrays. Using Electrochemistry to Build Molecules

14:40 to 15:00 **Invited**

Mahito Atobe (Department of Electronic Chemistry, Tokyo Institute of Technology, Yokohama, Japan), Fumihiro Amemiya, Daisuke Horii, Toshio Fuchigami

A Novel Electrosynthetic System Using Parallel Laminar Flow in a Micro-Flow Reactor

15:00 to 15:20

M. J. Medeiros (University of Minho, 4704-553 Braga, Portugal), E. Dunach, A.R. Pereira, S. Olivero, D. Pletcher

Electrochemical Radical Cyclisation of Propargyl and Allyl Derivatives Using [Ni(tmc)]Br_2 as Catalyst in Enviromentally Friendly Media

15:20 to 15:40

Shigeru Nishiyama (Department of Chemistry, Faculty of Science and Technology, Keio University, Yokohama, Japan), Yuichi Ishikawa

Synthetic Studies on Biologically Important Organic Molecules by Means of Electrochemical Technology

15:40 to 16:00

Siegfried Waldvogel (Kekulé Institute for Organic Chemistry and Biochemistry, Bonn, Germany), Axel Kirste, Stamo Mentizi

Electrochemical Synthesis on Boron-doped Diamond

16:00 to 16:20

Yohei Okada (Tokyo University of Agriculture and Technology, Tokyo, Japan)

Electron Transfer Induced Olefin Cross Metathesis Reactions

16:20 to 16:40

Coffee Break

16:40 to 17:00

Hans Schäfer (Chemistry, University of Münster, Münster, Germany), Jens Heimann

Cathodic Cyclization of pyridinium alkyl ketones and -aldehydes to indolizidines and quinolizidines: A short entry to the alkaloid swainsonin

17:00 to 17:20

James Y. Becker (Department of Chemistry, Ben-Gurion University, Beer Sheva, Israel), Alex V. Shtelman

Formation of Novel Disilylalkanes by Kolbe Electrolysis of α-Silylcarboxylic Acids

17:20 to 17:40

Yulia Budnikova (A.E. Arbuzov Institute of Organic and Physical Chemistry, Kazan, Russia), Dmitry Mikhaylov, Tatyana Gryaznova, Sergei Krasnov, Ruzilya Galimullina, Oleg Sinyashin

Nickel complexes of N,N-or P,N-ligands a platform for electrocatalytic transformations of small molecules (H_2, P_4) and C=C, P-X, C-X bonds

17:40 to 18:00

Anny Jutand (Ecole Normale Superieure Departement de Chimie, Paris Cedex 5, France), Christian Amatore, Gaetan Le Duc

Mechanism of the Palladium-Catalyzed Miyaura-Suzuki Reactions, as Monitored by Electrochemical Techniques

18:00 to 18:20

James Utley (School of Biological and Chemical Sciences, Queen Mary University of London, London, United Kingdom), Carmen Smith, John Hammond

Anodic Oxidation of a Lignosulfonate to Vanillin in a Versatile Flow Cell Assembly

18:20 to 18:40

Elisabet Dunach (CNRS, University Nice, Nice, France), Sandra Olivero, Christine Pintaric

Electrochemical boration of organic halides: Mechanistic aspects

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

Chaired by: Marc Koper and Zhong-Qun Tian

14:00 to 14:40 **Keynote**

Andrew Gewirth (Department of Chemistry, University of Illinois, Urbana, USA), Matthew Thorum, Claire Turnow

Copper Coordination Complexes for Facile Electrochemical Reduction of Oxygen

14:40 to 15:00 **Invited**

Ib Chorkendorff (Department of Physics, Technical University of Denmark, Kgs. Lyngby, Denmark)

New electrode materials for the oxygen reduction reaction

15:00 to 15:20 **Invited**

Perla Balbuena (Department of Chemical Engineering and Materials Science and Engineering Program, Texas A&M University, College Station, USA), Gustavo Ramirez-Caballero, Yuguang Ma, Rafael Callejas-Tovar, Julibeth Martinez de la Hoz, Pussana Hirunsit

Chemical and Electrochemical Stability of Core-shell Oxygen Reduction Catalysts

15:20 to 15:40

Nagahiro Hoshi (Department of Applied Chemistry and Bio-technology, Graduate School of Engineering, Chiba University, Chiba, Japan), Nasashi Nakamura, Aya Hitotsuyanagi

Structural Effects on Activity and Selectivity of Oxygen Reduction Reaction on High Index Planes of Pt

15:40 to 16:00

María Escudero (Instituto de Química Física, Madrid, Spain), Dusan Strmcnik, Martín E. Zoloff, Ezequiel P. M. Leiva, Nenad M. Markovic

Electrocatalysis and Surface Nanostructuring: Atomic Ensemble Effects and Non-Covalent Interactions

16:00 to 16:20

Coffee Break

16:20 to 16:40 **Invited**

Vladimir Komanicky (Safarik University, Kosice, Slovakia), Daniel Hennessy, Hakim Iddir, Michael Pierce, Kee-Chul Chang, Goran Karapetrov, Andreas Menzel, Peter Zapol, Hoydoo You

Bridging structure gap in electrocatalysis: Preparation of novel platinum nanostructured model systems

16:40 to 17:00

Gary Attard (School of Chemistry, Cardiff University, Cardiff, United Kingdom), Sharon Huxter, Richard Ilsley, Graham Hall, Helmut Baltruschat, A.A. Abd-El-Latif

Electrocatalysis at well-defined PtSn, PtRu and PtPd bimetallic electrode surfaces

17:00 to 17:20 **Invited**

Ezequiel Leiva (Department of Mathematics and Physics, Facultad de Ciencias Quimicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Marcelo Mariscal, Oscar Oviedo

Predicting the stability of capped metallic nanoparticles: Statistical thermodynamic analysis

17:20 to 17:40 **Invited**

Yung-Eun Sung (School of Chemical & Biological Engineering, Seoul National University, Seoul, Korea), Tae-Yeol Jeon

Electrocatalytic Activity in Pt-Ru and Pt-Ni Alloy Nanoparticles

17:40 to 18:00

Patrick Urchaga (Laboratory of Catalysis in Organic Chemistry, Electrocatalysis group, UMR 6503 CNRS Université de Poitiers, Poitiers, France), Steve Baranton, Christophe Coutanceau

Study of CO electro-oxidation at platinum surfaces. From platinum polycrystalline electrode to well define nanoparticles

18:00 to 18:20

Khaled Soliman (Institute of Electrochemistry, Ulm, Germany), Ludwig Kibler, Dieter Kolb

Carbon monoxide adlayer oxidation on Ir(210) single crystal electrodes

18:20 to 18:40

Sylvain Brimaud (Institute of Surface Chemistry and Catalysis, Ulm University, Ulm, Germany), Zenonas Jusys, Jürgen Behm

Structural effects in the electro-oxidation of carbon monoxide on preferentially shaped Pt nanoparticles

Symposium 11: Sensors and Biosensors

Location: Hermes

Chaired by: Mark Meyerhoff and Renata Bilewicz

14:00 to 14:20

Muthukumar Chockalingam (School of Chemistry, University of New South Wales, Sydney, Australia), Astrid Magenau, Katharina Gaus, Justin Gooding

Higher and Super Resolution Optical Investigation of Cellular Signaling with Well-Defined Indium Tin Oxide Electrodes

14:20 to 14:40

Raphael Trouillon (Department of Bioengineering, Imperial College London, London, United Kingdom), Danny O'Hare

Vascular endothelial growth factor, nitric oxide synthase and intracellular interactions:
An electrochemical study using a biocompatible microelectrode array

14:40 to 15:00

Damien Quinton (UPCGI, UMR 8151, INSERM 1022, Chimie ParisTech, Paris, France), Loan To Thi Kim, Aurélie Girard, Sophie Griveau, Laurent Griscom, Fethi Bedioui

Conception of a New Array of Gold Ultramicroelectrodes for the Simultaneous Electrochemical Detection of Nitric Oxide and Peroxynitrite

15:00 to 15:20

Maria Gómez-Mingot (Dept. of Physical Chemistry and Institute of Electrochemistry, University of Alicante, Alicante, Spain), Leticia García-Cruz, Luis A. Alcaraz, Jose Solla-Gullón, Jesús Iniesta, Vicente Montiel, Craig E. Banks

A Screening Tool for the Electrochemical Determination of Methionine as a Biomarker of Oxidative Stress

15:20 to 15:40

Franziska Wegerich (Max Planck Institute of Colloids and Interfaces, Potsdam, Germany), Paola Turano, Marco Allegrozzi, Helmuth Möhwald, Fred Lisdat

Characterization of engineered cytochrome c for the application as recognition element of a superoxide biosensor

15:40 to 16:00 **Invited**

Manning Philip (Institute of Cellular Medicine, Newcastle upon Tyne, United Kingdom), Sarah Jayne Boulton, James Henderson, Calum Mc Neil

The Integration of Intracellular Optical Nanosensors with Extracellular Electrochemical Sensing Arrays as a Novel Method for the Study of Free Radical Based Cellular Interactions

16:00 to 16:20

Stephane Arbault (CNRS, Laboratoire Pasteur, Ecole Normale Supérieure, Paris, France)

Chrono-amperometric Analysis of the Reactive Oxygen and Nitrogen Species Released by an Immunostimulated Macrophage

16:20 to 16:40

Coffee Break

16:40 to 17:20 **Keynote**

Mark Meyerhoff (Department of Chemistry, University of Michigan, Ann Arbor, USA)

Improving Blood Compatibility of Intravascular Electrochemical Sensors Using Nitric Oxide Releasing/ Generating Polymeric Coatings

17:20 to 17:40

Judith Rishpon (Tel-Aviv University, Tel-Aviv, Israel), Lihi Adler-Abramovich, Michal Badihi-Mossberg, Ehud Gazit

Characterization of Peptide-Nanostructure-Modified Electrodes and their Application for Ultrasensitive Environmental Monitoring

17:40 to 18:00

Kannan Balasubramanian (Max-Planck-Institute for Solid State Research, Stuttgart, Germany), Alexis Vlandas, Tetiana Kurkina, Ashraf Ahmad, Marko Burghard, Klaus Kern

Electrochemically functionalized carbon nanotube devices for sensing applications

18:00 to 18:20

Aicheng Chen (Department of Chemistry, Lakehead University, Thunder Bay, Canada), A.K.M. Kafi, Asieh Ahmadalinezhad, Paul Benvenuto

Nanomaterials Design for Electrochemical Biosensing

Symposium 12: Electrochemistry on a Local Scale

Location: Rhodes 9-2

Chaired by: Daniel Mandler and Kei Murakoshi

14:00 to 14:40 **Keynote**

Frederic Kanoufi (Physicochimie des Electrolytes, des Colloides et Sciences Analytiques, CNRS, UMR 7195, ESPCI-Paris Tech, Paris, France), Catherine Combellas

Local Surface Reactivity of Thin Organic Layers from their Inspection with Microelectrodes

14:40 to 15:00 **Invited**

Laurent Thouin (Ecole Normale Supérieure, Paris, France), Cécile Pebay, Aifang Wang, Christian Amatore

Mass Transport at Microelectrodes: Dynamic Regimes Under Influence of Natural Convection

15:00 to 15:20

Donato Fantauzzi (Institute for Electrochemistry, Ulm, Germany), John A. Keith, Timo Jacob

Molecular dynamics studies on the morphology of PtNi-alloy particles

15:20 to 15:40

Satoshi Yasuda (Department of Chemistry, Faculty of Science, Hokkaido University, Sapporo, Japan), Mai Takase, Hideki Nabika, Kei Murakoshi

Control of Localized Photoelectrochemical Reaction of an Isolated Single-Walled Carbon Nanotubes at Metal Nanogap

15:40 to 16:00

Michaela Nebel (Analytische Chemie, Elektroanalytik & Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Kathrin Eckhard, Thomas Erichsen, Wolfgang Schuhmann

Constant-distance mode scanning electrochemical microscopy for the localized visualization of fuel cell catalyst activity

16:00 to 16:20

Paolo Ugo (Department of Physical Chemistry, University of Venice, Venice, Italy), Morena Silvestrini, Piero Schiavuta, Paolo Scopece

Thiols Directed Functionalization of Nanoelectrode Ensembles with Proteins

16:20 to 16:40

Coffee Break

16:40 to 17:00

Florian Hausen (INM, Leibniz Institute for New Materials, Saarbrücken, Germany), Roland Bennewitz

Electrochemical Control of Atomic Friction

17:00 to 17:20

Marion Janin (Interfaces, Traitements, Organisation et Dynamique des Systèmes, Université Paris 7-Denis Diderot, CNRS, UMR 7086, Paris, France), Jalal Ghilane, Pascal Martin, Hyacynthe Randriamahazaka, Jean-Christophe Lacroix

Molecular Junctions Fabricated by Scanning Electrochemical Microscopy SECM

17:20 to 17:40

Carlos Manuel Sanchez-Sanchez (Instituto Universitario de Electroquimica, Universidad de Alicante, Alicante, Spain), Janaina Souza-Garcia, Vicente Montiel, Enrique Herrero, Antonio Aldaz, Juan M. Feliu

Imaging Platinum Single Crystal Electrodes by Scanning Electrochemical Microscopy

17:40 to 18:20 **KEYNOTE**

Hideki Masuda (Tokyo Metropolitan University, Hachioji, Tokyo, Japan), Toshiaki Kondo, Takashi Yanagishita, Kazuyuki Nishio

Fabrication of Ordered Nanostructures for Optical and Electrochemical Detections using Anodic Porous Alumina

Symposium 14: Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel cells

Location: Rhodes 10

Chaired by: Frédéric Barrière and Alain Bergel

14:00 to 14:20 **INVITED**

Juan Pablo Busalmen (Laboratorio de Bioelectroquímica, INTEMA(CONICET), Mar del Plata, Argentina)

Certainties and doubts on the electrochemical interaction between Geobacter sulfurreducens and electrodes

14:20 to 14:40 **INVITED**

Enrico Marsili (School of Biotechnology, Dublin City University, Dublin, Ireland)

Novel materials and methods for characterization of electroactive biofilms

14:40 to 15:00 **Invited**
Lital Alfonta (Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel), Liron Amir, Simon Fishilevich, Karnit Behartan, Alon Szczupak, Dan Kol-Kalman

Genetically Engineered Bio-Fuel Cells

15:00 to 15:20 **Invited**
Benjamin Erable (Laboratoire de Génie Chimique, CNRS, Université de Toulouse, Toulouse, France)

Marine Electo-active Biofilms: Microbial diversity, electrochemical properties, and applications

15:20 to 15:40
Kelly Nevin (University of Massachusetts Amherst, Amherst, USA), Sarah Hensley, Trevor Woodard, Ashley Franks, Zarath Summers, Derek Lovley

Microbial Electrosynthesis: Reducing Carbon Dioxide to Multi-Carbon, Extracellular Products

15:40 to 16:20 **Keynote**
Shelley Minteer (Saint Louis University, St. Louis, USA), Daria Sokic-Lazic, Michael Moehlenbrock, Timothy Toby, Abdul Waheed

Improving the Energy Density and Efficiency of Enzymatic Biofuel Cells

16:20 to 16:40

Coffee Break

16:40 to 17:00 **Invited**
Donal Leech (National University of Ireland Galway, Galway, Ireland), Krishna Katuri, Tunc Catal, Saravanan Rengaraj, Partha Jana, Paul Kavanagh

Electrochemical-induced growth and voltammetric characterization of biofilms in microbial fuel cells

17:00 to 17:20
Paule Salvin (Laboratoire Matériaux et Molécules en Milieu Amazonien, Université des Antilles et de la Guyane, UMR Ecofog, Cayenne, France), Florent Robert, Christophe Roos

Amazonian Electroactive Biofilms for Microbial Fuel Cells

17:20 to 18:00 **Keynote**
Uwe Schröder (Institute of Ecological and Sustainable Chemistry, Technische Universitaet Braunschweig, Braunschweig, Germany)

Recent Advances in the Exploration and Development of Electroactive Microbial Biofilm based Electrodes

Symposium 16: General Session

Location: Risso 7

Chaired by: Annick Hubin and Roberto Torresi

14:00 to 14:20
Eric Vieil (LEPMI, St Martin d'Hères, France)

Model of Electrochemical Reaction with Formal Graphs

14:20 to 14:40
Gunther Wittstock (Department of Pure and Applied Chemistry, Carl von Ossietzky University of Oldenburg, Oldenburg, Germany), Hubert H. Girault, Andreas Lesch, Fernando Cortéz-Salazar, Dimitry Momotenko

Scanning electrochemical microscopy imaging of large samples with multiple soft tips

14:40 to 15:00
Anh-Tuan Tran (CNRS, UPR15, Université Pierre et Marie Curie, Paris Cedex 05, France), François Huet, Kieu Ngo, Daniel Rose

Advances in Electrochemical Noise Measurements

15:00 to 15:20

Chia-Chern Chen (Institute of Biomedical Engineering, National Cheng Kung University, Tainan City, Taiwan), Tsun-Mei Lin

Analysis of Electric Impedance Coagulography by Moving Approximate Entropy

15:20 to 15:40

Els Tourwé (Research Group of Electrochemical and Surface Engineering (SURF), Vrije Universiteit Brussel, Brussel, Belgium), Tom Breugelmans, John Lataire, Tom Hauffman, Rik Pintelon, Annick Hubin

Estimation of the instantaneous impedance of time-varying systems

15:40 to 16:00

Abderrahmane Tadjeddine (Laboratoire de Chimie Physique, bât. 201P2, Univ. Paris-Sud, CNRS, Orsay, France), B. Busson, C. Humbert, C. Six, C. Mele, B. Bozzini

Sum Frequency Generation as a Vibrational Prove of the Interface and Thin films

16:00 to 16:20

Liza Rassaei (Department of Chemistry, Bath, United Kingdom), Frank Marken, Richard G. Compton

Recent Advances in Microwave Enhanced Electrochemistry

16:20 to 16:40

Coffee Break

16:40 to 17:00

Balázs B. Berkes (Department of Physical Chemistry, Eötvös Loránd University, Budapest, Hungary), György Inzelt, Akos Kriston

Electrochemical Nanogravimetric Studies of Platinum in Acid Media

17:00 to 17:20

Janaina Souza-Garcia (Instituto de Electroquímica, Universidad de Alicante, Alicante, Spain), Edson A. Ticianelli, Victor Climent, Juan M. Feliu

Mechanistic changes observed in heavy water for nitrate reduction reaction on Pd modified Pt(hkl) electrodes

17:20 to 17:40

Antoine Bonnefont (Institut de Chimie, Université de Strasbourg-CNRS, Strasbourg, France), Pavel Ruvinskiy, Maryam Bayati, Elena Savinova

Cooperative phenomena in 3D nanostructured electrodes: CO bulk electrooxidation on Pt nanoparticles supported on vertically aligned carbon nano-filaments

17:40 to 18:00

Siegfried Ernst (Institut für Physikalische und Theoretische Chemie, Bonn, Germany), Sevda Ayata, Izzet Kisacik, Ana Stefanova, Helmut Baltruschat

Oxidation of Water, Hydrogen Peroxide and Organic Compounds at Boron Doped Diamond Electrodes

18:00 to 18:20

Erkang Wang (State Key Laboratory of Electroanalytical Chemistry, Chinese Academy of Sciences, Jilin, China)

Preparation of Polyaniline Nanofibers Using Polyacetylene Nanoparticles as “Seeds”

Friday, 1 October, 2010 - Morning

Plenary

Location: Apollon

Chaired by: Claude Deslouis

08:30 to 09:30

Philippe Allongue (Physique de la Matière Condensée, CNRS, Palaiseau, France)

Nanoelectrochemistry: From Synthesis to Functionality

Symposium 2: Environment, Water and Analytical Electrochemistry

Location: Risso 8

Chaired by: Serge Cosnier

09:40 to 10:00 **Invited**

Hasuck Kim (Department of Chemistry, Seoul National University, Seoul, Korea), Yang-Rae Kim, Donghoon Han

Electrochemical Detection of Mercury Ion Based on Molecular Switching

10:00 to 10:20

Sarra El Ichi (LCBB, ICMMO, Orsay, France), Mohamed Nejib Marzouki, Hafsa Korri-Youssoufi

Structural studies of a new garlic peroxidase (POX_{1B}) and its application as enzymatic biosensor tool for environmental analysis

10:20 to 10:40

Coffee Break

10:40 to 11:20 **Keynote**

Florence Lagarde (Laboratoire des Sciences Analytiques, Villeurbanne cédex, France)

Bio-assisted electrochemical methods for water quality assessment

11:20 to 11:40

Janice Limson (Dept. of Biochemistry, Microbiology and Biotechnology, Rhodes University, Grahamstown, South Africa), Rory Brimecombe, Michael Niland

Nanomaterial modified electrodes for monitoring microbial degradation of analytes in real time

11:40 to 12:00

Paulo Olivi (Departamento de Quimica, FFCLRP Universidade de São Paulo, USP, Ribeirão Preto, Brazil), Franciane P. Cardoso

Tannic acid electrooxidation using Boron Doped Diamond electrodes (BDD)

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Location: Risso 6

Chaired by: Jonathan Ellis and Ana Maria Oliveira-Brett

09:40 to 10:00

Sebastian Bauer (Department of Materials Science and Engineering, Institute for Surface Science and Corrosion LKO-WWIV, Erlangen, Germany), Jung Park, Klaus von der Mark, Patrik Schmuki

Anodic TiO_2 nanotube layers on titanium: Control of cell-surface interactions at the nanoscale

10:00 to 10:20

Ingela Mattisson (Astra Tech AB, Mölndal, Sweden), Christina Gretzer, Elisabet Ahlberg

Electrochemical properties of nano-structured titanium surfaces

10:20 to 10:40

Coffee Break

10:40 to 11:00

Baohong Liu (Fudan University, Shanghai, China), Liang Qiao, Hubert Girault

In-source photocatalytic redox reactions for bioanalysis

11:00 to 11:20

Ales Iglic (Laboratory of Biophysics, Faculty of Electrical Engineering, University of Ljubljana, Ljubljana, Slovenia), Ekaterina Gongadze, Sarka Perutkova, Klemen Bohinc, Stefano Maset, Ursula van Rienen, Veronika Kralj-Iglic

Interactions between Titanium Implant's Surface and Osteoblasts Mediated by Proteins in Electrolyte Solution

11:20 to 11:40

Colm Mallon (School of Chemical Sciences, Dublin City University, Dublin, Ireland), Robert J. Forster, Tia E. Keyes

Protein Release from Patterned Surfaces

FRIDAY AM

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Supercapacitors

Location: Apollon

Chaired by: Thomas H. Etsell

09:40 to 10:00

Clément Comminges (European Institute For Energy Research (EIFER), Karlsruhe, Germany), Mohsine Zahid

Durability tests of SOFC stacks: The influence of protective coating and operating conditions on the lifetime

10:00 to 10:20

Alireza Torabi (Chemical and Materials Engineering, University of Alberta, Edmonton, Canada), Thomas H. Etsell, Partha Sarkar

Tungsten Carbide based Anodes for Solid Oxide Fuel Cells

10:20 to 10:40

Coffee Break

10:40 to 11:00
Makiko Asamoto (Ehime University, Matsuyama, Japan), Kazunari Sugihara, Syuhei Yamaguchi, Hidenori Yahiro

Electrochemical Performance of Modified Ni/SDC Anode for Direct Methane Solid Oxide Fuel Cell

11:00 to 11:20
Xiao-Dong Zhou (Department of Chemical Engineering, Columbia, USA)

Materials Development and Polarization Measurement of High Temperature Oxygen Electrodes

11:20 to 11:40
Geoff Kelsall (Department of Chemical Engineering, Imperial College London, London, United Kingdom), Uttam Doraswami

Indirect Carbon-Air Fuel Cells

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Fuel Cells

Location: Calliope

Chaired by: Masahiro Watanabe

09:40 to 10:00
Sebastian Rau (Fraunhofer Institute for Solar Energy Systems ISE, Freiburg, Germany), Roderick Fuentes, Julia Colom Tomás, Tom Smolinka, John Weidner

PEM electrolyzer with nano-structured electrodes for high efficient hydrogen production

10:00 to 10:20
Abirami Devadas (Equipe Electrocatalyse Laboratory of Catalysis in Organic Chemistry (LACCO), UMR 6503 CNRS-Université de Poitiers, Poitiers, France), Steve Baranton, Teko Napporn, Christophe Coutanceau

Microwave synthesis of RuO_2 nanocrystals for oxygen evolution reaction

10:20 to 10:40
Coffee Break

10:40 to 11:00
Edel Sheridan (SINTEF Materials and Chemistry, Trondheim, Norway), Magnus Thomassen, Tommy Mokkelbost, Anna Lind

The development of a supported Iridium catalyst for oxygen evolution in PEM electrolysers

11:00 to 11:20
Jean-François Fauvarque (Département des Matériaux Industriels, Conservatoire National des Arts et Métiers (CNAM), Paris, France), Cyrille Sollogoub, Geneviève Lepinasse, Camille Van Gastel, Géraldine Palissat, Arash Mofakhami, Florence Mofakhami

A new protonic conductivity material : activated Boron Nitride. Incorporation in polymer matrices for water electrolyses and fuel cells

11:20 to 11:40
George Tsekouras (School of Chemistry, University of St. Andrews, St. Andrews, United Kingdom), John T.S. Irvine

Influence of $(La,Sr)TiO_3$ defect chemistry on high temperature steam electrolysis performance

Symposium 4: Electrochemical Energy Conversion and Storage

Advances in Battery Research

Location: Euterpe

Chaired by: Jakub Reiter and Jong-Sung Yu

09:40 to 10:00

Jakub Reiter (Institute of Inorganic Chemistry of the AS CR, v.vi., Rez near Prague, Czech Republic), Martina Nadherna, Robert Dominko

Compatibility of pyrrolidinium ionic liquids with graphite

10:00 to 10:20

Abdelmaula Aboulaich (Laboratoire Chimie Provence, Marseille, France)

All-solid-state thick Li-ion batteries: Key parameters to improve electrochemical performances

10:20 to 10:40

Coffee Break

10:40 to 11:00

Jong-Sung Yu (Department of Advanced Materials Chemistry, Korea University, Jochiwon, Korea), Min-Sik Kim, Jung Ho Kim, Sinmook Lim, Dae-Soo Yang

Ordered hierarchical nanostructured carbon as an efficient anode material in Li ion battery

11:00 to 11:20

Kuei-Hsien Chen (IAMS, Academia Sinica, Taipei, Taiwan), Antonio Basilio, Yu-Kuei Hsu, Li-Chyong Chen

Photoelectrochemical Production of Hydrogen Using III-Nitride Semiconductors

11:20 to 11:40

Rachid Yazami (Materials Science, California Institute of Technolgy, Pasadena, USA)

Thermodynamics of electrode processes in lithium ion batteries

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Location: Rhodes 9-1

Chaired by: Nataliya Roznyatovskaya and Galina Tsirlina

09:40 to 10:00

Olle Inganäs (Biomolecular and Organic Electronics, IFM, Linköping, Sweden)

Light, Electronic Polymers And Electrochemistry – Creating and Using The Insulator-Metal Transition in Conjugated Polymers

10:00 to 10:20

Leif Nyholm (Dept. of Materials Chemistry, Uppsala University, Uppsala, Sweden), Albert Mihranyan, Gustav Nyström, Aamir Razaq, Maria Strömme

High Surface Area Conducting Paper Materials Composed of Polypyrrole and Cladophora Cellulose

10:20 to 10:40

Coffee Break

10:40 to 11:20 **KEYNOTE**

Alain Deronzier (Université Joseph Fourier, Grenoble cedex 9, France)

Electrocatalytic Reduction at nanocomposite Materials: A Convenient Process to Use Carbon Dioxide as a Renewable Carbon Source?

11:20 to 11:40

Ludvig Edman (Umeå University, Umeå, Sweden), Piotr Matyba, Junfeng Fang, Andreas Sandström, Nathaniel Robinson, Klara Maturova, Martijn Kemerink, Hisato Yamaguchi, Goki Eda, Manish Chhowalla

Understanding and Optimizing Light-Emitting Electrochemical Cells

Symposium 6: Corrosion Science: Mechanisms and Methods

Location: Clio

Chaired by: Nadine Pébère and Hisasi Takenouti

09:40 to 10:00
Sandrine Jakab (CEA, Marcoule, Bagnols sur Ceze, France), Isabelle Solinhac, Jean-Philippe Dancausse, Michel Masson

Corrosion studies of the oxide dispersion strengthened steels under nuclear fuel dissolution conditions

10:00 to 10:20
David Sicsic (CEA, Saclay, Gif-Sur-Yvette, France), Fanny Balbaud, Bernard Tribollet

Investigation of the Nitric Acid Reduction Process in High Concentrated Media at an Inert Electrode

10:20 to 10:40
Coffee Break

10:40 to 11:00
Emma Hoarau (ANDRA, DS, Chatenay-Malabry Cedex, France), Christian Bataillon, Claire Chainais, François Bouchon, Rachid Touzani, Didier Crusset, Jean Talandier, Juergen Fuhrmann

Finite-volume simulation of carbon steel corrosion in nuclear waste deep repository

11:00 to 11:20
Noelia Beatriz Luque (Institute for Theoretical Chemistry, Ulm University, Ulm, Germany), Ibach Harald, Pötting Kay, Wolfgang Schmickler

A simulation of two-dimensional Ostwald ripening on silver electrodes

11:20 to 11:40
Abdelhafed Taleb (UPMC, LECIME, ENSCP, Chimie, ParisTech-CNRS, UMR7575, Paris, France), Janusz Stafiej

Simulation of the grain size effect on the metal corrosion: Roughness oscillation

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Location: Thalie

Chaired by: Michel Rosso

09:40 to 10:20 **Keynote**
Pedro Gomez-Romero (CIN2 (CSIC), Bellaterra, Barcelona, Spain), Jullieth Suarez-Guevara, Omar Ayyad, David Muñoz-Rojas

Hybrid Nanocomposite Structures Formed by Metals and Conducting Polymers

10:20 to 10:40
Coffee Break

10:40 to 11:00
Geoffrey Wilcox (Department of Materials, Loughborough University, Loughborough, United Kingdom)

Observations of Whisker Formation on Electrodeposited Metallic Coatings

11:00 to 11:20
Subir Kumar Ghosh (K U Leuven, Leuven, Belgium), Jean-Pierre Celis

Electrodeposition of Nanostructured MoS_x Thin Filmsand Composite Coatings containing MoS_x-Particles

11:20 to 11:40

Francesco Di Franco (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Università degli Studi di Palermo, Palermo, Italy), Monica Santamaria, Patrizia Bocchetta, Francesco Di Quarto, Claudio Calì, Mauro Mosca

Electrochemical Fabrication of Inorganic/Organic Field Effect Transistor

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Location: Erato

Chaired by: Elisabet Dunach and Kevin Moeller

09:40 to 10:00

Jean Lessard (Chemistry, Sherbrooke University, Sherbrooke, Canada), Frédéric Couture-Martin, Cecilia Cristea, Alireza Sardashti, Jean Marc Chapuzet

Electroreduction of Nitrocyclopropanes

10:00 to 10:20

Martine Largeron (UMR 8638 CNRS, University Paris Descartes, Paris, France), Leslie Schwendimann, Pierre Gressens

Electrochemically Induced Tandem Oxidation Processes for the Synthesis of Novel Neuroprotective Agents

10:20 to 10:40

Coffee Break

10:40 to 11:00 **Invited**

R. Daniel Little (Chemistry & Biochemistry, University of California, Santa Barbara, Santa Barbara, USA), Randi Gbur, Marco Lam, Jennifer Mallory, Jennifer Myung, Dennis Tam, S. J. Yoo

Of Cation and Anion Radicals: Housanes, Fulvenes, and Natural Products

11:00 to 11:20

Kouichi Matsumoto (Faculty of Science and Engineering, Kinki University, Osaka, Japan), Shunsuke Fujie, Koji Ueoka, Seiji Suga, Shigenori Kashimura, Jun-ichi Yoshida

An Electro-initiated Cation Chain Reactions Mediated by ArS^+

11:20 to 11:40

Petr Zuman (Department of Chemistry, Clarkson University, Potsdam, USA), Jiri Ludvik
Differences Between the Three Isomeric Benzenedicrboxaldehydes

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Location: Uranie

Chaired by: Gary Attard and Elena Savinova

09:40 to 10:00 **Invited**

Juan M. Feliu (Institut of Electrochemistry, University of Alicante, Alicante, Spain), Francisco J. Vidal-Iglesias, Jose Solla-Gullon, Victor Climent

Size effects on Pt nanoparticles

10:00 to 10:20 **Invited**

Frédéric Maillard (Laboratoire d'Electrochimie et de Physico-chimie des Matériaux et des Interfaces, UMR 5631 CNRS, Grenoble Université, Saint Martin d'Hères, France), Laetitia Dubau, Marian Chatenet, Elisabeth Rossinot, Johan André

Nanoscale compositional changes and modification of the surface reactivity of Pt_3Co/C electrocatalysts during PEMFC operation

10:20 to 10:40
Coffee Break

10:40 to 11:00
Anne-Katrin Huber (Institute of Physical Chemistry, Justus-Liebig University Gießen, Gießen, Germany), Mareike Falk, Marcus Rohnke, Bjoern Luerßen, Jürgen Janek

In situ examination of materials degradation phenomena at lanthanum strontium manganate (LSM) model electrodes on yttria stabilized zirconia (YSZ)

11:00 to 11:20
Valery Petrykin (J. Heyrovsky Institute of Physical Chemistry, Prague, Czech Republic), Katerina Macounova, Jiri Franc, Maki Okube, Petr Krtil

Local structures of nano-crystalline electrocatalytic $Ru_{1-x}M_xO_2$ (M=Ni and Zn) materials revealed by EXAFS

11:20 to 11:40
Sergey Pronkin (LMSPC, ECPM, UdS, University of Strasbourg, Strasbourg, France), Antoine Bonnefont, Olivier Rosseler, Nicolas Keller, Valerie Keller-Spitzer, Elena R. Savinova

Electrochemical and electrocatalytic properties of Pt nanoparticles deposited on TiO_2 substrates

Symposium 11: Sensors and Biosensors

Location: Hermes

Chaired by: Koji Sode

09:40 to 10:00
Yucel Sahin (Department of Chemistry, Eskisehir, Turkey), Mutlu Sahin, Levent Ozcan, Ali Ozcan, Betul Usta, Sabriye Percin Ozkorucuklu, Muzeyyen Yilmaz

Use of Pencil Graphite Electrode for Sensor Applications

10:00 to 10:20
Antonin Prévoteau (CRPP (CNRS), Pessac, France)

Dissolved oxygen: A key parameter affecting “wired” enzyme glucose biosensors

10:20 to 10:40
Coffee Break

10:40 to 11:00
Marco Carminati (Dipartimento di Elettronica e Informazione, Politecnico di Milano, Milano, Italy), Giorgio Ferrari, Filippo Guagliardo, Marco Sampietro

Miniaturized Single-Chip femtoAmpere Potentiostat for Nano-Electrochemistry and Bio-Sensing

11:00 to 11:40 **Keynote**
Koji Sode (Department of Biotechnology, Graduate School of Engineering, Tokyo University of Agriculture & Technology, Tokyo, Japan), Takuya Hanashi, Wakako Tsugawa, Kazunori Ikebukuro, Tomohiko Yamazaki, Hiroshi Tanaka

BioCapacitor ~ the development of the stand alone biosensing system and the autonomous sensing actuator~

Symposium 12: Electrochemistry on a Local Scale

Location: Rhodes 9-2

Chaired by: Gunther Wittstock

09:40 to 10:20 **Keynote**
Christine Kranz (Institute of Analytical and Bioanalytical Chemistry, University of Ulm, Ulm, Germany)

Recent Progress in Combined Atomic Force - Scanning Electrochemical Microscopy (AFM-SECM)

10:20 to 10:40
Coffee Break

10:40 to 11:00
Yann Guillemin (Laboratoire de Chimie Physique et Microbiologie pour l'Environnement, UMR 7564 CNRS, Nancy Université, Villers-lès-Nancy, France), Mathieu Etienne, Alain Walcarius

Micro-scale controlled electrogeneration of mesoporous silica thin films by means of SECM

11:00 to 11:20
Bruno Fabre (UMR 6226, CNRS, Univ. Rennes 1, Sciences Chimiques de Rennes MaCSE, Rennes, France), Philippe Hapiot, Han Zuilhof, Luc Scheres, Dodzi Zigah

Ferrocene-terminated monolayers covalently bound to silicon surfaces. Towards the control of electronic communication between redox centers

11:20 to 11:40
Zhifeng Ding (Chemistry, University of Western Ontario, London, Canada), Mohammad Harati, Jia Jia, Kyle Pellarin, Carly Hewson, Kévin Giffard, David A. Love, Woon Ming Lau

Scanning Electrochemical Microscopy of Thin Films for Photovoltaic Cells

Symposium 14: Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel Cells

Location: Rhodes 10

Chaired by: Donal Leech and Uwe Schröder

09:40 to 10:00
Keith Baronian (School of Applied Science, CPIT, Christchurch, New Zealand), Frankie Rawson, Nicholas Haslett, David Garrett, Frederic Barriere

Eukaryote Microbial Fuel cells: Strategies to improve power density

10:00 to 10:20
Jurg Keller (Advanced Water Management Centre, University of Queensland, Brisbane, Australia), Yang Mu, Jelena Radjenovic, René Rozendal, Korneel Rabaey

Dehalogenation of Iodinated X-Ray Contrast Media in a Bioelectrochemical System

10:20 to 10:40
Coffee Break

10:40 to 11:20 **Keynote**
Bert Hamelers (Environmental Technology, Wageningen, Netherlands), Annemiek ter Heijne, Tom Sleutels, David Strik, Cees Buisman

Application of bio-electrochemical systems: Prospects and challenges

11:20 to 11:40
Sidney Aquino Neto (University of São Paulo, Ribeirão Preto, Brazil), Juliane Cristina Forti, Gabriella R. Daniel, Adalgisa R. De Andrade, Valtencir Zucolotto, Pietro Ciancaglini

ADH immobilization using PAMAM dendrimers via layer-by-layer technique for EtOH/O_2 Biofuel Cells

Symposium 16: General Session

Location: Risso 7

Chaired by: Hercilio Gomes de Melo

09:40 to 10:00

Mauro Pasta (Dipartimento di Chimica Inorganica, Metallorganica e Analitica "Lamberto Malatesta", Università degli Studi di Milano, Milan, Italy), Fabio La Mantia, Yi Cui

Mechanism of glucose electrochemical oxidation on gold surface

10:00 to 10:20

Simon Leijonmarck (Department of Chemical Engineering and Technology, Stockholm, Sweden), Ann Cornell, Carl-Ola Danielsson, Göran Lindbergh

Electrochemically assisted debonding of adhesives

10:20 to 10:40

Coffee Break

10:40 to 11:00

Franco Decker (Dipartimento di Chimica, "Sapienza" Università di Roma, Roma, Italy), Jean Rousset, Servane Haller, Laure Dupuy, Fédérique Donsanti, Jean-François Guillemoles, Daniel Lincot

Porous ZnO films for dye-sensitized solar cells: electrochemical impedance characterization

11:00 to 11:20

Omar Abdul-Rahim (School of Chemistry, Monash Univerity, Clayton, Australia), Alan Bond, Patrick Perlmutter, David Collins

Substituent Effect in the Cyclic Voltammetry of Stilbenes

11:20 to 11:40

Jen-Hsien Huang (Research Center for Applied Sciences, Academia Sinica, Taipei, Taiwan), Chih-Yu Hsu, Chih-Wei Hu, Chih-Wei Chu, Kuo-Chuan Ho

The Influence of Charge Trapping on the Electrochromic Performance of Poly(3,4-alkylenedioxythiophene) Derivatives

Poster presentation program

Poster Session 1

Poster presentations: Monday, 27 September, 18:20 to 20:00 in *Rhodes*

Symposium 1
New Insights and Applications in Ionic Liquid Electrochemistry

Symposium 2
Environment, Water and Analytical Electrochemistry

Symposium 3
Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Symposium 5
Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Symposium 4
Electrochemical Energy Conversion and Storage
Batteries, Fuel cells (s04-P-144 to s04-P-001)

Symposium 6
Corrosion Science: Mechanisms and Methods

Symposium 11
Sensors and Biosensors
Imaging Techniques, In Vivo Sensing, Nanomaterials in Sensor Systems (s11-P-001 to s11-P-068)

Poster Session 2

Poster presentations: Tuesday, 28 September, 18:20 to 20:00 in *Rhodes*

Symposium 4
Electrochemical Energy Conversion and Storage
Lithium Ion Batteries, Supercapacitors (s04-P-145 to s04-P-212)

Symposium 7
Electrodeposition for Material Synthesis and Nanostructure Fabrication

Symposium 8
Electrochemical Process Engineering and Technology

Symposium 9
Molecular Electrochemistry - Methods, Models, Molecules, Materials

Symposium 10
Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Symposium 11
Sensors and Biosensors
New sensing architectures (s11-P-069 to s11-P-122)

Symposium 12
Electrochemistry on a Local Scale

Symposium 13
Surface Functionalization

Symposium 14
Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel Cells

Symposium 15
Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells

Symposium 16
General Session

POSTER SESSION 1

Symposium 1: New Insights and Applications in Ionic Liquid Electrochemistry

Custom Designed Applications

s01-P-001

Jennifer Hartley (Department of Chemistry, University of Leicester, Leicester, United Kingdom), Gero Frisch, Andrew Abbott

Electrochemical Processing of Metals Using Ionic Liquids

s01-P-002

Juergen Janek (Institute of Physical Chemistry, Justus-Liebig University, Giessen, Germany), Manuel Poelleth, Oliver Hoefft, Frank Endres

Electrochemical Processes at the Surface of Ionic Liquids in Low Temperature Plasmas

s01-P-003

Kuniaki Murase (Department of Materials Science and Engineering, Kyoto University, Kyoto, Japan), Kozo Yanase, Takashi Ichii, Hiroyuki Sugimura

Cu-Zn Alloy Metallization of Polymer through Reduction-Diffusion Method Using Ionic Liquid Bath at Medium-Low Temperatures

Ionic Liquids

s01-P-004

Wojciech Adamiak (Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, Poland), Mengjuan Li, Jingyuan Chen, Marcin Opallo

Multistep Electroreductions of Fullerene C60 in the Ionic Liquid-Based Biphasic Systems

s01-P-005

Rocío Aguilar-Sánchez (Facultad de Ciencias Químicas, Universidad Autónoma de Puebla, Puebla, Mexico)

Electrochemical Studies of Bare and BPn Modified Au(hkl) Electrodes in an Ionic Liquid and in Aqueous Electrolyte

s01-P-006

Aurelie Alemany (BASF, New Business Development, Chemical Intermediates, Ludwigshafen, Germany)

Ionic Liquids in Electrochemical Applications

s01-P-007

Lavinia Astratine (Material Surface and Science Institute (MSSI), Limerick, Ireland), Edmond Magner, Anthony Betts, John Cassidy

Forming conducting polymers utilising room temperature ionic liquids

s01-P-008

Ronald Fawcett (Department of Chemistry, University of California, Davis, USA), Daniel Misicak, Attila Gaal, Peter Ryan

Double Layer Studies in Room Temperature Imidazolium Ionic Liquids

s01-P-009

Paula Fernandes (Departamento de Química, Faculdade de Ciências Universidade do Porto, Porto, Portugal), Carlos M. Pereira, Fernando Silva

Gold nanoparticles prepared using deep eutectic solvents

s01-P-010

Gero Frisch (Department of Chemistry, University of Leicester, Leicester, United Kingdom), Andrew Abbott, Jennifer Hartley, Karl Ryder

Ideal Solutions - Redox Potentials in Ionic Liquids

s01-P-011

Laurent Gaillon (PECSA, University Pierre et Marie Curie, UMR 7195 CNRS, ESPCI, UPMC, Paris, France), Cécile Rizzi, Juliette Sirieix-Plénet

Electrochemical study of a redox amphiphilic ionic liquid: Aggregation in pure ionic liquid and in aqueous solution

s01-P-012

Sandra García-Garabal (Departamento de Física, Facultade de Ciencias, Universidade da Coruña, Coruña, Spain), Juan Vila, Montserrat Dominguez-Perez, Oscar Cabeza, Esther Rilo Siso

Comparison between experimental conductivity data for aqueous binary mixtures of CnMIM-BF_4 ionic liquids and those with ethanol

s01-P-013

Akihito Imanishi (Division of Chemistry, Graduate School of Engineering Science, Osaka University, Osaka, Japan), Shinobu Gonsui, Ken-ichi Fukui, Tetsuya Tsuda, Susumu Kuwabata

Formation of Au nanoparticles in ionic liquids by low-energy electron beam irradiation technique

s01-P-014

Andriy Kovalenko (National Institute for Nanotechnology, Edmonton, Canada), Sergey Gusarov

Multiscale, Quantum Chemical and Molecular Solvation, Theory for Electrochemistry of Ionic Liquids

s01-P-015

Corinne Lagrost (Sciences Chimiques de Rennes, UMR CNRS, Université de Rennes 1 n°6226, Rennes, France), Gabriel Loget, Soizic Chevance, Cyril Poriel, Joelle Rault-Berthelot, Gerard Simonneaux

Imidazolium–based ionic liquids as electrolyte for allowing the facile electrochemistry of model proteins on bare electrodes

s01-P-016

Eugenia Lomako (Centre of Electrochemical Surface Technology, Wiener Neustadt, Austria), Olga Babushkina

Electrochemistry of Nb(V) in Basic and Acidic Ionic Liquids Based on 1-Butyl-1-Methylpyrrolidinium Chloride

s01-P-017

Nuno Pereira (Faculty of Sciences, Porto, Portugal), Sónia Salomé, Paula Fernandes, Carlos M. Pereira, Fernando Silva

Effect of additive in the deposition of Sn, Zn and Sn-Zn alloys from deep eutetic solvents

s01-P-018

Jonathan Szymczak (Institut Jean Lamour, UMR 7198 Université Paul Verlaine - Metz, Metz Cedex 3, France), Sophie Legeai, Clotilde Boulanger, Grégory Chatel, Micheline Draye

Study of bismuth electrochemical system in a piperidinium-based ionic liquid

s01-P-019

Ramesh T. Subramaniam (MM, Setapak, Malaysia)

BMIMTf ionic liquid-assisted ionic dissociation of MgTf in P(VdF-HFP)-based solid polymer electrolytes

s01-P-020

Paula Cojocaru (Politecnico di Milano, Milano, Italy), Anahit Raygani

Electrokinetic Studies of Metal Electrodeposition in Choline Chloride Based Ionic Liquids

s01-P-021

A.I. de Sá (LNEG, Lisboa, Portugal), S. Quaresma, S. Eugénio, C. M. Rangel, R. Vilar

Alternative baths for the gold electrodeposition based on1-butyl-1-methyl-pyrrolidinium dicyanamide ionic liquid

Kinetic and Double Layer Effects

s01-P-022

Enn Lust (Insitute of Chemistry, University of Tartu, Tartu, Estonia), Liis Siinor, Heisi Kurig, Alar Jänes, Jaanus Eskusson, Karmen Lust

Influence of chemical composition of the room-temperature ionic liquids on the electrical double layer capacitance

s01-P-023

Mathieu Salanne (Université Pierre et Marie Curie - Paris 6, Paris, France), Sami Tazi, Christian Simon, Paul Madden

Potential-induced phase transition of the adsorbed layer at the ionic liquid / electrified metal interface

New Analytical Applications

s01-P-024

Maria-Antonietta Baldo (Dep. of Physical Chemistry, University of Venice, Venice, Italy), Paolo Oliveri, Salvatore Daniele

Application of Aprotic Ionic Liquids as Supporting Electrolytes for Electrochemical Measurements in Edible Oils

s01-P-025

Jan Langmaier (J. Heyrovsky Institute of Physical Chemistry of ASCR, v.v.i, 182 23 Prague 8, Czech Republic)

Theoretical Aspects and Application of Voltammetry of Ion Transfer across a Polarized Room-Temperature Ionic Liquid Membrane Facilitated by Valinomycin

s01-P-026

Rasa Pauliukaite (Departmento de Quimica, Faculdade de Ciencias, Universidade de Coimbra, Coimbra, Portugal), Kevin D. Murnaghan, Andrew P. Doherty, Christopher M.A. Brett

Different Strategies to Apply Room Temperature Ionic Liquids in Electrochemical Sensors

Novel Thermodynamic

s01-P-027

Viktoriya Nikitina (Chemistry Department of Lomonosov Moscow State University, Moscow, Russia), Renat R. Nazmutdinov, Galina A. Tsirlina

Redox Potentials in Ionic Liquids

Symposium 2: Environment, Water and Analytical Electrochemistry

Electrochemical Oxidation

s02-P-001

Geogina Alarcon-Angeles (Materials Department, Autonomous Metropolitan University, Mexico, Mexico), Silvia Corona-Avendaño, Mario Romero-Romo, Maria Teresa Ramirez-Silva, Manuel Palomar-Pardave

EIS Characterization of β-Cyclodextrin Electro-Polymerized onto a Carbon Paste Electrode

s02-P-002

Ruslan Alvarez Diduk (Universidad Autónoma Metropolitana Iztapalapa, Departamento de Química, Mexico, Mexico), Maria Teresa Ramirez-Silva, Alberto Rojas-Hernandez, Annia Galano, Manuel Palomar-Pardave, Mario Romero-Romo

Electrochemical characterization of the reaction between quercetin and chromium VI

s02-P-003

Florina Maria Balaj (Electrochemistry, Babes Bolyai University, Cluj Napoca, Romania), Sorin-Aurel Dorneanu, Florica Imre-Lucaci, Adriana Ispas, Andreas Bund, Petru Ilea

Synthesis and Characterisation of some Metallic Materials for Nitrate Reduction

s02-P-004

Henry Bergmann (Anhalt University, FB 6/7, Koethen, Germany), Tatiana Iourtchouk

Occurrence of perhalogenates in water electrolysis using BDD anodes

s02-P-005

Elena Bernalte-Morgado (Analytical Chemistry, Badajoz, Spain), Eduardo Pinilla-Gil, Carmen Marín-Sánchez, Christopher M.A. Brett

Characterisation of Screen-printed Gold and Carbon Electrode Sensors by Electrochemical Impedance

s02-P-006

Cristhian Berrios (Facultad de Quimica y Biologia, Universidad de Santiago de Chile, Santiago, Chile), M. Soledad Ureta-Zañatu

Electrooxidation of tetracyclines antibiotics on glassy carbon and ITO electrode

s02-P-007

Enric Brillas (Laboratori d'Electroquímica dels Materials i del Medi Ambient, Facultat de Química,Universitat de Barcelona, Barcelona, Spain), Edgar Ruiz, Conchita Arias, Juan M. Peralta-Hernández, Aracely Hernández-Ramírez

Effect of Current and Catalyst and Dye Concentrations on the Degradation of Azo Dyes with Electro-Fenton and Solar Photoelectro-Fenton Processes

s02-P-008

Maria de Lurdes Ciríaco (Department of Chemistry, University of Beira Interior, Covilha, Portugal), Dália Santos, Maria José Pacheco, Ana Lopes

Ti/SnO_2-Sb_2O_4 Anodes: Preparation, Characterization and Application in the Degradation of Pharmaceutical Compounds

s02-P-009

Silvia Corona-Avendaño (Departamento de Matriales, Universidad Autónoma Metropolitana-Azcapotzalco, Mexico, Mexico), Georgina Alarcon-Angeles, Mario Romero-Romo, Maria Teresa Ramirez-Silva, Manuel Palomar-Pardave

Electrochemical study of Adrenaline on Cu(II) over a carbon paste electrode

s02-P-010

Silvia Corona-Avendaño (Universidad Autónoma Metropolitana Azcapotzalco, Departamento de Materiales, Mexico, Mexico), Georgina Alarcon-Angeles, Manuel Palomar-Pardave, Mario Romero-Romo, Maria-Teresa Ramirez-Silva

Effect of the modification of carbon paste electrodes with carbon nanotubes and β-cyclodextrin on the electrochemical response of ascorbic acid

s02-P-011

Martin Davila (Universidad Autonoma de Puebla, Puebla, Mexico)

Removal and degradation Reactive Black 5 and Indigo Carmine dyes by adsorption and electrochemical treatment

s02-P-012

Ahmad Dirany (Université Paris-Est, Laboratoire Géomatériaux et Environnement (LGE), Noisy Le Grand, France), Nihal Oturan, Ignasi Sirés, Mehmet Ali Oturan

Removal of pharmaceuticals from water by electrochemically generated Fenton's reagent: removal efficiency and degradation pathways

s02-P-013

Christian Durante (Chemical Sciences, University of Padua, Padova, Italy), Marco Cuscov, Abdirisak Ahmed Isse, Giancarlo Sandonà, Armando Gennaro

Two Step Process for Exhaustive Heavy Metals Abatement: The Case of Cr-EDTA Complex

s02-P-014

Abdellatif El Ghenymy (Química Física, Barcelona, Spain), Conchita Arias, José A. Garrido, Rosa M. Rodríguez, Francesc Centellas, Pere L. Cabot, Enric Brillas

Electro-Fenton and Photoelectro-Fenton Treatments of Sulphanilic acid

s02-P-015

Sergi Garcia-Segura (Universitat de Barcelona, Barcelona, Spain), Enric Brillas, Conchita Arias, Pere L. Cabot, José A. Garrido, Rosa M. Rodríguez, Francesc Centellas

Mineralization of the Fluoroquinolone Flumequine by Electro-Fenton and Photoelectro-Fenton

s02-P-016

Jorge Ginja Teixeira (Chemistry Department, Evora University, Evora, Portugal), Sergio Martins, Gonçalo Palmeiro, António Pereira

Evaluation of the Antioxidant Activity of New Coumarin Derivatives by Cyclic Voltammetry

s02-P-017

Karine Groenen Serrano (Laboratoire de Génie Chimique, Toulouse, France), Omar Sabri, Hélène Chaumat, André Savall

A first step towards the electrochemical regeneration of phenol-saturated activated carbon

s02-P-018

Tarou Hosoi (Graduate School of Science and Technology, Shizuoka University, Hamamatsu, Japan), Yoshiumi Kohno, Yasuhisa Maeda

Amperometric detection of dye concentration in the solution by using diamond electrode

s02-P-019

Christophe Innocent (IEM-UMR5635, Montpellier, France), Djamel Eddine Akretche

Electrochemical study of the oxygenated compounds of chlorine

s02-P-020

Eloy Isarain-Chávez (Facultat de Química Universitat de Barcelona, Barcelona, Spain), Enric Brillas, Francesc Centellas, Arias Conchita, Pere L. Cabot, Rosa M. Rodríguez, José A. Garrido

Solar photoelectro-Fenton degradation of B-blockers using a pilot flow plant coupled to a CPC photoreactor

s02-P-021

Nicoles Jaffrezic (Laboratory of Physical and Chemical Interfaces, Monastir, Tunisia), Ahlem Rouis, Joel Davenas, Hafedh Ben Ouada, Isabelle Bonnamour, Rihab Ebdelli

Electrochemical impedance detection of heavy metal cations by membranes based on new azo-calix[4] arenes

s02-P-022

Kenji Kikuchi (The university of Shiga Prefectrue, Hikone, Japan), Aoi Ioka, Takeo Oku, Yoshinori Tanaka, Yasuhiro Saihara, Zempachi Ogumi

Stability and weight of oxygen nanobubble obtained with water electrolysis

s02-P-023

Jin-Ho Kim (Korea Institue of Ceramic Engineering & Technology, Icheon, Korea), Kwang-Taek Hwang

Photocatalytic Nanocomposite Thin Film of $SrBi_2Nb_2O_9$ by Aerosol Deposition

s02-P-024

Youngkook Kwon (Leiden Institute of Chemistry, Leiden University, Leiden, Netherlands)

Combining Voltammetry with HPLC: Application to Electro-oxidation of Glycerol

s02-P-025

Bahadir K. Körbahti (University of Mersin, Mersin, Turkey)

Chemical Oxygen Demand Reduction of Domestic Wastewater by Electrocoagulation using Fe Electrodes and Process Optimization through Response Surface Analysis

s02-P-026

Ludovic Lesven (LEGOS UMR 5566 (CNES, CNRS, IRD, UPS), Toulouse, France), Margaux Gourdal, Justyna Jonca, Danièle Thouron, Pierre Gros, Maurice Comtat, Véronique Garçon

Silicate monitoring in sea water using an autonomous electrochemical sensor

s02-P-027

Marcos Lanza (Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Leonardo Valentin, Suellen Alves, Fernanda Migliori, Neila Braga, Maurício Baldan, Neidenei Ferreira, Rodnei Bertazzoli

A Comparative Study of Electrochemical Oxidation of the Tebuthyuron using DSA-Cl_2®, DSA-O_2® and Ti/BDD Electrodes

s02-P-028

Ana Lopes (Department of Chemistry, University of Beira Interior, Covilha, Portugal), Patrícia Rodrigues, Lurdes Ciríaco, Maria José Pacheco

Combined Electrochemical Treatment of Leachates from Municipal Landfills

s02-P-029

Carlos Alberto Martinez Huitle (CCET, Department of Chemistry, Universidade Federal do Rio Grande do Norte, Natal, Brazil)

Application of Electrochemical Technology as an Alternative Pre-treatment of Industrial Wastewaters containing Textile dyes

s02-P-030

Carlos Alberto Martinez Huitle (CCET, Department of Chemistry, Universidade Federal do Rio Grande do Norte, Natal, Brazil), Jessica Horacina Bezerra Rocha, Gustavo Rodrigues de Oliveira, Daniel Araujo Carvalho, Jailson Vieira de Melo

Electrocatalytic Properties of Ti-supported Pt for Decolorizing and Removing Dye from Synthetic Textile wastewaters

s02-P-031

Carlos Alberto Martinez Huitle (CCET, Department of Chemistry, Universidade Federal do Rio Grande do Norte, Natal, Brazil), Aline Maria Sales Solano, Chrystiane do Nascimento Brito, Maiara Barbosa Ferreira, Carmem L.P.S. Zanta

Comparison of Electrochemical Processes for Degradation of Organic Compounds: Direct and Indirect Oxidation

s02-P-032

Mohammad Hossein Mashhadizadeh (Chemistry, Tehran, Iran), Reihane Refahati

Electrochemical Determination of Carbamazepine by TiO_2 Nanoparticle Carbon Paste Modified Electrode

s02-P-033

Shuhei Matsubara (The University of Shiga Prefecture, Hikone, Japan), Kenji Kikuchi, Takeo Oku, Yoshinori Tanaka, Yasuhiro Saihara, Zempachi Ogumi

Generation of ozone-nanobubble by water electrolysis with boron-doped diamond electrode

s02-P-034

Emilia Morallón (Physical Chemistry Department, University of Alicante, Alicante, Spain), Raul Berenguer, Cesar Quijada

Electrochemical oxidation of phenol at Pt and Ru-doped SnO_2 electrodes in alkaline medium

s02-P-035

Artur Motheo (Institute of Chemistry of São Carlos, University of São Paulo, São Carlos, Brazil), Ana Luiza Fornazari, Geoffroy Malpass, Douglas Miwa

Electrochemical degradation of mixed formaldehyde and phenol solutions at DSA® materials

s02-P-036

Youssef Mountassir (Faculty of Science Semlalia, University Cadi Ayyad, Marrakesh, Morocco), Lhoucine Gebrati, Abdelaziz Benyaich, Ahmed Nejmeddine, El Mustafa Rezrazi, Patrice Bercot

Detoxification and Decolorization of Moroccan Textile Wastewater by Electrochemical Process. An Invistigation of Energy Consumption and Operation Cost

s02-P-037

Agnieszka Nosal-Wiercinska (Faculty of Chemistry, Department of Analytical Chemistry and Instrumental Analysis, M. Curie–Sklodowska University, Lublin, Poland)

The catalytic influence of methionine on the electroreduction of Bi(III) ions in chlorates (VII) solutions

s02-P-038

Haroldo Oliveira (Institute of Chemistry, State University of Campinas, Campinas, Brazil), Erika Silva, Claudia Longo

Photocatalytic activity of TiO_2 and TiO_2/WO_3 electrodes for estradiol removal from aqueous solution.

s02-P-039

Maria José Pacheco (Department of Chemistry, University of Beira Interior, Covilha, Portugal), Telma Anágua, Cláudia Leal, Lurdes Ciríaco, Ana Lopes

Electrochemical Degradation of Naphthalene Sulfonic Amines using a BDD anode: Influence of the Supporting Electrolyte

s02-P-040

Orla Power (Environmental Technologies and Biomaterials Research Group, NUI Maynooth, Maynooth, Ireland)

The Modification of Nylon Membranes, using Polypyrrole Nanofibres, for the Remediation of Heavy Metals or Nitrates from Water

s02-P-041

Maria Teresa Ramirez-Silva (Departamento de Química, Área de Química Analítica, Universidad Autónoma Metropolitana-Iztapalapa, Mexico, Mexico), Dafne Sarahia Guzmán-Hernández, Silvia Corona-Avendaño, Alberto Rojas-Hernandez, Mario Romero-Romo, Manuel Palomar-Pardave, Carlos Galan-Vidal

Tenoxicam Electrochemical Characterization Using a Bare Carbon Paste Electrode

s02-P-042

Josimar Ribeiro (Química/Universidade Federal do Espírito Santo, Vitória, Brazil), Lucas M. Artem, Vitor Gilles, Adalgisa R. de Andrade

Electrochemical behavior the of binary and ternary electrodes of the type Ti/PtM1M2 (M1 = RuO_2 and M2 = SnO_2) in the presence of 4-chlorophenol

s02-P-043

Fadhila Sekli-Belaidi (Université de Toulouse Laboratoire de Génie Chimique UMR, UPS, INP, CNRS 5503, Toulouse, France), Maurice Comtat, Anne Galinier, Robert Salvayre, Pierre Gros

PEDOT modified gold ultramicroelectrodes for several applications

s02-P-044

Ricardo Salazar (University of Santiago of Chile, Santiago, Chile)

Degradation of Triadimefon Funjicide in Wastewater by Electro-Fenton

s02-P-045

Abdollah Salimi (University of Kurdistan, Sanandaj, Iran)

Fabrication of Highly Sensitive and Ultra Selective Nitrite Sensor Based on Rh(III)-Cyclometalated-Complex/Carbon Nanotubes Modified Glassy Carbon Electrode

s02-P-046

Jürgen Schuster (DECHEMA e.V. Karl-Winnacker-Institut, Frankfurt am Main, Germany), Stefanie Hild, Klaus-Michael Mangold, Claudia Weidlich, Andreas Tiehm

Application of Electrochemical Methods for the Elimination of Pharmaceutical Residues in Wastewater

s02-P-047

Ana Stefanova (University of Bonn, Electrochemistry, Bonn, Germany), Siegfried Ernst, Achmet Erem, Sevda Ayata, Izzet Kisacik, Helmut Baltruschat

Reactions of OH-Radicals with Organic Compounds at Boron Doped Diamond Electrodes

s02-P-048

Masayuki Takaya (The University of Shiga Prefecture, Hikone, Japan), Kenji Kikuchi, Takeo Oku, Yoshinori Tanaka, Yasuhiro Saihara, Zempachi Ogumi

Interface structure of oxygen nanobubble

s02-P-049

Alice Vránková (3rd Internal Department, First Faculty of Medicine and General Teaching Hospital, Charles University in Prague, Prague, Czech Republic), Tereza Skramlikova

Comparison of the Results of HPLC Methods for Determination of Methanephrine and Normethanephrine from Urine and Blood Plasma Considering the Diagnosis of Tumor Pheochromocytoma

s02-P-050

Claudia Weidlich (DECHEMA e.V. Karl-Winnacker-Institut, Frankfurt am Main, Germany), Klaus-Michael Mangold, Marcus Haar

Boron Doped Diamond Electrodes for Combined Water Disinfection and Softening

s02-P-051

José Luís Xavier (UFRGS- Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil), Emma Ortega, Valentin Pérez-Herranz, Andrea Bernardes, Jane Zoppas Ferreira

Advanced oxidation processes (AOP's) applied in treatment of organic refractory pollutants

s02-P-052

Manel Zaied (LAMBE, Evry, France), Sophie Peulon, Nizar Bellakhal, Annie Chaussé

Removal of Phenothiazine Dye by Thin Layers of Birnessite Electrodeposited on SnO_2: Mechanistic Studies

s02-P-053

Jiri Zima (Faculty of Science, Department of Analytical Chemistry, Charles University, Prague, Czech Republic), Hana Dejmkova, Veronika Vokalova, Karolina Vlachova, Andrea Nemeckova, Jiri Barek

Voltammetric and Amperometric Determination of Selected Pharmaceuticals using Carbon Paste Electrodes

Metal Speciation

s02-P-054

Irena Ciglenecki-Jusic (Center for Marine and Environmental Research, Rudjer Boskovic Institute, Zagreb, Croatia), Elvira Bura-Nakic, Damir Krznaric, Georg R. Helz, Eric Viollier

Voltammetric characterization of iron sulphide species in model solutions and natural samples

s02-P-055

Vitor Fernandes (Chemistry Department, Evora University, Evora, Portugal), Alfredina Veiga, António Candeias, Dora Martins Teixeira, Jorge Ginja Teixeira

Adsorptive Cathodic Stripping Voltammetric Determination of Uranium (VI) Using Natural Phytocompounds as Complexing Agents

s02-P-056

Malgorzata Grabarczyk (Faculty of Chemistry, Maria Curie-Sklodowska University, Lublin, Poland)

Determination of dissolved uranium ions in environmental water samples by adsorptive stripping voltammetry

s02-P-057

Teddy Hezard (Laboratoire de Chimie Agro-industrielle et Laboratoire de Génie Chimique, Université de Toulouse, Toulouse , France), David Evrard, Katia Fajerwerg, Brigitte Dubreuil, Philippe Behra, Pierre Gros

Stripping Voltammetric Determination of Hg(II) in Aqueous Media Using Covalently Modified Carbon Electrode

s02-P-058

Alexander Kuhn (ENSCBP, University Bordeaux, Pessac, France), Veronika Urbanova, Martin Bartos, Karel Vytras

Porous antimony and bismuth film electrodes for signal increase in anodic stripping voltammetry

s02-P-059

Matthieu Masson (Dept. of Inorganic and Analytical Chemistry & Institute F.-A. Forel, University of Geneva, Geneva, Switzerland), Marylou Tercier-Waeber, François Bujard, Flavio Graziottin

Improvement of a Voltammetric *in situ* Profiling System for Remote Autonomous Long-term Monitoring

s02-P-060

Marcela Ovalle (UABC, Instituto de Ingenieria, Mexicali, Mexico), Roumen Zlatev, Margarita Stoytcheva, Benjamin Valdez

Differential Alternative Pulses Voltammetry Application for on-line Determination of Zn(II) in Watts Nickel Bath

s02-P-061

Vernon Somerset (CSIR, NRE, Stellenbosch, South Africa), Lucas Hernandez, Emmanuel Iwuoha

Electroanalysis of Trace Metal Ions at Metal Film Modified Carbon Electrodes

s02-P-062

Sotiris Sotiropoulos (Chemistry Department, Aristotle University of Thessaloniki, Thessaloniki, Greece), Panagiota Agrafiotou, Lucie Baldrianova, Ivan Svancara, Karel Vytras

Cathodic stripping voltammetry of Methionine and Homocysteine at Bi-powder Carbon Paste Electrodes

s02-P-063

Mary-Lou Tercier-Waeber (Dept. of Inorganic and Analytical, Chemistry & Institut Forel, University of Geneva, 1211 Geneva 4, Switzerland), Matthieu Masson, Fabio Confalonieri, Flavio Graziottin, Philippe Dallemagne, Martin Sénéclauze

Wireless Sensor Network for High Resolution *In Situ* Monitoring of the Temporal and Spatial Evolution of Bioavailable Trace Metal Species and Master Variables in Aquatic Systems

s02-P-064

Cecylia Wardak (Department of Analytical Chemistry and Instrumental Analysis, Chemical Faculty, M. Curie-Sklodowska University, Lublin, Poland)

Ionic liquids as new lipophilic additives to the membrane of cadmium ion-selective electrodes

s02-P-065

Cecylia Wardak (Department of Analytical Chemistry and Instrumental Analysis, Chemical Faculty, M. Curie-Sklodowska University, Lublin, Poland)

Novel cadmium ion-selective electrode with solid contact based on ionic liquid

Microsensor Array

s02-P-066

Katia Fajerwerg (Laboratoire de Chimie de Coordination, Université Paul Sabatier, Toulouse, France), Vaiata Ynam, Danièle Thouron, Véronique Garçon, Bruno Chaudret, Maurice Comtat

Electrodeposited silver nanoparticles on gold electrode: A new approach for nitrates monitoring in aqueous media.

s02-P-067

Jean Gamby (CNRS, UPR 15 Laboratoire Interfaces et Systèmes Electrochimiques, Paris, France), Mohammed Kechadi, Lila Chaal, Boualem Saidani, Bernard Tribollet

Biofilm adhesion on polymeric support. Kinetics of bovine albumine adsorption on polyethylene microchannel

s02-P-068

Andreza Gomide (Institute of Physics, University of Campinas, UNICAMP, Campinas, Brazil), A.B. Gomide, D.M. Soares, W.E. Gomes, M.A. Tenan

Microrheology of water salt solutions close to hydrophobic/hydrophilic electrodes

s02-P-069

Catherine Sella (Ecole Normale Supérieure, Paris, France), Laurent Thouin, Christian Amatore

Electrochemical Performance of Channel Microband Arrays Under Laminar Flow

s02-P-070

Khaoula Sghair (Laboratoire de Physique et Chimie des Interface, Faculté des Sciences de Monastir, Monastir, Tunisia)

Classification and Discrimination of Different Tunisian Water Samples Using an Electronic Tongue

s02-P-071

Morena Silvestrini (Department of Physical Chemistry, University of Venice, Venice, Italy), Ligia Maria Moretto, Paolo Ugo

Direct Voltammetric Determination of Trace Iodide in Water by Nanoelectrode Ensembles

New Materials for Microelectrodes

s02-P-072

Mohammad Nooredeen Abbas (Anal. Lab., Appl. Org. Chem., National Research Centre, Cairo, Egypt)

Polymer with pendent ionophores in sensor technology

s02-P-073

Elsa Miriam Arce-Estrada (ESIQIE, IPN, Mexico D.F., Mexico), Luis Alberto Estudillo-Wong, Nicolas Alonso-Vante

NO gas-adsorption and in-solution saturated systems on prepared mono and bi-metallic nanoparticles: Alkaline conditions

s02-P-074

Andrea B. Couto (Instituto Nacional de Pesquisas Espaciais (INPE), São José dos Campos, Brazil), Laura C. Santos, Jorge T. Matsushima, Maurício R. Baldan, Neidenei G. Ferreira

Hydrogen and oxygen plasma enhancement in the Cu electrodeposition and consolidation processes on BDD electrode applied to nitrate reduction

s02-P-075

Luigi Falciola (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Maria Luisa Possenti, Annalisa Cupo, Fabio Meroni, Veronica Carrara, Nicolò Vassalli

Electroanalytical detection of some contaminants in the food chain.

s02-P-076

Tingting Han (Laboratory of Analytical Chemistry, Process Chemistry Centre, Åbo Akademi University, Turku, Finland), Johan Bobacka, Ari Ivaska

Polyaniline cellulose composite paper for gas analysis

s02-P-077

Nicole Jaffrezic-Renault (Laboratory of Analytical Sciences, Villeurbanne, France), Basma Khadro, Abdelhamid Errachid, Aurelien Sikora, Anne-Sophie Loir, Florence Garrelie, Christophe Donnet

Electrochemical performances of different Diamond-Like Carbon (DLC) films deposited by femtosecond pulsed laser ablation for heavy metal detection using square wave anodic stripping voltammetric (SWAS

s02-P-078

Winfried Vonau (Kurt-Schwabe-Institut, Ziegra-Knobelsdorf, Germany), Frank Gerlach, Kristina Ahlborn

Redox potential determination with screen-printed redox glass electrodes

s02-P-079

Travis Wade (Laboratoire des solides Irradies, Ecole Polytechnique, Palaiseau Cedex, France), Haad Bessbouse, Iris Nadhakumar, Marie-Claude Clochard

Functionalized Nanoporous Membrane Sensors for Lead(II) Determination by Square Wave Anodic Stripping Voltammetry

Symposium 3: Bioelectrochemistry - From Fundamentals to Applications with a Special Focus on Nanostructured Materials

Bioconversion

s03-P-001

Kensuke Kuroda (Dept. Mater. Sci. & Eng., Nagoya University, Nagoya, Japan), Takanori Iida, Ryoichi Ichino, Masazumi Okido

Anodized TiO_2 coating with high osteoconductivity on the Ti substrate

s03-P-002

Claudia Ley (DECHEMA e.V., Karl-Winnacker-Institut, Biochemical Engineering, Frankfurt am Main, Germany), Dirk Holtmann, Klaus-Michael Mangold, Jens Schrader

Immobilization of P450 enzymes on electrodes via a conductive polymer matrix

s03-P-003

Roberto Ortiz (Biochemistry, Lund University, Lund, Sweden), Hirotoshi Matsumura, Kiyohiko Igarashi, Federico Tasca, Roland Ludwig, Lo Gorton

Effect of Deglycosylation of Cellobiose Dehydrogenase Applied to 3rd Generation Biosensors and Biofuel Cells

s03-P-004

Zhijie Wang (LCPME, CNRS, Nancy University, F-54600, France), Mathieu Etienne, Gert W. Kohring, Alain Walcarius

Electro-Assisted Deposition of Protein Encapsulated Sol-Gel Thin Films for Bio-Electrocatalytic Applications

Bioelectrochemistry

s03-P-005

Adam Healy (Department of Chemistry, University of Oxford, Oxford, United Kingdom), Holly Reeve, Oliver Lenz, Kylie Vincent

Coupling direct electrochemistry of proteins on graphite with infrared spectroscopy to examine metalloenzyme active sites

Biofuel Cells

s03-P-006

Gilbert Noell (Siegen University, Organic Chemistry, Siegen, Germany)

Direct and Redox Polymer Mediated Electron Transfer between Enzymes and Electrodes

s03-P-007

Christophe Innocent (IEM, Montpellier, France), Abledkader Zebda, Christine Mousty, Christian Forano, Sophie Tingry, Serge Cosnier

Composite Layered Double Hydroxides- Polypyrrole for Elaboration of Glucose/O_2 biofuel cell

Biosensing

s03-P-008

Shuping Bi (Nanjing University, Nanjing, China)

Electrochemical Studies on the Effect of Monovalent Cations (Li^+, Na^+, K^+, Cs^+) on Self-assembly of Thiol-modified Double-stranded DNA and Single-stranded DNA on Gold Electrode

s03-P-009

Maija Blomquist (Process Chemistry Center, Laboratory of Analytical Chemistry, Åbo Akademi University, Turku/Åbo, Finland), Alok Prabhu, Johan Bobacka, Andrzej Lewenstam, Ari Ivaska, Kalle Levon

Electrochemical Characterization of Functionalized Polyaniline for Biosensor Applications

s03-P-010

Paulina Cañete (Dpto. Farmacología y Toxicología, Universidad de Chile, Santiago, Chile), Soledad Bollo, Maria Teresa Martinez, Monica Gonzalez

Adsorptive/Covalent MWNT-ODN functionalization. A voltammetric comparison

s03-P-011

Fereshteh Chekin (Department Chemistry, Amol, Iran), Jahan Bakhsh Raoof, Lo Gorton, Nélida Leiva, Leif Bülow

Bioelectrocatalytic Properties of Plant Hemoglobin Immobilized on the Screen Printed Carbon Electrodes

s03-P-012

Aurore De Rache (Chimie Analytique et Chimie des Interfaces, Faculté des Sciences, Université Libre de Bruxelles, Brussels, Belgium), Thomas Doneux, Eléonore Triffaux, Claudine Buess-Herman

Characterization of dilute aptamer SAMs for thrombin electrochemical detection

s03-P-013

Frederique Deiss (Department of Chemistry and Chemical Biology, Harvard University, Cambridge, USA), Emeline Descamps, Nathalie Berthet Duroure, Liviu Nicu, Thierry Livache, Neso Sojic

Fabrication of multiplexed microarrays of DNA nanosensors by using cantilever-based electrochemical deposition

s03-P-014

Victor Constantin Diculescu (Departamento de Química, Faculdade de Ciências e Tecnologia, Universidade de Coimbra, Coimbra, Portugal), Ana-Maria Chiorcea-Paquim, Oana Corduneanu, Sonia Fiuza, Maria Paula Marques, Ana Maria Oliveira-Brett

DNA Interaction with Palladium Chelates of Biogenic Polyamines - AFM and Voltammetric Characterization

s03-P-015

Hanna Elzanowska (Department of Chemistry, University of Warsaw, Warsaw, Poland), Agnieszka Ogorek, Pawel J. Kulesza

Enhanced DNA Detection with Palladium and Methylene Blue

s03-P-016

Lukas Fojt (Center for Dental and Craniofacial Research, Faculty of Medicine, Masaryk University, Brno, Czech Republic), Stanislav Hason, Ludek Strasak, Vladimir Vetterl, Jiri Vanek, Sonia Bartakova, Jana Soukalova

Electrochemical methods usable in dentistry

s03-P-017

Américo G. Duarte (REQUIMTE, CQFB, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Lisboa, Portugal)

Direct Electrochemistry of the Nitric Oxide Reductase from Pseudomonas Nautica

s03-P-018

Masoumeh Ghalkhani (Sharif University of Technology, Tehran, Iran), Isabel. P.G. Fernandes, Carlos Oliveira, Saeed Shahrokhian, Ana Maria Oliveira–Brett

Electrochemical oxidation of clioquinol at a glassy carbon electrode

s03-P-019

Jirimali Harishchandra (Chemistry, Seoul, Korea), Rajaram K. Nagarale, Jong Myung Lee, Duraisamy Saravanakumar

Catechol-Linked Chitosan for the Electrocatalytic Sensing of NADH

s03-P-020

Matthias Heim (ENSCBP, University Bordeaux, Pessac, France), Veronika Urbanova, Blaise Yvert, Karel Vytras, Alexander Kuhn

Porous microelectrode arrays for neurobiological measurements with reduced noise

s03-P-021

Elena Karyakina (Department of Chemistry, M.V. Lomonosov Moscow State University, Moscow, Russia)

Layer-by-Layer Assembly of Hydrogenase Electrodes for Direct Bioelectrocatalysis

s03-P-022

Dongmin Kim (Chemistry, Pusan National University, Busan, Korea), Yoon-Bo Shim, Hui-Bog Noh

A non-oxidation glucose sensor based on an aminophenyl boronic acid bonded-conducting polymer

s03-P-023

Lucie Korecká (Department of Biological and Biochemical Science, University of Pardubice, Pardubice, Czech Republic), Radovan Metelka, Lenka Moravová, Karel Vytras, Zuzana Bílková

Electrochemical Immunomagnetic Biosensor for Protein Detection

s03-P-024

Agata Kowalczyk (Department of Chemistry, University of Warsaw, PL-02-093, Warsaw, Poland), Anna Nowicka, Zbigniew Stojek

Application of 4-Aminoethylbenzenediazonium Salt to Construction of DNA Biosensor at Glassy Carbon Electrode

s03-P-025

Marta Ligaj (Chair of Biochemistry and Microbiology, Poznan University of Economics, Poznan, Poland), Daniela Gwiazdowska, Mariusz Tichoniuk, Sebastian Sacharowski, Marian Filipiak

Detection and Identification of Aeromonas Hydrophila by DNA Biosensor Coupled with a Multiplex Polymerase Chain Reaction

s03-P-026

Guo Liping (Faculty of Chemistry, Northeast Normal University, Changchun, China), Jing Bai

Different oxygen groups functionalized ordered mesoporous carbons and comparative study of their electrocatalytic activity

s03-P-027

Fred Lisdat (Biosystems Technology, Wildau University of Applied Sciences, Wildau, Germany), David Sarauli, Johannes Tanne, Chenggang Xu, Burkhard Schulz, Libuse Trnkova

Polyaniline Sulfonate/Cytochrome c Multilayer Electrodes: Polyelectrolytes' Properties and Assembly Characteristics

s03-P-028

Fred Lisdat (Biosystems Technology, Wildau University of Applied Sciences, Wildau, Germany), David Sarauli, Roland Ludwig, Dietmar Haltrich, Lo Gorton

Comparison between Cyt c-Mediated and Direct Electron Transfer Pathways for Cellobiose Dehydrogenase at Modified Gold Electrodes

s03-P-029

Toshinori Motegi (Department of Chemistry, Faculty of Science, Hokkaido University, Sapporo, Japan), Hideki Nabika, Kei Murakoshi

Molecular Separation in the Self-spreading Lipid Bilayer based on Brownian Ratchet Mechanism

s03-P-030

Christine Mousty (Laboratoire des Matériaux Inorganiques (UMR 6002), Université Blaise Pascal, Aubière, Gambia), Marta Sanchez-Paniagua Lopez, Fabrice Leroux

Biopolymer-layered double hydroxides nanocomposite: Application to aqueous and non-aqueous phenol biosensing

s03-P-031

Anna Nowicka (Department of Chemistry, Warsaw, Poland), Maria Hepel, Zbigniew Stojek

Influence of the Cr Species on Interaction of Anticancer Drug Mitoxantrone with DNA

s03-P-032

Severino Oliveira (Departamento de Química, Universidade de Coimbra, Coimbra, Portugal), Ana Brett

In Situ Evaluation of Chromium-DNA Damage Using a DNA-Electrochemical Biosensor

s03-P-033

Marcela Ovalle (Universidad Autonoma de Baja California, Instituto de Ingenieria, Mexicali, Mexico), Alexandar Hristov, Roumen Zlatev, Margarita Stoytcheva, Benjamin Valdez, Zdravka Velkova, Monica Carrillo

Candida spp. Whole Cells Phenol Sensor and its Environmental Application

s03-P-034

Tércio Paulo (Department of Chemistry, Cornell University, Ithaca, USA), Izaura Diógenes, Héctor Abruña

Direct electrochemistry and electrocatalysis of myoglobin immobilized on L-cysteine self-assembled on gold electrode

s03-P-035

Ana Dora Pontinha (Departamento de Química, Universidade de Coimbra, Coimbra, Portugal), V.C. Diculescu, S.M.A. Jorge, M. Vivan, A.-M. Chiorcea-Paquim, A.M. Oliveira Brett

Voltammetric and AFM Study of Methotrexate-DNA Interaction

s03-P-036

Sharareh Sajjadi (Department of Biology, Roodehen, Iran), Hossain-Ali Rafiee-Pour, Parvaneh Rahimi, Hedayatollah Ghourchian, Amir-Homayoon Keyhan

Electrochemistry and Electrocatalysis of Choline Oxidase based on Ionic-liquid/NH_2-MWCNTs Nano-composite

s03-P-037

Denise Schach (Austrian Institute of Technology, Max Planck Institute for Polymer Research, Mainz, Germany), Dieter Walz, Marc Grosserüschkamp, Christoph Nowak, Wolfgang Knoll

Oriented Immobilization and direct Electron Transfer to the Cytochrome c Oxidase

s03-P-038

Célia M. Silveira (REQUIMTE, Departamento de Química, CQFB, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal), Marta Pimpão, Fernando Pereira, M. Gabriela Almeida, José J.G. Moura

Screening of nanostructured electrode configurations to improve the interfacial electron transfer and electrocatalysis of a multihemic nitrite reductase

s03-P-039

Morena Silvestrini (Department of Physical Chemistry, University of Venice, Venice, Italy), Katia Bortolozzo, Dino Paladin, Paolo Ugo

Use of Nanoelectrode Ensembles as Electrochemical Biosensors

s03-P-040

Viswanathan Subramanian (Requimte, Instituto Superior de Engenharia do Porto, Porto, Portugal), Ana Pinho, Simone Morais, Cristina Delerue-Matos

Electrochemical Immunosensor For Label Free Determination of Benzo[a]pyrene in Environmental Samples

s03-P-041

Vladimir Vetterl (Faculty of Medicine, Masaryk university, Brno, Czech Republic), Stanislav Hason, Frantisek Jelen, Miroslav Fojta, Sona Stepankova, Jan Lata

Electrochemical Monitoring of Metabolites Related to the Xanthine Oxidase Pathway

s03-P-042

Huihui Wang (Faculty of Marine Technology, Tokyo University of Marine Science and Technology, Tokyo, Japan), Mitsuru Izumi, Hideaki Endo, Hitoshi Ohnuki

Thin Film Biosensor Based on Organic-Inorganic Hybrid System

s03-P-043

Holger Wolfschmidt (Department of Physics E19, Technische Universität München, Garching, Germany), Claudia Baier, Alice Schlichtiger, Jörg Eppinger, Ulrich Stimming

Towards new electrochemical biosensors: Modification of enzymes with redox-active affinity labels

s03-P-044

Ewelina Zabost (Department of Chemistry, University of Warsaw, Warsaw, Poland), Anna Nowicka, Zofia Mazerska, Zbigniew Stojek

Thermal stability of ligand-DNA complexes formed by different types of interactions. Comparison of results obtained by spectroscopic and electrochemical techniques

s03-P-045

Shengwen Zhang (Centre for Molecular Nanoscience, School of Chemistry, University of Leeds, Leeds, United Kingdom), Rongjun Chen, Andrew Nelson, Zachary Coldrick

Interaction of pH-responsive Pseudo-peptides with Phospholipid Monolayers in Aqueous Solutions: The Effect of Grafting, pH and Concentration

Nanomaterials

s03-P-046

Susana Cordoba de Torresi (Instituto de Quimica/Universidade de São Paulo, São Paulo, Brazil), Vinicius R Gonçales, Elaine Matsubara, Jose M. Rosolen

Carbon Nanotubes/felt composite modified with a hybrid redox mediator and enzymes for glucose biosensing

s03-P-047

Elena E. Ferapontova (Interdisciplinary Nanoscience Center (iNANO), Faculty of Science, Aarhus University, Aarhus C, Denmark), Andrey Kartashov, Mingdong Dong, Stepan Shipovskov, Flemming Besenbacher

Long-Range Electron Transfer in Recombinant Peroxidases Anisotropically Oriented on Gold

s03-P-048

Stefano Frasca (Institut für Biochemie und Biologie, Universität Potsdam, Golm, Germany), Till von Graberg, Yilmaz Aksu, Jiu-Ju Feng, Arne Thomas, Bernd M. Smarsly, Peter Hildebrandt, Matthias Driess, Ulla Wollenberger

Mesoporous ITO and Tin-Rich ITO as a Novel Platform for Bioelectronics

s03-P-049

Zeljka Jovanovic (Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Vladimir Panic, Aleksandra Krkljes, Zorica Kacarevic-Popovic, Branislav Nikolic, Vesna Miskovic-Stankovic

Electrochemical synthesis of a novel silver/poly(N-vinyl-2-pyrrolidone) nanocomposite characterized by cyclic voltammetry

s03-P-050

Petri Kanninen (Department of Chemistry, Aalto University, Helsinki, Finland), Tanja Kallio, Virginia Ruiz, Esko I. Kauppinen, Kyösti Kontturi

Immobilization of Pyrroloquinoline Quinone on Carbon Nanotubes

s03-P-051

Behzad Rezaei (Isfahan University of Technology, Isfahan, Iran), Najmeh Majidi, Shokoofe Noori

The Bioavailability of Artemisinin and its Cytotoxity to Cancerous Cells by using Multiwalled Carbon Nanotubes

s03-P-052

Abdollah Salimi (University of Kurdistan, Sanandaj, Iran)

Sensitive Glucose Biosensor Based on Silicon Nitride Nanoparticles

s03-P-053

Alexander Vakurov (The Centre for Molecular Nanoscience (CMNS), Chemistry department, Leeds, United Kingdom), Guillermo Mokry, Andrew Nelson, Karen Steenson, Rachel Wallace, Andy Brown, Steve Milne, Rik Brydson

Membrane activity of silica nanoparticles studied using a phospholipid monolayer on a mercury electrode

Nanostructures

s03-P-054

Luis A. Alcaraz (Department of Physical Chemistry and Institute of Electrochemistry, University of Alicante, Alicante, Spain), María Gómez Mingot, Víctor Climent, Jesús Iniesta, Antonio Donaire, Vicente Montiel

Electron Transfer Studies for Different Adsorption-Immobilisation Procedures of Blue Copper Protein Rusticyanin

s03-P-055

Cristina Cordas (Requimte, CQFB, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Caparica, Portugal), Inês S. Camacho, Joana Cristovão, Alice S. Pereira, Pedro Tavares

Direct Electrochemistry of Immobilized Ferritin Proteins

s03-P-056

Johanna Löberg (Department of Chemistry, University of Gothenburg, Sweden), Christina Gretzer, Ingela Mattisson, Elisabet Ahlberg

Will the electrical properties of titanium oxide thin films influence the *in vitro* response?

s03-P-057

Daniel Mandler (Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel), Esteban Malel, Roland Ludwig, Lo Gorton

Local Deposition of Au Nanoparticles by Direct Electron Transfer *via* Cellobiose Dehydrogenase

s03-P-058

Xiaoju Wang (Laboratory of Inorganic Chemistry, Process Chemistry Centre, Åbo Akademi University, Åbo/Turku, Finland), Pia Sjöberg-Eerola, Johan Bobacka, Mikael Bergelin

The effect of counter-ions and substrate material on the growth and morphology of poly(3,4-ethylenedioxythiophene) films: Towards the application of enzyme electrode construction in biofuel cells

s03-P-059

Jieun Song (Chemistry, Seoul, Korea), Zhenyu Hong, Minji Park

Electrochemical Conversion of CO_2 to Formic Acid for the Selective and Efficient Production; Screening Microbes and Optimizing Experimental Conditions

Symposium 4: Electrochemical Energy Conversion and Storage

Batteries

s04-P-001

Hassan Al-Fetlawi (University of Southampton, Southampton, United Kingdom), Akeel Shah, Frank Walsh

Modelling All-Vanadium Redox Flow Battery

s04-P-002

Yurii Baikov (Ioffe Physical Tecnhical Institute of Russian Academy of Science, Saint-Petersburg, Russia)

Alkali metal hydroxides as a basis of new type of solid inorganic protonics: Fundamental and applied aspects

s04-P-003

Seong-Min Bak (Department of Materials Science and Engineering, Yonsei University, Seoul, Korea), Sang-Bok Ma, Hye-Ryun Choi

$LiMn_2O_4$/Graphene Nanosheets Nanocomposites for Energy Storage Applications

s04-P-004

Elena A. Baranova (Department of Chemical and Biological Engineering, University of Ottawa, Ottawa, Canada), Chae-Ho Yim, Yaser Abu-Lebdeh, Isobel Davidson

Development of olivine-based cathode materials using an organic template assisted synthesis for Li-Ion battery in PHEV

s04-P-005

Leonard Berlouis (P & A Chemistry, University of Strathclyde, Glasgow, United Kingdom), Georgios Nikiforidis, David Hall, David Hodgson

Carbon materials for the negative electrode in the Zn-Ce redox flow cell

s04-P-006

Nicola Comisso (Institute for Energetics and Interphases National Research Council, Padova, Italy), Leonard E.A. Berlouis, Cesare Pagura

Hydrogen Storage in Modified Carbon nano-Horns

s04-P-007

Agnieszka Sierzczynska (Institute of Non-Ferrous Metals Branch in Poznan, Central Laboratory of Batteries and Cells, Poznan, Poland), Grzegorz Lota, Katarzyna Lota, Adriana Wrona

AB5-type Hydrogen Storage Alloy Modified with Carbon Used as Anodic Materials in High Energy Ni/MH Batteries and Borohydride Fuel Cell

s04-P-008

Volkmar M. Schmidt (Mannheim University of Applied Sciences, Mannheim, Germany), Alexander Herter

Alkaline Polymer Electrolytes for Batteries and Fuel Cells based on Polyvinylalcohol modified with TiO_2

s04-P-009

Carla Fonseca (Universidade São Francisco, Itatiba, Brazil), Fabio Amaral, Garbas Santos, Elaine Marques, Silmara Neves

A combined recovery process of cathode material in spent lithium-ion batteries

s04-P-010

Laure Gourrier (Université Montpellier 2, Montpellier, France), Stefano Deabate, Thierry Michel, Matthieu Paillet, Jean-Louis Bantignies, Marc Leblanc, Francois Henn

Structural, vibrational and electrochemical study of micrometric “pseudo-single” crystals of β-nickel hydroxide

s04-P-011

Magdalena Graczyk-Zajac (Institute of Materials Science, Darmstadt University of Technology, Darmstadt, Germany), Ana-Maria Lazar, Denis Chaumont, Ralf Riedel, Marco Sacilotti

Nanostructured TiO_2 obtained by MOCVD: promising anode material for Li-ion batteries

s04-P-012

Chih-Yu Hsu (Department of Chemical Engineering, National Taiwan University, Taipei, Taiwan), Po-Yen Chen, Kun-Mu Lee, Po-Chin Nien, K. R. Justin Thomas, Jiann T. Lin, Kuo-Chuan Ho

Switching Behavior of a Photoelectrochromic Device: Kinetics at the Interface of PProDOT-Et_2 Film/ Redox Pair

s04-P-013

Jan Kaspar (Institute of Materials Science, Darmstadt University of Technology, Darmstadt, Germany), Gabriela Mera, Andrzej Nowak, Magdalena Graczyk-Zajac, Ralf Riedel

New Carbon-Rich SiCN Ceramic Anode Materials for Lithium-Ion Batteries with Enhanced Capacity and Rate Capability

s04-P-014

Hyung Sun Kim (Advanced Batteery Center, Korea Institute of Science Technology, Seoul, Korea)

Electrochemical properties of graphite/DSA-assembled electrode for redox flow battery

s04-P-015

Jeongbin Lee (Department of Chemical Engineering, Suwon, Korea), Ui Seong Kim, Taeyoung Han, Seongyoung Park

Two-dimensional thermal modeling of a lithium-ion battery

s04-P-016

Jae-Won Lee (Korea Institute of Ceramic Engineering & Technology, Seoul, Korea), Sung Hwan Min, Kwang Chul Roh, Sun-Min Park

Effect of co-solvent on the properties of Li-Mn spinel prepared by hydrothermal process

s04-P-017

Chun-An Ma (Zhejiang University of Technology, Hangzhou, China), xiao hua Tu, you qun Chu

Studies of the Kinetic of the Aluminium Electrode in Molten $LiNO_3$-KNO_3 electrolyte

s04-P-018

Hamoudi Mekhalfi (Laboratoire des Matériaux et Systèmes Electroniques, Bordj Bou Arréridj, Algeria)

Chemical recycling of manganese oxide from spent Zn–MnO_2 batteries

s04-P-019

Eduardo Muñoz (Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile), Regina Cisternas, Ricardo Córdova, Rodrigo Henríquez, Ricardo Schrebler

Synthesis and characterization of Prussian blue onto p-Si(100)

s04-P-020

Chan-Jin Park (Department of Materials Science and Engineering, Chonnam National University, Gwangju, Korea), Choi Yun-Il, Hee-Jin Jang

Influences of Alloying Elements on the Electrochemical Characteristics of Aluminum Anode for Al-air Batteries

s04-P-021

Han-Sol Park (Department of Materials Science and Engineering, Chonnam National University, Gwangju, Korea), Park Choong-Nyeon, In-Su Jang, Chan-Jin Park

Mechanism for the Degradation of Cycle Life in Ni-MH Secondary Batteries and its Improvement by the Addition of Y_2O_3 and Nano-size Co Powders

s04-P-022

Hélène Porthault (CEA LITEN, Grenoble, France), Frédéric Le Cras, Sylvain Franger

Synthesis of $LiCoO_2$ thin films using a direct electrochemical-hydrothermal route

s04-P-023

Nebojsa Potkonjak (Institute of General and Physical Chemistry, Belgrade 118, Serbia)

Dependence of Hydrogen Diffusion Coefficient in Metal Hydride Electrode on Depth of Discharge

s04-P-024

Ivan Rexed (School of Chemical Science and Engineering, Stockholm, Sweden), Mårten Behm, Göran Lindbergh

Modeling of ZEBRA Batteries

s04-P-025

Edward Roberts (School of Chemical Engineering and Analytical Science, University of Manchester, Manchester, United Kingdom)

Techno-Economic Modelling of a Utility Scale Redox Flow Battery System

s04-P-026

Seung-Min Ryu (Department of Chemical Engineering, Suwon, Korea), Sung Tae Kim, Seung Myun Chung

Modeling of capacity fade during cycling of a 12-V automotive lead-acid battery

s04-P-027

Angela Sanchez (Instituto Nacional del Carbon-Csic, Oviedo, Spain), Ricardo Santamaría, Rosa Menéndez, Clara Blanco, Zoraida González

Electrochemical behaviour on V(V)/V(IV) redox couple at carbon-based electrodes

s04-P-028

M. Manuela Silva (University of Minho, Braga, Portugal), J. F. Ribeiro, M. F. Silva, L. C. Rodrigues, L. M. Goncalves, J. H. Correia

LIPON as Electrolyte in Solid-State Film Batteries

s04-P-029

Emma Smith (University of Leicester, Leicester, United Kingdom), Andrew Abbott, Karl Ryder

Electrolytic Deposition and Stripping of Zn Metal from Deep Eutectic Solvents

s04-P-030

Ravichandra Tangirala (Energy Technology Research Group, School of Engineering Sciences, University of Southampton., Southampton, United Kingdom), Xiaohong Li, Carlos Ponce de León Albarran, Derek Pletcher, Frank C. Walsh

The Influence of Electrolyte Additives on the Charge-Discharge Performance of a Soluble Copper-Lead Dioxide Flow Battery

s04-P-031

Waltraud Taucher-Mautner (Institute for Chemistry and Technology of Materials, Graz University of Technology, Graz, Austria), Viktor Hacker

Development of a Pasted Zinc Electrode for Rechargeable Zinc-Air Batteries

s04-P-032

Jaeshin Yi (Department of Chemical Engineering, Suwon, Korea), Chisu Kim, Young-jin Hong

Three-dimensional modeling of the thermal behavior of a lithium-ion battery pack

s04-P-033

Chuhong Zhang (School of Chemistry, University of St. Andrews, St. Andrews, United Kingdom), Peter Bruce

Alkali Metal Crystalline Polymer Electrolytes

s04-P-034

Jeyong Yoon (School of Chemical and Biological Engineering, Seoul National University (SNU), Seoul, Korea), Heo Yi Joon

Effect of carbon electrode characteristics on the performance of capacitive deionization

s04-P-034-2

Daniel Brandell (Department of Materials Chemistry, Uppsala University, Uppsala, Sweden), Vahur Zadin, Heiki Kasemägi, Alvo Aabloo

Optimization of the 3D-Microbattery Geometry by Finite Element Analysis

Fuel cells

s04-P-035

Gastón Alvial (Departamento de Física, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil), Raphael Longuinhos, José Marcos Figueiredo, Evandro de Morais, André Ferlauto, Rodrigo Lacerda, Luiz O. Ladeira

Determination of the Catalytic Area of an Aligned Carbon Nanotube Electrode

s04-P-036

Alexandros Anastasopoulos (University of Southampton, School of Chemistry, Southampton, United Kingdom), Faisal Al-Odail, Brian E. Hayden

Hydrogen Evolution and Hydrogen Oxidation on PdAu Alloy Surfaces

s04-P-037

Ahmed Bahloul (Laboratoire des Matériaux et Systèmes Electroniques, Bordj Bou Arréridj, Algeria), Mustapha Boubatra, Nacer Chelali, Alain Mauger, François Gendron, Christian Julien

Physicochemical characterization of manganese oxide dispersed on carbon for fuel cells catalyst

s04-P-038

Cesar Alfredo Barbero (Departamento de Química, Universidad Nacional de Río Cuarto, Río Cuarto, Argentina), Gustavo Marcelo Morales, Gabriel Planes, Emilia Morallón, M. Sergio Moreno, Horacio J. Horacio J. Salavagione, Horacio J. Salavagione

Carbon Nanotubes-PEDOT/PSS-Au, Pt, Pd Nanoparticle Composite for Catalytic Applications

s04-P-039

Cesar A. Barbero (Department of Chemistry, Universidad Nacional de Rio Cuarto, Rio Cuarto, Argentina), Gabriel Planes, Jimena Tuninetti, Maria C. Miras, Elena Pastor, Jose L. Rodriguez, Cesar A. Barbero

Effect of Electrodeposited Conductive Polymer (CP) Films on the Methanol Oxidation at CP/Pt electrodes

s04-P-040

Cesar Barbero (Departamento de Química, Universidad Nacional de Río Cuarto, Rio Cuarto, Argentina), Angelica Baena-Moncada, Gabriel Angel Planes

Hierarchical porous electrodes for methanol electro-oxidation

s04-P-041

Symeon Bebelis (Department of Chemical Engineering, University of Patras, Patras, Greece), Nikolaos Kotsionopoulos

Operation of a propane-fuelled solid oxide fuel cell under internal steam reforming conditions

s04-P-042

Christophe Chauvin (Shinshu University, Ueda, Japan), Takahiro Saida, Soshi Iimura, Wataru Sugimoto, Yoshio Takasu

Improving stability of Pt/C ORR catalyst with RuO2 nanosheets

s04-P-043

Sara Cavaliere (Institut Charles Gerhardt UMR, CNRS 5253 AIME, Université Montpellier 2, Montpellier Cedex 5, France), Laure Chevallier, Deborah Jones, Jacques Rozière, Alex Bauer, Rob Hui

Novel PEMFC electrodes based on electrospun titania nanofibres

s04-P-044

Min-Hsing Chang (Department of Mechanical Engineering, Tatung University, Taipei, Taiwan), Chun-Ting Liu, Hao-Ming Chang

Effect of PTFE Content and Carbon Loading in Micro Porous Layer on the Performance of a PBI-based High Temperature PEM Fuel Cell

s04-P-045

Sheng-Pei Chen (Department of Chemistry, Xiamen University, Xiamen, China), Peng Wang, Shi-Gang Sun

Electrocatalytic oxidation of ethanol on FePt/GC prepared through galvanic replacement reaction

s04-P-046

Mitsuharu Chisaka (Department of Electrical and Electronic Information Engineering, Toyohashi University of Technology, Toyohashi, Japan), Tomohiro Iijima, Akira Tomita, Tatsuro Yaguchi, Yoji Sakurai

Oxygen reduction reaction activity and durability of nitrogen doped Vulcan XC-72 as a support material in polymer electrolyte membrane fuel cell cathodes

s04-P-047

Po-Jen Chu (Department of Engineering Materials, University of Sheffield, Sheffield, United Kingdom), Aleksey Yerokhin, Allan Matthews

Effect of (Poly)phosphate Anion Structure on Characteristics of PEO Coatings on Ti, for Dye Sensitised Solar Cell Applications

s04-P-048

Delphine Conteau (LEMTA, Vandoeuvre-lès-Nancy, France), Sophie Didierjean, Caroline Bonnet, François Lapicque, Denis Funfschilling

Two-phase flow pressure drop in the cathode gas channel of a PEMFC

s04-P-049

Rodrigo Fernando De Souza (UFABC, Santo Andre, Brazil), Luanna Parreira, Erico Teixeira-Neto, Almir Neto, Marcelo Calegaro, Martha Janete Giz, Giuseppe Camara, Mauro Santos

PtSnCe/C Electrocatalysts for Ethanol Oxidation: DEFC and FTIR *in-situ* studies

s04-P-050

Oleg Drozhzhin (Department of Chemistry, Moscow State University, Moscow, Russia), Sergey Istomin, Eugene Antipov

$Sr_{0.5}(Sm,Gd)0.5Co_{1-x}Mn_xO_{3-\delta}$ - novel cathode materials for solid oxide fuel cells

s04-P-051

Julien Durst (Laboratoire d Electrochimie et de Physico chimie des Matériaux et des Interfaces, Saint Martin d Heres, France), Laetitia Dubau, Frederic Maillard, Marian Chatenet, Elisabeth Rossinot, Johan Andre

Influence of PEMFC operating conditions on the durability of Pt_3Co/C electrocatalysts

s04-P-052

Nevenka Elezovic (Institute for Multidisciplinary Research, University of Belgrade, Belgrade, Serbia), Biljana Babic, Velimir Radmilovic, Nedeljko Krstajic, Ljiljana Vracar

Nb-TiO_2 supported platinum nanocatalyst for hydrogen oxidation reaction

s04-P-053

Ralf Elze (Institute of Energy Research IEF-3: Fuel Cells, Jülich, Germany), C. Wannek, K. Wippermann, J. Wackerl, J. Mergel, M. Schuster, B. Bauer

Novel hydrocarbon electrolytes for direct methanol fuel cells and their influence on the anode performance and the membrane electrolyte interface

s04-P-054

Yoichi Endo (Department of Nuclear Engineering and Management, School of Engineering, University of Tokyo, Tokyo, Japan), Kazuya Sasaki, Akihiro Suzuki, Takayuki Terai

Effect of Transition Metal Catalysts for Steam Reforming of Dimethyl Ether as Fuel for Low Temperature Operating Solid Oxide Fuel Cells

s04-P-055

Thomas H. Etsell (Department of Chemical and Materials Engineering, Edmonton, Canada), Amir Reza Hanifi, Alireza Torabi, Partha Sarkar

Effect of Electrode Position on Performance and Redox-Cycling Resistant of Tubular Ceramic Fuel Cells

s04-P-056

Hiroshi Fukunaga (Department of Fine Materials Engineering, Shinshu University, Ueda, Japan), Junichi Ota, Akinao Okabe, Toru Takatsuka

Effect of Sintering Condition on Microstructure of Ni-YSZ Cermet Anode for SOFC

s04-P-057

Aldo Saul Gago (LACCO, UMR, CNRS 6503, Université de Poitiers, Poitiers, France), Yongjun Feng

Formic acid laminar-flow fuel cells based on $CoSe_2$

s04-P-058

Ljiljana Gajic-Krstajic (Institute of Technical Sciences-SASA, Belgrade, Serbia), Nevenka Elezovic, Biljana Babic, Nedeljko Krstajic, Ljiljana Vracar

Kinetics of the oxygen reduction reaction at Nb-TiO_2 supported platinum catalyst in alkaline solution

s04-P-059

Snezana Gojkovic (Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Maja Obradovic, Amalija Tripkovic

The influence of Co on the oxidation of carbon monoxide and formic acid on Pt surfaces

s04-P-060

Pedro Gomez-Romero (CIN2 (CSIC), Bellaterra, Barcelona, Spain), Jullieth Suarez-Guevara, Juan Antonio Asensio

Polybenzimidazoles for High-Temperature PEMFC Membranes. New Methods and Materials

s04-P-061

Vladimir Guterman (Chemistry Department, Southern Federal University, Rostov-on-Don, Russia)

Pt-Cu/C and Pt-Ag/C Electrocatalysts with Different Structures for H_2/O_2 Fuel Cells

s04-P-062

Sang-Beom Han (Department of Chemical and Environmental Engineering, Soongsil University, Seoul, Korea)

Proton Exchange Membrane Fuel Cells with Nitrate Reduction Reactions

s04-P-063

Amir Rezs Hanifi (Department of Chemical and Materials Engineering, Edmonton, Canada), Alireza Torabi, Thomas H. Etsell, Partha Sarkar

Improved Redox-Cycling Resistant Tubular Ceramic Fuel Cells

s04-P-064

Luhua Jiang (Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, China), Jing Qi, Gongquan Sun

ORR on highly-graphic mesoporous carbon-supported iron phthalocyanine in alkaline media

s04-P-065

Vicente Jiménez (Chemical Engineering, University of Castilla-La Mancha, Ciudad Real, Spain), Ana Ramírez, Paula Sánchez, José Luis Valverde, Amaya Romero

Improving hydrogen storage on modificed carbon nanofibers

s04-P-066

JongHoon Joo (Max-Planck-Institute for Solid State Research, Stuttgart, Germany), Rotraut Merkle, Joachim Maier, Markus Kubicek, Judith Januschewsky, Jürgen Fleig, Andreas Oestereich, Zoltan Hlavathy, Michael Hävecker, Axel Knop-Gericke, Robert Schlögl

In-situ X-ray Photoelectron Spectroscopy Studies of adsorbed Oxygen Species on $La_{0.6}Sr_{0.4}CoO3-\delta$ Perovskites

s04-P-067

Sang-Kyung Kim (Korea Institute of Energy Research, Daejeon, Korea), Da-mi Kim, Seongyop Lim, Dong-Hyun Peck, Doohwan Jung, Byungrok Lee

Effect of Metal Ion Concentration on the Pt Particle Size of Catalyst

s04-P-068

Sang-Kyung Kim (Korea Institute of Energy Research, Daejeon, Korea), Sang-Min Park, Seongyop Lim, Doo-Hwan Jung, Dong-Hyun Peck, Won Hi Hong

Improvement of Homogeneity of Current Distribution in Direct Methanol Fuel Cell through Catalyst Loading Variation

s04-P-069

Sang-Kyung Kim (Korea Institute of Energy Research, Daejeon, Korea), Young-Chul Park, Seongyop Lim, Doo-Hwan Jung, Dok-Yol Lee

Investigation on the Factors Affecting Performance Degradation of Direct Methanol Fuel Cell

s04-P-070

Hyun Tae Kim (Department of Chemical and Biological Engineering and Institute of Chemical Processes, Seoul National University, Seoul, Korea), Jong Suk Yoo, Sang Heup Moon

Hydrogen and CO Oxidation Reactions on Au Promoted Pd/C Electrocatalysts Prepared by Surface Redox Method

s04-P-071

Kwang Min Kim (GIFT, POSTECH, Pohang, Korea), Jin Ho Park, Jong Hee Kim

Effect of Chemical Treatment on Interfacial Contact Resistance of Ferritic Stainless Steel Containing Cu in PEMFC Environment

s04-P-072

In Kim (Analysis Research Division, Daegu Center, Korea Basic Science Institute, Daegu, Korea), Younkee Paik, Seen Ae Chae, Sung-Hyea Kwon, Kug-Seung Lee, Yung-Eun Sung, Hasuck Kim

Reaction Difference of Pt/C, PtRu/C and Pt_3Sn/C Anode Catalysts in Direct Ethanol Fuel Cells Investigated by ^{13}C NMR

s04-P-073

Sang-Kyung Kim (Korea Institute of Energy Research, Daejeon, Korea), Se-Hee Lee, Young-Chul Park, Seongyop Lim, Doo-Hwan Jung, Se-Young Choi

Stability of Crn-Coated Stainless Steels as a Metal Bipolar Plate for a Direct Methanol Fuel Cell

s04-P-074

Sang-Kyung Kim (Korea Institute of Energy Research, Daejeon, Korea), Hun Suk Im, Seongyop Lim, Won Hi Hong

Study on the Water Flooding in the Cathode of Direct Methanol Fuel Cell by Impedance Spectroscopy

s04-P-075

Taro Kinumoto (Department of Applied Chemistry, Faculty of Engineering, Oita University, Oita, Japan), Keita Nagano, Tomoki Tsumura, Masahiro Toyoda

Preparation and Durability of $Pt/SnO_2/KB$ Catalyst for Proton Exchange Membrane Fuel Cells

s04-P-076

Nikolas Kiratzis (Applied Sciences, TEI of West Macedonia, Kozani, Greece), Athanasios Triantafylloy, Athina Krestoy, Stefania Kostea, Christos Tsaousides

Evaluation of Copper based Cermets as Potential Anodes for Solid Oxide Fuel Cells (SOFCs)

s04-P-077

Jun Kondoh (Graduate School of Science and Technology, Shizuoka University, Hamamatsu-shi, Japan), Satoru Mikuni, Naomi Sawada, Tohru Ohta, Toshimasa Mori, Hiromi Yatsuda

Methanol sensor using shear horizontal surface acoustic wave devices for direct methanol fuel cells

s04-P-078

Ulrike I. Kramm (Helmholtz-Zentrum Berlin für Materialien und Energie Department for Solar Fuels and Energy Storage (E-I6), Berlin, Germany), Iris Herrmann, Peter Bogdanoff, Eric Proietti, Michel Lefèvre, Frédéric Jaouen, Jean-Pol Dodelet, Sebastian Fiechter

Effect of High-Energy Ball Milling on the PEM-Fuel-Cell Performance of Fe/N/C-catalysts for the Oxygen Reduction

s04-P-079

Ulrike I. Kramm (Helmholtz-Zentrum Berlin für Materialien und Energie Department of Solar Fuels and Energy Storage (E-I6), Berlin, Germany), Gerald Zehl, Alexei Erko, Irmgard Abs-Wurmbach, Peter Bogdanoff, Ioanna Martinaiou, Iris Dorbandt, Sebastian Fiechter

Structural Investigation of Iron Porphyrin-based Catalysts for the Oxygen Reduction in Acidic Media: Nature of the Temperature-induced Increase in Catalytic Activity

s04-P-080

Ulrike Krewer (Group Portable Energy Systems, Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg, Germany), Stefan Schymaniuk, Martin Mueller, Juergen Mergel

Methanol Concentration Sensing in and with Direct Methanol Fuel Cells

s04-P-081

Christian Kulp (Analytische Chemie - Elektroanalytik und Sensorik, Bochum, Germany), Wolfgang Schuhmann, Michael Bron

Synthesis of Carbon Supported Core-Shell Nanoparticles in an Electrochemical Slurry Reactor

s04-P-082

Young-Uk Kwon (Department of Chemistry, Sungkyunkwan University, Suwon, Korea), Ji-Hoon Jang, Juyeong Kim, Yang-Hee Lee

Electrocatalytic Properties of Nanoparticles Synthesized by Sonochemistry

s04-P-083

Virginie Lair (LECIME, UMR, CNRS 7575, ENSCP, Chimie ParisTech, Paris, France), Valérie Albin, Armelle Ringuedé, Michel Cassir

Influence of Additives on the Conductivity of the Electrolyte in the Molten Carbonates Fuel Cell: Experimental and Predictive Approach

s04-P-084

Natalia Lebedeva (Energy Research Centre of the Netherlands (ECN), Petten, Netherlands), Arend S. Booij, Martin Aalberts, Ivan N. Voropaev, Pavel A. Simonov, Anatoly V. Romanenko, Valerii I. Bukhtiyarov

Novel Sibunit Carbon Supports for Catalysts for Proton Exchange Membrane Fuel Cells

s04-P-085

Young-Woo Lee (Department of Chemical and Environmental Engineering, Soongsil University, Seoul, Korea)

Composition-Modulated Octahedral Pt-Pd Alloy Nanoparticles as Oxygen Reduction Electrocatalysts

s04-P-086

Ezequiel Pedro Marcos Leiva (Departamento de Matemática y Física, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Agustin Sigal, Mariana Isabel Rojas

DFT Study of a graphene sheet decorated with nickel in contact with different adsorbates

s04-P-087

Chi-Yang Liu (Department of Materials Science and Engineering, National Cheng Kung University, Tainan, Taiwan), Kuan-Zong Fung

Influence of Sr Substitution on Crystal structure, Conductivity and Vanadium Valence State of $La_{1-x}Sr_xVO_3$ Anode in Reducing Atmosphere

s04-P-088

Justo Lobato (Chemical Engineering Departament, University of Castilla, La Mancha, Ciudad Real, Spain), Pablo Cañizares, Manuel A. Rodrigo, Diego Úbeda, Francisco Javier Pinar

Study of titanium based polybenzimidazole (PBI) composite membranes for high temperature PEMFCs. Effect of titanium oxide content

s04-P-089

Mariangela Longhi (Physical Chemistry and Electrochemistry, University of Milano, Milano, Italy), Leonardo Formaro, Ivano Galbiati

Platinum-free electrocatalysts for Oxygen Reduction from SiO_2-templated sugar-nitrogen base mixtures

s04-P-090

Milica Marceta Kaninski (Vinca Institute of Nuclear Sciences, Belgrade, Serbia), Aleksandar Maksic, Vladimir Nikolic, Djordje Saponjic, Scepan Miljanic

Hydrogen Isotope Effects in Fuel Cells

s04-P-091

Maria Marcu (Electrochemistry, Institute of Physical Chemistry, Bucharest, Romania), Alexandra Banu, Loredana Preda

Electro-oxidation of ethanol on $Pt/TiO_x/C$ electrocatalyst

s04-P-092

Serguei Martemianov (Institut Pprime UPR du CNRS 3346, CNRS, Université de Poitiers, ENSMA, Poitiers, France), Alina Ilie, Christophe Coutanceau

Optimization of Operational Parameters of Solid Anionic Membrane Fuel Cells

s04-P-093

Justus Masa (Analytische Chemie – Elektroanalytik & Sensorik, Ruhr-Universitaet Bochum, Bochum, Germany)

An Electrochemical Robotic System for Automated Synthesis and Screening of Catalyst Libraries

s04-P-094

Alessandro Minguzzi (Department of Physical Chemistry and Electrochemistry, Università degli Studi di Milano, Milano, Italy), Dario Battistel, Cristina Locatelli, Joaquin Rodriguez-Lopez, Alberto Vertova, Salvatore Daniele, Sandra Rondinini, Allen J. Bard

Recent developments on the rapid screening of electrocatalysts by scanning electrochemical microscopy

s04-P-095

María de los Angeles Montero (Programa de Electroquímica Aplicada e Ingeniería Electroquímica (PRELINE), Facultad de Ingeniería Química, Universidad Nacional del Litoral, Santa Fe, Argentina), María Rosa Gennero de Chialvo, Abel César Chialvo

Rotating Nanoparticle Array Electrode as a Tool for Steady State Kinetic Studies

s04-P-096

Maria de los Angeles Montero (Programa de Electroquimica Aplicada e Ingenieria Electroquimica (PRELINE), Facultad de Ingenieria Quimica, Universidad Nacional del Litoral, Santa Fe, Argentina), Maria Rosa Gennero de Chialvo, Abel Cesar Chialvo

Electrocatalytic Activity of Core-shell Au@Pt Nanoparticles for the Hydrogen Oxidation Reaction

s04-P-097

Adina Morozan (SPCSI, CEA Saclay, Gif-sur-Yvette Cedex, France), Bruno Jousselme, Pascale Jegou, Serge Palacin

Electrocatalytic Activity towards Oxygen Reduction of Composite Materials based Polypyrrole

s04-P-098

Mouna Nacef (Laboratoire d'Analyses Industrielles et Génie des Matériaux, Département de Génie des Procédés, Guelma, Algeria), Mohamed Lyamine Chelaghmia, Abed Mohamed Affoune

Alcohols electrooxidation on Pt and Pt-Ni/C electrodes

s04-P-099

Vladimir Nikolic (Vinca Institute of Nuclear Sciences, Belgrade, Serbia), Aleksandar Maksic, Djordje Saponjic, Milica Marceta Kaninski, Gvozden Tasic

Polymer Electrolyte Membranes for Solid Alkaline Fuel Cells

s04-P-100

Gabriele Orsini (Dipartimento di Ingegneria Chimica, Chimica Industriale e Scienza dei Materiali, Università di Pisa, Pisa, Italy), Vincenzo Tricoli

Nonhydrolytic Sol-Gel Route to Mesoporous Tungsten Oxide with Mixed Electron and Proton Conduction

s04-P-101

Junichiro Otomo (Department of Environment Systems, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, Chiba, Japan), Iori Shimada, Fumihiko Kosaka, Yoshito Oshima

Electrooxidation of alcohol fuels at intermediate temperatures

s04-P-102

Aleksandra Pacula (Institute of Catalysis and Surface Chemistry Polish Academy of Sciences, Krakow, Poland), Michał Mosiałek, Grzegorz Mordarski, Magdalena Dudek, Robert P. Socha, Alicja Rapacz-Kmita

Ceramic electrolytes in the CeO_2-BaO-Gd_2O_3 system

s04-P-103

Martin Paidar (Department of Inorganic Technology, Institute of Chemical Technology Prague, Prague, Czech Republic), Rudolf Mraz, Jakub Polonsky, Karel Bouzek

Magneli phases supported catalyst for PEM fuel cell

s04-P-104

Gu-Gon Park (Fuel Cell Research Center/Korea Institute of Energy Research, Daejeon, Korea), Eun-Hwa Jang, Young-Jun Sohn, Sung-Dae Yim, Chang-Soo Kim, Sung-Hyun Kim, Tae-Hyun Yang

Optimization of electrode structure of the newly adopted electro-catalysts for membrane-electrode-assembly of polymer electrolyte fuel cells

s04-P-105

Alok K. R. Paul (Central Electrochemical Research Institute, Chennai, India), A. K. Shukla

A Numerical Model of a Liquid-Feed Direct Borohydride Fuel Cells and its Experimental Validation

s04-P-106

Pekka Peljo (Department of Chemistry, Aalto University, Helsinki, Finland), Lasse Murtomäki, Tanja Kallio, Kyösti Kontturi

Molecular Fuel Cell Utilizing a Liquid-Liquid Interface

s04-P-107

Robson Pacheco Pereira (Departamento de Química, Instituto de Ciências Exatas, Pólo Universitário de Volta Redonda, Universidade Federal Fluminense., Volta Redonda, Brazil), Carolina M.D. da Silva, Felipe A.M. Loureiro, Adney L.A. Silva, Ana Maria Rocco

Proton Conductive Membranes based on Sulfonated Poly(acrylonitrile-co-butadiene-co-styrene)

s04-P-108

Robson Pacheco Pereira (Departamento de Química, Instituto de Ciências Exatas, Pólo Universitário de Volta Redonda, Universidade Federal Fluminense, Volta Redonda, Brazil), Felipe A.M. Loureiro, Adney L.A. Silva, Ana Maria Rocco, Gullit D.C. Anjos

Conductivity, Vibrational Spectrocopy and Thermal Behavior of Sulfonated Poly(styrene-co-allyl alcohol) membranes

s04-P-109

Sergey Pronkin (LMSPC-ECPM-UdS, University of Strasbourg, Strasbourg, France), Yeuk Ting Law, Thomas Cottineau, Nicolas Keller, Elena R Savinova, Valerie Keller-Spitzer

Ordered layers of doped TiO_2 nanotubes as anode for photoelectrochemical water splitting

s04-P-110

Carmen M. Rangel (LNEG, Lisboa, Portugal), C.O. Soares, R.A. Silva, M. D. Carvalho, M.E. Melo Jorge, A. Gomes, M.I. da Silva Pereira

High Surface Area $LaNiO_3$ Electrodes for Oxygen Electrocatalysis in Alkaline Media

s04-P-111

C.M. Rangel (LNEG, Lisboa, Portugal), J.C. Calderón, J.L. Figueiredo, N. Mahata, R. A. Silva, M.F.R. Pereira, E. Pastor, L. Calvillo, M.J. Lázaro

Catalyst Supported on Functionalized Carbons: Impact on Catalyst Loading and Fuel Cell Performance

s04-P-112

Diogo Santos (Instituto Superior Tecnico, Department of Chemical and Biological Engineering, Lisboa, Portugal), Cesar Sequeira

Effect of Operational Parameters on the Performance of Direct Borohydride / Hydrogen Peroxide Fuel Cells

s04-P-113

Mauro Santos (Laboratório de Eletroquímica e Materiais, Centro de Ciências e Humanas, Universidade Federal do ABC, Santo André, Brazil), Júlio César Silva, Rodrigo Fernando De Souza, Érico Teixeira Neto, Marcelo Calegaro

Ethanol Oxidation Reaction using SnO_2@Pt/C as an Electrocatalyst

s04-P-114

Robert Savinell (Department of Chemical Engineering, Case Western Reserve University, Cleveland, USA), Tyler Petek, Jesse Wainright, Han Liu

Composite Kapton-PBI/Phosphoric Acid Membrane for a Hydrogen Pump Electrolyzer

s04-P-115

Anastasia Savouchkina (General Energy Department, Paul Scherrer Institut, Villigen, Switzerland), Guenther G. Scherer, Alexander Wokaun, Ruediger Koetz, Annette Foelske-Schmitz

Effect of Thermal Treatment of Glassy Carbon on Corrosion of Pt/C Model Electrodes

s04-P-116

Keith Scott (Department of Chemical Engineering and Advanced Materials, Newcastle University, Newcastle upon Tyne, United Kingdom)

MnO_2 Nanostructures as Electro-catalysts for Oxygen Reduction Reaction in Alkaline Medium

s04-P-117

Keith Scott (School of Chemical Engineering and Advanced Materials, Newcastle University, Newcastle upon Tyne, United Kingdom), Xu Wu, Suddhasatwa Basu, Jyoti Tayal, Xu Wang

An Investigation of Iridium Stabilized Ruthenium Oxide Nanometer Anode Catalysts for PEMWE

s04-P-118

Hyung Suk Seo (Graduate Institute of Ferrous Technology, Pohang University of Science and Technology, Pohang, Korea), Dae Won Yun, Kyoo Young Kim

Effect of Ti on Oxidation Behavior of Ferritic Stainless Steel in SOFC Environment

s04-P-119

Jae-Kyung Shin (Department of Materials Science and Engineering, Chonnam National University, Gwangju, Korea), Kwi-Sub Yun, Chan-Jin Park

Hydrogen Generation from an Alkaline Solution by the Corrosion and Hydrolysis of Al-Sn and Al-Si Alloys

s04-P-120

Galdric Sibiude (CEA, LITEN, DEHT, LCPEM, Grenoble, France), Nicolas Guillet, Gérard Bidan

Templated electrodeposited catalyst nanowires on microporous substrate as fuel cell electrodes

s04-P-121

Stanislaw Sieniutycz (Faculty of Chemical and Process Engineering, Warsaw University of Technology, Warszawa, Poland)

Power Limits for Imperfect Electrochemical Generators and Fuel Cells - A Thermodynamic Approach

s04-P-122

Evelina Slavcherva (Insitute of Electrochemistry and Energy Systems, Bulgarian Academy of Sciences, Sofia, Bulgaria), Georgi Topalov, Gerald Ganske, Ivan Radev, Uwe Schnakenberg

Magnetron Sputtered Catalysts for PEM Electrochemical Energy Conversion

s04-P-123

Francesca Soavi (Dipartimento di Scienza dei Metalli, Elettrochimica e Tecniche Chimiche, Università di Bologna, Bologna, Italy), Catia Arbizzani, Sara Righi, Marina Mastragostino

Mesoporous Carbon Supports for Pt-free Cathode Catalysts in PEMFC

s04-P-124

Korakot Sombatmankhong (Department of Chemical Engineering and Biotechnology, University of Cambridge, Cambridge, United Kingdom), Sinéad M. Matthews, Kamran Yunus, Adrian C. Fisher

The Development and Characterisation of Microfabricated Polymer Electrolyte Membrane Fuel Cells

s04-P-125

Sotiris Sotiropoulos (Chemistry Department, Aristotle University of Thessaloniki, Thessaloniki, Greece), Jenia Georgieva, Eugenia Valova, Stephan Armyanov, Sofia Papadimitriou, Georgios Kokkinidis

Methanol oxidation at Pt(Cu)/ Vulcan XC72R carbon catalysts prepared by the partial galvanic replacement of Cu from a Cu/Vulcan XC72R precursor material

s04-P-126

Verena Stockhausen (ITODYS Paris 7-Denis Diderot, Paris, France), Pascal Martin, Hyacinthe Randriamahazaka, Jean Christophe Lacroix

Towards Plasmonic Grätzel type Solar Cells

s04-P-127

Wataru Sugimoto (Shinshu University, Ueda, Japan), Naoki Ogiwara, Takahiro Saida, Christophe Chauvin, Yoshio Takasu

ORR Activity of RuO_2 Nanosheet Modified Pt/GC Model Electrodes

s04-P-128

Nail Suleimanov (Kazan State Power Engineering University, Kazan, Russia), Sergei Khantimerov, Eugene Kukovitsky, Vadim Matukhin, Yurii Sakhratov

Hydrogen Storage Properties of Conic Carbon Nanotubes

s04-P-129

Kaido Tammeveski (Institute of Chemistry, University of Tartu, Tartu, Estonia), Nadezda Alexeyeva, Eugene Shulga, Vambola Kisand

Electroreduction of Oxygen on Nitrogen-Doped Carbon Nanotube Modified Glassy Carbon Electrodes

s04-P-130

Laure Timperman (LACCO, UMR, CNRS 6503, University of Poitiers, Poitiers, France), Walter Vogel

Photochemically Generated Pt-Oxygen Reduction Reaction Supported on Oxide-Carbon Composites

s04-P-131

Germano Tremiliosi-Filho (Departamento de Fisicoquímica, Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Mauricio J. Prieto

The influence of CO and acetic acid in the electrochemical oxidation of ethanol

s04-P-132

Yoshiharu Uchimoto (Graduate School of Human and Environmental Studies, Kyoto Univ., Kyoto, Japan), Hiroyoshi Aoki, Tomokazu Fukutsuka

In situ electrochemical XAFS study on Pt core-shell catalyst for PEFCs

s04-P-133

Sofía Varela (DTU Fysik, CINF, Fysikvej, Kongens Lyngby, Denmark), Patricia Hernández-Fernández, Manuel Montiel, Enrique Fatás, Pilar Ocón

Evaluation of a CO Tolerant Catalysts for Polymer Electrolyte Membrane Fuel Cell Type H2/O2

s04-P-134

Amado Velázquez-Palenzuela (Química Física, Universitat de Barcelona, Barcelona, Spain), Francesco Centellas, Jose Antonio Garrido, Conchita Arias, Rosa María Rodríguez, Enric Brillas, Pere Lluís Cabot

Kinetic analysis of oxygen reduction reaction (ORR) on smooth Pt-Nafion and Pt/C-Nafion electrocatalysts

s04-P-135

Hebe Mercedes Villullas (Instituto de Química, Universidade Estadual Paulista - UNESP, Araraquara (SP), Brazil), Ricardo Gentil

Studies of Oxygen Reduction Activity and Methanol Tolerance of PtV/C Catalysts

s04-P-136

Lianbang Wang (Zhejiang University of Technology, Hangzhou, China), Xingyue Zhan, Junwei Chu, Sheng Li, Chunan Ma

Co Modified Hydrogen Storage Alloy Used as the Anodic Catalyst in a Borohydride Fuel Cell

s04-P-137

Xu Wang (School of Chemical Engineering and Advanced Materials, Newcastle University, Newcastle upon Tyne, United Kingdom), Keith Scott, Xu Wu

Iron (II) phthalocyanine modified carbon for oxygen reduction in alkaline membrane fuel cells

s04-P-138

Anna Wise (University of Southampton, Southampton, United Kingdom), Andrea Russell, Sarah Ball, Dave Thompsett

In situ Characterisation of Bimetallic Alloy and Core-Shell Electrocatalysts for Oxygen Reduction

s04-P-139

Yan Yan (Ceramics Laboratory, Ecole Polytechnique Fédérale de Lausanne EPFL, Lausanne, Switzerland), Janine Conde, Paul Muralt

Low Temperature Micro SOFCs: Current Density at Pt-YSZ Triple Line Boundary on Cathode Side

s04-P-140

Jun Yano (Niihama National College of Technology, Niihama, Japan), Yushi Takatsuka, Yutaka Harima, Akira Kitani

Pt and Sn dispersed polyaniline film-covered electrodes for a direct ethanol fuel cell

s04-P-141

Sung-Dae Yim (Fuel Cell Research Center, Korea Institute of Energy Research (KIER), Daejeon, Korea), Young-Gi Yoon, Soek-Hee Park, Chang-Soo Kim, Young-Jun Sohn, Gu-Gon Park, Tae-Hyun Yang

Alteration of pore properties by the addition of TiO_2 into the catalyst layer of MEA in PEM fuel cells

s04-P-142

Jong-Sung Yu (Department of Advanced Materials Chemistry, Korea University,, Jochiwon, Korea), Min-Sik Kim, Jung Ho Kim, Minwoo Kim, Min Young Song, Sinmook Lim

Hierarchical nanostructured carbon as a highly efficient catalyst support in low-temperature fuel cell

s04-P-143

Christopher Zalitis (Chemistry Department, Imperial College London, London, United Kingdom), Anthony Kucernak

Studying the *orr* under realistic fuel cell conditions

s04-P-144

Lin Zhuang (Department of Chemistry, Wuhan University, Wuhan, China), Jing Pan, Li Xiao, Qingping Hu, Shanfu Lu, Juntao Lu, Daoping Tang, Shuai Zhang, Yan Li, Cuixia Yang, Minglong He

Developing low-cost electrochemical devices based on alkaline polymer electrolytes

Symposium 5: Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials

Electroactive Materials Based Applications

s05-P-001

Joaquin Arias-Pardilla (Center for Electrochemistry and Intelligent Materials, Universidad Politécnica de Cartagena, Cartagena, Spain), Toribio F. Otero, Laura Valero, Jose Gabriel Martinez

Polypyrrole-DBSA artificial muscles sensing temperature and ionic concentration

s05-P-002

Priscilla Baker (Chemistry Department, Bellville, South Africa)

Electrochemical modulation of the actuator properties of a polypyrrole directed phenazine derivative for implementation in controlled drug delivery

s05-P-003

Peter Bogdanoff (Helmholtz-Zentrum Berlin, Berlin, Germany), Stephan Brunken, Klaus Ellmer, Carolin Zachäus, Sebastian Fiechter

Ruthenium disulphide layers as catalyst for water oxidation

s05-P-004

Soledad Bollo (Laboratorio de Bioelectroquímica, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile, Santiago, Chile), Karina González, Patricio Hermosilla-Ibañez, Diego Venegas-Yazigi

Electrocatalytic evaluation of carbon paste electrodes modified with polyoxometalates

s05-P-005

Young-Woo Choi (Fuel Cell Research Center, Daejeon, Korea), Mi-Soon Lee, Gu-Gon Park, Sung-Dae Yim, Tae-Hyun Yang, Chang-Soo Kim

High Hydroxide Ion Conductive Polymer Electrolyte Pore-filling Membranes for the Application to Zinc-Air Battery

s05-P-006

Karla Calfuman (Dpto. Farmacología y Toxicología, Universidad de Chile, Santiago, Chile), Paulina Cañete, Karina Gonzalez, Mauricio Isaacs, Soledad Bollo

Glassy carbon electrodes modified with tetraruthenated macrocycles for the amperometric determination of H_2O_2

s05-P-007

Young-Woo Choi (Fuel Cell Research Center, Korea Institute of Energy Research, Daejoen, Korea), Mi-Nai Kim, Chang-Soo Kim, Young-Gi Yoon, Tae-Hyun Yang, Seok-Hee Park

High proton conductive characteristics of sulfated ZrO_2-impregnated sulfonated poly(arylether)sulfone membranes for low humidity and high temperature polymer electrolyte fuel cells

s05-P-008

Young Tea Chun (Samsung Electronics CO., LTD, Samsung Advanced Instituted of Technology, Yongin-Si, Korea), D.S. Chung, H.S. Shim, Y.S. Kim, J.W. Kim, B.K. Song, S.J. Jeon, C.H. Noh, R.R. Das, Y.W. Jin, S.Y. Lee

Crosstalk Free Electrochromic E-paper Display

s05-P-009

Johnny Degerman (Applied Electrochemistry, School of Chemical Science and Engineering, The Royal Institute of Technology KTH, Stockholm, Sweden), Peter Georen, Carina Lagergren, Göran Lindbergh

A New Methodology for Measuring Current Distribution in Electrochromic Smart Windows

s05-P-010

Fernando R. Diaz Alzamora (Organic Chemistry Department, Chemistry Faculty, Pontificia Universidad Católica de Chile, Santiago, Chile), María A. del Valle de la Cortina, Ignacio A. Jessop Rivera, Christian M. Núñez Durán, Pedro P. Zamora Yates

Synthesis of poly[(alkyl)-terthiophenes], characterization and their use in organic solar cells

s05-P-011

Luigi Falciola (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Marcella Balordi, Adriana Valore, Alessia Colombo, Claudia Dragonetti, Stefania Righetto, Dominique Roberto, Renato Ugo, Tiziana Benincori, Giovanni Rampinini, Francesco Sannicolò

Novel ruthenium (II) complexes with substituted 1,10-phenanthroline or 4,5-diazafluorene linked to a fullerene as highly active and redox-switchable second order NLO chromophores.

s05-P-012

Luigi Falciola (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Alessia Colombo, Claudia Dragonetti, Dominique Roberto, Renato Ugo, Silvia Luzzati, Dariusz Kotowski

Novel diruthenium acetylide complex as a springboard for bulk heterojunction organic solar cells

s05-P-013

Hsuan-Min Fang (Graduate Institute of Photonics and Optoelectronics, National Taiwan University, Taipei, Taiwan), Guo-Dung John Su

Surface Treatment of Ionic Polymer Metal Composite for Optical Applications

s05-P-014

Carla Fonseca (Universidade São Francisco, Itatiba, Brazil), Carla Almeida, Sheila Canobre, Roberta Bianchi, Silmara Neves

Porous biodegradable polymer electrolyte a new propose to polymer electrolyte

s05-P-015

Mark Goldin (N.V.Sklifosovsky Research Institute for Emergency Medicine, Moscow, Russia), Mogely Khubutiya, Andrey Stepanov, Victor Emets, Vladimir Andreev, Alexey Kluev, Guzel Garaeva, Alexey Davydov

Carbon Materials Covered by Polypyrrole as a Source for Hemosorbent Synthesis

s05-P-016

Ignacio González (Chemistry Depatment, Universidad Autónoma Metropolitana-Iztapalapa., México, D.F., Mexico), Angel Meléndez, Rubén Arroyo

On the Reactivity of Proustite (Ag_3AsS_3) – Pyrargyrite (Ag_3SbS_3) Solid Solutions in Cyanide Based on Electronic and Structural Aspects

s05-P-017

Vitali Grinberg (A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, Moscow, Russia), Natalia Mayorova, Alexander Pasynskii

Anode Nanoelectrocatalyst for Direct Borohydride Electrooxidation

s05-P-018

Aránzazu Heras (Chemistry / University of Burgos, Burgos, Spain), Bárbara Zanfrognini, Álvaro Colina, Chiara Zanardi, Jesús López-Palacios, Renato Seeber

Electrochemical synthesis of PEDOT/Au nanoparticles composites for electrocatalysis of glucose.

s05-P-019

Keiichi Kaneto (LSSE, Kyushu Institute of Technology, Kitakyushu, Japan)

Learning Effect of Artificial Muscles based on Electrochemomechanical Deformation in Conducting Polymers

s05-P-020

Olga Khazova (A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sci., Moscow, Russia), Alla Mikhaylova, Natalya Mayorova, Alexey Rychagov, Yurii Volfkovich, Anatolii Krestinin

Catalytic and Capacitance Properties of Composites from Carbon Nanotubes and Polyaniline

s05-P-021

Maria Luisa Lozano (Universidad Autónoma Metropolitana-Azcapotzalco, México, Mexico), Laura Galicia

Spectroscopic characterization of Poly Fe (III)-5-Amino 1,10 phenantroline formed on a carbon paste electrode and a nanotubes paste electrode

s05-P-022

Adela Maghear (Analytical Chemistry Dept., Iuliu Hatieganu University, Cluj-Napoca, Romania), Cecilia Cristea, Ana Marian, Iuliu O. Marian, Robert Sandulescu

Heavy metal detection in water by carbon paste electrodes modified with different clays of Romanian origin

s05-P-023

Carlos Alberto Martinez Huitle (CCET, Department of Chemistry, Universidade Federal do Rio Grande do Norte, Natal, Brazil), Nedja Suely Fernandes, Sergio Ferro, Achille De Battisti, Marco Antonio Quiroz Alfaro

Application of Nafion®-modified boron doped diamond electrode as sensor for detecting caffeine

s05-P-024

Margarita Miranda Hernandez (Depto. Solar Materials, Temixco, Mexico)

Copper particles supported on carbon film electrode for the reduction of CO_2

s05-P-025

Aleksandra Pacula (Institute of Catalysis and Surface Chemistry Polish Academy of Sciences, Krakow, Poland), Kohei Uosaki, Katsuyoshi Ikeda

Synthesis and characterization of electroactive composites containing cobalt species and nitrogen-doped nanostructured carbon

s05-P-026

Virginia Ruiz (Department of New Materials, CIDETEC-IK4, Donostia-San Sebastián, Spain), Esko I. Kauppinen, Reyes Malave, Víctor Hernández, Juan T. López-Navarrete

Improving the electrochromic properties of PEDOT and WO_3 films on flexible and transparent carbon nanotube electrodes

s05-P-027

Mutlu Sahin (Department of Chemistry, Eskisehir, Turkey), Hakan Gorcay, Esengul Kir, Yucel Sahin

Purification of Water by Conducting Polymer as Cation-Exchanger

s05-P-028

Yucel Sahin (Department of Chemistry, Eskisehir, Turkey), Betul Usta, Mutlu Sahin

A Novel Method for the Electrochemical Extraction of Both Anions and Cations Using Polypyrrole and Overoxidized Sulfonated Polypyrrole

s05-P-029

Robert Sandulescu (Analytical chemistry Dept., Iuliu hateiganu University, Cluj-Napoca, Romania), Anuta Câmpean, Mihaela Tertis

Electrochemical Determination of Some Alkaloids Using Clay Modified Electrodes

s05-P-030

Sotiris Sotiropoulos (Chemistry Department, Aristotle University of Thessaloniki, Thessaloniki, Greece), Jenia Georgieva, Eugenia Valova, Stephan Armyanov, Nikos Philippidis, Ioannis Poulios

The effect of catalyst loading and electrodeposition/electrosynthesis techniqueon the morphology, local composition and photoelectrocatalytic activity of electrochemically prepared TiO_2-WO_3 anodes

s05-P-031

Jong-Sung Yu (Department of Advanced Materials Chemistry, Korea University, Jochiwon, Korea), Jung Ho Kim, Min-Sik Kim, Minwoo Kim, Min Young Song, Nitin Chaudhari

Hollow Core-Mesoporous Shell Carbon Counter Electrode in Dye-Sensitized Solar Cell

Electroactive Polymers

s05-P-032

Lidia Adamczyk (Division of Chemistry, Faculty of Materials Engineering and Applied Physics, Czestochowa University of Technology, Czestochowa, Poland), Pawel J. Kulesza

Preparation and protective properties of compositefilms of poly(3,4-etylenedioxythiophene) and 4-(pyrrole-1-yl) benzoic acid with heteropolyanions on stainless steel

s05-P-034

Metin Ak (Pamukkale University, Denizli, Turkey), Ibrahim Yagmur, Levent Toppare

Synthesis, Characterization, and Electrochromic Properties of Thienylpyrrole Based Functionalized Polymer and its Copolymer with EDOT

s05-P-035

Pierre-Henri Aubert (Université de Cergy-Pontoise, LPPI, Cergy-Pontoise, France), Laurent Goujon, Pierre Verge, Frédéric Vidal, Laurent Sauques, Dominique Teyssié, Claude Chevrot

Optical Modulation of PEDOT/Elastomer-based semi-Interpenetrating Polymer Network

s05-P-036

Cesar A. Barbero (Department of Chemistry, Universidad Nacional de Rio Cuarto, Rio Cuarto, Argentina), Diego F. Acevedo, Pablo Cavallo, Maria C. Miras

Reversible Alteration of Polyaniline Electrochemical Properties by Coupling with Diazonium Salts

s05-P-037

Cesar A. Barbero (Department of Chemistry- Universidad Nacional de Rio Cuarto, Rio Cuarto, Argentina), Gabriel A. Planes, Jose L. Rodriguez, Maria C. Miras, Elena Pastor

In-situ FTIR and DEMS study of poly(N-methylaniline) electrochemistry: Polymer Formation, Redox Switching and Electrochemically Induced Degradation.

s05-P-038

Cesar A. Barbero (Department of Chemistry Universidad Nacional de Rio Cuarto, Rio Cuarto, Argentina), Evelina Frontera, Jimena Tuninetti, Maria C. Miras, Gabriel Planes, Jose L. Rodriguez, Elena Pastor

Synthesis and Electrochemical Properties of Novel Functionalized Polypyrrole Films

s05-P-039

Viacheslav Barsukov (Department of Electrochemical Power Engineering & Chemistry, Kiev National University of Technologies & Design, Kiev, Ukraine), Anatoly Katashynsky, Kostyantyn Lykhnytsky, Volodymyr Khomenko

Quantum-Chemical Grounds for Electronic Conductivity of Doped Polyaniline

s05-P-040

Ann Beresford (Chemistry Department, University of Leicester, Leicester, United Kingdom), Rachel M. Brown, A. Robert Hillman, John W. Bond

Electrochromic Enhancement of Latent Fingerprints

s05-P-041

Ricardo Carvalho (Departamento de Química, Universidade de Coimbra, Coimbra, Portugal), Carla Caridade, Christopher Brett

Carbon-Nanotube / Poly(neutral red) Modified Glassy Carbon Electrodes: Characterisation of Different MWCNT Brands and Application to Ascorbate Determination

s05-P-042

Wojciech Domagala (Department of Physical Chemistry and Technology of Polymers, Silesian University of Technology, Gliwice, Poland), Barbara Pilawa, Mieczyslaw Lapkowski

Quantitative *in situ* EPR spectroelectrochemical studies of doping phenomena in poly(3,4-butylenedioxythiophene) - PBuDOT

s05-P-043

A Ehsani (Chemistry, Tehran, Iran), A Ehsani, M.G. Mahjani, M. Jafarian

Electrochemical study on synthesis and characterization of poly ortho aminophenol / multi-walled carbon nanotube composite film

s05-P-044

Abdeslam Et Taouil (Université de Franche Comte, Besançon, France), Fabrice Lallemand, Jean-Yves Hihn, Jean-Marie Melot, Boris Lakard

Effects of high frequency ultrasound on EDOT electropolymerisation

s05-P-045

Claire Fullarton Department of Chemistry, Univeristy of Leicester Leicester, United Kingdom), Emma Smith, Andrew Abbott, A. Robert Hillman, Boris Trofimov, Karl Ryder

Electrochemical Characterisation of Ion Exchange Processes in Mixed Pyrrole-Thiophene Membranes Immersed in Choline Chloride Based Ionic Liquids

s05-P-046

Mariana Emilia Ghica (Departamento de Quimica, Coimbra, Portugal), Antonio Ricardo Gonçalves, Christopher Michael Ashton Brett

Characterisation of PEDOT and PEDOT/PNR Modified Electrodes and Application to the Determination of Hydrogen Peroxide

s05-P-047

Oxana Gribkova (A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, RAS, Moscow, Russia), Viktor Ivanov, Alexander Nekrasov, Sergey Vorob'ev, Anatoliy Vannikov

Domination of rigid-backbone polyacid template during electrodeposition of polyaniline films in the presence of mixtures of polysulfonic acids

s05-P-048

Henrik Gustafsson (Process Chemistry Centre c/o Laboratory of Analytical Chemistry, Åbo Akademi University, Åbo-Turku, Finland), Carita Kvarnström, Ari Ivaska

Charging and Discharging Behaviour of BBL–PEDOT Bilayers

s05-P-049

Milica Gvozdenovic (Department of Physical Chemistry and Electrochemistry, Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Branimir Jugovic, Tomislav Trisovic, Jasmina Stevanovic, Branimir Grgur

Electrochemical characterization of polyaniline electrode for use in electrochemical power sources

s05-P-050

Monika Góral (Department of Chemistry, University of Warsaw, Warsaw, Poland), Pawel J. Kulesza, Mohamed Jouini, Christian Perruchot, Krzysztof Miecznikowski

Fast Charge Propagation at Poly(3, 4 – ethylenedioxythiophene) and Poly(2, 2' – bithiophene) Hybrid Films Containing Mixed Addenda Dawson Heteropolyanion

s05-P-051

Krystyna Jackowska (Laboratory of Electrochemistry, Faculty of Chemistry, University of Warsaw, Warsaw, Poland), Kinga Pisarek, Iwona Bartosiewicz, Aleksander Biegunski

Tyrosinase biosensor based on poly (indole- 5 - carboxylic acid). Selective detection of dopamine

s05-P-052

Suzanne Joiret (LISE, UPR 15 du CNRS, Université P. et M. Curie, Paris, France), Marie Claude Bernard, Claude Deslouis, Claude Gabrielli, Lo Thi Kim, Hubert Perrot, Philippe Rousseau, Xiaodong Wang

Raman and electrogravimetric impedance spectroscopies to study the influence of acido-basic equilibrium on polyaniline oxidation

s05-P-053

Mohamed Jouini (Université Paris Diderot Paris 7, ITODYS, UMR 7086, Paris Cedex 13, France), Mounia Guergouri, Christian Perruchot, Gregory Dupeyre, Salah Aeiyach, Lila Bencharif, Mustapha Bencharif

Some Tolidine Derivatives and Their Potential Electroactive Polymers. A Systematic Study in Organic Solvent.

s05-P-054

Branimir Jugovic (Institute of Technical Science, Serbian Academy of Science and Arts, Belgrade, Serbia), Milica Gvozdenovic, Jasmina Stevanovic, Tomislav Trisovic, Branimir Grgur

Electrochemical characterization of electrochemically polymerized polyaniline in citrate containing electrolyte

s05-P-055

Eunhee Lee (Department of Chemistry and Institute of Basic Science, Chonnam National University, Gwangju, Korea), Mohammad Shamsuddin Ahmed, Haesang Jeong, Jung-Min You, Seungwon Jeon

The Electrochromic Response of 9-Vinylcarbazole Copolymer with 3,4-Ethlenedioxythiophene.

s05-P-056

Jesús López-Palacios (Department of Chemistry University of Burgos, BURGOS, Spain), Barbara Zanfrognini, Álvaro Colina, Fabio Terzi, Aránzazu Heras, Renato Seeber

Spectroelectrochemical study on the stability of poly(3,4-ethylenedioxythiophene) films.

s05-P-057

Waldemar Marmisollé (Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas (INIFTA), Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina), María Inés Florit, Dionisio Posadas

The ageing response of polyaniline: interpretation of the voltammetric data by an Extended Feldberg's Model

s05-P-058

Waldemar Marmisollé (Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas (INIFTA), Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina), María Inés Florit, Dionisio Posadas

Spectroelectrochemical Study of the Redox Potential Distribution in Polyaniline

s05-P-059

Waldemar Marmisollé, (Instituto de Investigaciones Fisiccoquímicas Teóricas y Aplicadas (INIFTA). Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina), María Inés Florit,, Dionisio Posadas

Capacitive Currents in Redox Switching of Polyaniline

s05-P-060

C. John McAdam (Department of Chemistry, Dunedin, New Zealand), Shailesh K. Goswami, Lyall R. Hanton, Stephen C. Moratti, Jim Simpson

Electroactive Polymer Gels

s05-P-061

Niall McGuinness (Environmental Technologies and Biomaterials Research Group, Department of Chemistry, National University of Ireland Maynooth, Co. Kildare, Ireland)

Novel Polypyrrole Substituted Carbon Monoxide Releasing Molecules (CO-RMs); New Delivery System for Carbon Monoxide

s05-P-062

Shymaa Medany (Chemistry Department-Science Faculty-Cairo University, Giza, Egypt), Waheed Badawy

Polyaminoanthraquinone modified electrodes-Kinetics of polymerization and electroanalytical applications

s05-P-063

Emilia Morallon (Institute of Materials. Physical Chemistry Department, University of Alicante, Alicante, Spain), David Salinas-Torres, Francisco Montilla, Francisco Huerta

Electrochemical synthesis of hybrid conducting polymer/sol-gel materials

s05-P-064

Emilia Morallón (Dept. Química Física e Instituto de Materiales (IUMA), Alicante, Spain), Omar Rivero-Torre, Carlos Sanchis, Francisco Huerta

On the Self-Doping Effect of Anionic Groups in Polyaniline: A Study of Ascorbic Acid Oxidation

s05-P-065

Kevin ONeil (Department of Chemistry University of Western Ontario, London, Canada), Oleg Semenikhin

AFM Phase Studies of the Local Properties of Electronically Conducting Polymers as a Function of Preparation Conditions and Treatment

s05-P-066

Tilia Patois (Institut UTINAM-team NCM, Besancon, France)

Conductivity behavior of Electrodeposited Polymer Films

s05-P-067

Alain Pailleret (LISE (UPR 15 du CNRS), Paris, France), Laïd Makhloufi, Bouzid Messaoudi, Hisasi Takenouti, Lynda Benhaddad, Claude Deslouis

Chemical template synthesis of hollow sea urchin like polypyrrole structures using nanostructured MnO_2 as oxidizing agent

s05-P-068

Rasa Pauliukaite (Department of Chemistry, University of Coimbra, Coimbra, Portugal), Dilek Kul, Rasa Pauliukaite, Christopher M.A. Brett

Polymerisation and Characterisation of Poly(Nile Blue) as Potential Redox Mediator

s05-P-069

Mehdi Rashvandavei (Department of Chemistry, Tehran, Iran), Zahra Fatahi

Electrocatalytic Oxidation of Methanol on Conductive Films Derived From Ni^{II}-(N,N'-bis(2,4-dihydroxy acetophenone)-2,2-Dimethylpropylenediimine) Modified Glassy Carbon Electrode

s05-P-070

Adriana Ribeiro (Instituto de Química e Biotecnologia, Maceió, Brazil), Suzany Feitoza, Ana Julia Silva, Josealdo Tonholo

A Multielectrochromic Copolymer Based on Polypyrrole and Polythiophene Derivatives

s05-P-071

Luisa Rodrigues (University of Minho, Braga, Portugal), M. Manuela Silva, Michael Smith

Study and characterization of amorphous-poly(ethylene oxide) doped with lithium hexafluoroantimonate

s05-P-072

Luisa Rodrigues (University of Minho, Braga, Portugal), M. Manuela Silva, Michael Smith

Study and characterization of a new electrolyte material produced by the sol-gel method

s05-P-073

Renato Seeber (Department of Chemistry, University of Modena and Reggio Emilia, Modena, Italy), Fabio Terzi, Laura Pigani, Chiara Zanardi, Barbara Zanfrognini, Luca Pasquali, Monica Montecchi, Stefano Nannarone, Brian Doyle, Antti Viinikanoja, Jukka Lukkari

Thiophene and Pyrrole Derivatives in Contact with Au and Pt Planar and Nanoparticle Surfaces

s05-P-074

M. Manuela Silva (University of Minho, Braga, Portugal), L. C. Rodrigues, M. J. Smith

Electrolytes based on interpenetrating blends of poly(trimethylene carbonate) and poly(ethylene oxide)

s05-P-075

Leonardo Teixeira Silveira (Instituto de Química, Universidade de São Paulo, São Paulo, Brazil), Elaine P. Cintra, Roberto M. Torresi, Susana I. Córdoba de Torresi

Electrochemical studies of thin films of poly(5-amino-1-naphthol) in a room temperature ionic liquid

s05-P-076

Yusran Sulaiman (Department of Chemistry University of Durham, Durham, United Kingdom)

Characterisation of PEDOT Derivatives for Sensors

s05-P-077

Tarmo Tamm (Institute of Technology, University of Tartu, Tartu, Estonia), Rauno Temmer, Margus Marandi, Jüri Tamm

Activity Lost, Activity Regained – About the Conditions for Polypyrrole Synthesis and Application

s05-P-078

Michal Wagner (Laboratory of Analytical Chemistry, Åbo Akademi University, Turku, Finland), Kai Yu, Carita Kvarnström, Ari Ivaska

Spectroelectrochemical characterization of poly(benzopyrene) films

s05-P-079

Claudia Weidlich (DECHEMA e.V. Karl-Winnacker-Institut, Frankfurt am Main, Germany), Klaus-Michael Mangold

Electrochemically switchable Polypyrrole coated Membranes

s05-P-080

Jorge Omar Zerbino (Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas, INIFTA, La Plata, Argentina), Maria Gisella Sustersic

Effect of the electro deposition programme on the structure of polypyrrole films doped and undoped with Dodecylsulphate

s05-P-081

Veronika Zinovyeva (Université de Bourgogne, Dijon, France), Mikhail A. Vorotyntsev, Dmitry V. Konev, Eric Lesniewska, Olivier Heintz, Igor Bezverkhyy, Michel Picquet, Laurent Gaillon, Cecile Rizzi

Electrochemical Synthesis of N-substituted Polypyrrole Derivatives in Molecular Solvents and Ionic Liquids

s05-P-082

Orawan Winther-Jensen (School of Chemistry, Monash University, Clayton, Australia)

Use of conjugated polymer for catalytic reaction in fuel cell applications

Nanocomposites

s05-P-083

Mouhssine Benlarbi (Institut de Chimie et Biochimie Moléculaires et Supramoléculaires, Equipe Génie Enzymatique, Membranes Biomimétiques et Assemblages Supramoléculaires (GEMBAS) Université Lyon 1 - CNRS 5246 ICBMS, Villeurbanne, France), Loïc Jacques Blum, Marcus François Lawrence, Christophe André Marquette

Semiconducting Properties of Nanoparticles Thin Films

s05-P-084

Joshua Byers (Department of Chemistry, The University of Western Ontario, London, Canada), Claude Deslouis, Alain Pailleret, Oleg Semenikhin

Atomic Force Microscopy Studies of Carbon Nitride Films: Localized Investigations of the Effects of the Deposition Parameters and Substrate

s05-P-085

Lyuc Chou (Dept. of Chemical and Materials Engineering, Chang Gung University, Tao-Yuan, Taiwan), Andrew S. Lin

Electrochemical Luminescence of Zinc Gallate ($ZnGa_2O_4$) Phosphors Fabricated by Microwave Assisted Synthesis

s05-P-086

Ali Ehsani (Chemistry, Tehran, Iran), Mohammad.G Mahjani, Majid Jafarian

Electrochemical fabrication of poly ortho aminophenol/multi-walled carbon nanotube/NiO composite films for electrocatalytic oxidation of methanol

s05-P-087

Cristina Freire (aREQUIMTE, Departamento de Química e Bioquímica, Faculdade de Ciências, Universidade do Porto, Porto, Portugal), Sonia Patricio, Cosme Moura, A. Robert Hillman

Ion Recognition Properties of [Ni(salen)]-polyelectrolyte hybrid LBL films

s05-P-088

Pedro Gomez-Romero (CIN" (CSIC), Bellaterra (Barcelona), Spain), Jullieth Suarez-Guevara, Omar Ayyad, David Muñoz-Rojas

From Ag@PPy Nanoparticles to Cu@PPy Nanowires. Hydrothermal Synthesis for the Preparation of Metal-Conducting Polymer Nanostructures

s05-P-089

Jean-Yves Hihn (Institut UTINAM, CNRS, UMR 6213, Université de Franche-Comté, Besançon, France), Boris Lakard, Stelian Lupu

Electrochemical *in situ* Preparation and Characterisation of Conducting Polymer Based Composite Materials on Platinum Electrode Chips

s05-P-090

Jean-Yves Hihn (Institut UTINAM, CNRS, UMR 6213, Université de Franche-Comté, Besançon , France)

Platinum Nanoparticles Electrodeposited In Situ in Conducting Polymer Films on Platinum Electrode Chips

s05-P-091

Jong-Pil Jegal (Department of Materials Science and Engineering, Yonsei University, Seoul, Korea), Jin Go Kim

Synthesis electrochemical properties of $FePO_4$/carbon nanotube nanocomposites for high rate Li-ion batteries

s05-P-092

Kwang-Bum Kim (Department of Material Science and Engineering, Yonsei University, Seoul, Korea), Sang-Bok Ma, Jin-Go Kim, Hyun-Kyung Kim, Jong-Pil Jegal, Hye-Ryun Choi

Metal Oxide / Carbon Nanotubes Nano-Hybrid Materials for Supercapacitor Applications

s05-P-093

Ulrich Lange (Inst. of Analytical Chemistry, Chemo- and Biosensors, University of Regensburg, Regensburg, Germany), Thomas Hirsch, Vladimir, M. Mirsky, Otto S. Wolfbeis

Graphene Palladium Nanoparticle layer-by-layer composite for hydrogen gas sensors

s05-P-094

Anna Lisowska-Oleksiak (Department of Chemical Technology, Chemical Faculty, Gdansk University of Technology, Gdansk, Poland), Monika Wilamowska, Andrzej P. Nowak

Hybrid and composite materials consisting of electroactive polymer and Prussian Blue analogues: Properties and possible applications

s05-P-095

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

Electroactive Lignosulfonate-Stabilized Silver Colloids and Nanostructured Films

s05-P-096

Olinda Monteiro (CQB, Department of Chemistry and Biochemistry, Faculty of Sciences, University of Lisbon, Lisbon, Portugal), Filipa Feliciano, Ana Mourato, Luisa Abrantes

New electrocatalytic materials based on the incorporation of titanate nanotubes in conducting polymer films

s05-P-097

Jean-Claude Moutet (Université Joseph Fourier Grenoble 1, Grenoble cedex 9, France), Juan Francisco Rivera, Christophe Bucher, Guy Royal, Eric Saint-Aman, Julio L. Sanchez, Maria del Carmen Aguirre, S. Amalia Pooley, Luis Basaez, Eduardo Pereira, Bernabé L. Rivas

Electrocatalytic Oxidation of As(III) to As(V) at Metal or Metal Oxide-Polymer Nanocomposites

s05-P-098

Silmara Neves (Laboratório de Caracterização e Aplicação de Materiais, LCAM, Universidade São Francisco, Itatiba, Brazil), Elaine Cristina Marques, Carla Polo Fonseca

Evaluation of the Influence of K Parameter in the Properties of the PAni/MWCNT Composites

s05-P-099

Alain Pailleret (LISE (UPR 15 du CNRS), Paris, France), Abdelaziz Kadri, Mireille Turmine, Chabha Benmouhoub, Claude Deslouis

Electrochemical deposition and characterization of hybrid polypyrrole /cerium oxide nanoparticules thin films

s05-P-100

Sang-Hoon Park (Department of Material Science and Engineering, Yonsei University, Seoul, Korea), Jin-Go Kim

Microwave-assisted Hydrothermal Synthesis and Electrochemical Properties of Cobalt Oxide/Graphene Nanocomposites

s05-P-101

Govind K. Prajapati (Physics Department, Banaras Hindu University, Varanasi, India), Prem N. Gupta

Effect of Lithium ion Irradiation on Nanocomposite Polymer Electrolytes

s05-P-102

Renato Seeber (Department of Chemistry University of Modena and Reggio Emilia, Modena, Italy), Fabio Terzi, Josè Maria Palacios-Santander, Josè Luis Hildago-Hildago-de-Cisneros, Ignacio Naranjo Rodríguez, Barbara Zanfrognini, Laura Pigani, Chiara Zanardi, Luca Pasquali, Monica Montecchi, Stefano Nannarone

Electrocatalysis through Grafted Metal Oxide (Nano)Particles

s05-P-103

Antonia Stoyanova (Institute of Electrochemistry and Energy Systems, Bulgarian Academy of Sciences, Sofia, Bulgaria), Elefteria Lefterova, Galin Borisov, Dimitar Radev, Evelina Slavcheva

Structural and electrochemical investigations of Cr- and Mn- containing Pt/Ebonex catalysts for the oxygen evolution reaction in PEM water electrolysis

s05-P-104

Katarzyna Szybowska (Department of Chemical Technology, Chemical Faculty, Gdansk University of Technology, Gdansk, Poland), Anna Lisowska-Oleksiak

Iodine doped TiO_2 with PEDOT:PSS as a 3D nanostructured n–p junction photoactive under visible light illumination

s05-P-105

Laurence Tortet (Laboratoire Chimie Provence, CNRS (UMR 6264), Université de Provence, 13397 Marseille cedex 20, France), Abdelmaula Aboulaich, Renaud Bouchet, Mickael Dollé, Gaelle Delaizir, Vincent Seznec, Virginie Viallet

Study of compacity effect on electrical properties of $Li_{1.5}Al_{0.5}Ge_{1.5}(PO_4)3$ ceramics using Brick Layer and Tortuosity models

s05-P-106

Miroslava Trchova (Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague 6, Czech Republic), Patrycja Bober, Elena N. Konyushenko, Jaroslav Stejskal

Deposition of Silver Nanoparticles inside Polyaniline Nanotubes

s05-P-107

Elena Tusseeva (A.N.Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Scences, Moscow, Russia), Anatolii Krestinin, Olga Khazova

Ultrathin Catalytic Layers Supported at Carbon Nanotubes and Polymers

s05-P-108

Monika Wilamowska (Department of Chemical Technology, Chemical Faculty, Gdansk University of Technology, Gdansk, Poland), Anna Lisowska-Oleksiak

Hybrid electrode containing copper hexacyanoferrate incorporated in poly(3,4-ethylenedioxythiophene) matrix: Electroactivity under UV-Vis illumination

s05-P-109

Ekaterina V. Zolotukhina (Voronezh State Technical University, Voronezh, Russia), Mikhail Yu. Chayka, Ekaterina V. Bulavina, Vladislav S. Gorshkov, Tamara A. Kravchenko

Electrochemical Activity of Nanostructured Copper into Ion Exchanger

s05-P-110

Ekaterina V. Zolotukhina (Voronezh State Technical University, Voronezh, Russia), Mikhail Yu. Chaika, Tamara A. Kravchenko, Ekaterina A. Sakardina

Kinetics of Growth of Metal Nanoparticles inside an Ion-Exchange Polymer Membrane

Rechargeable Inorganic Solids

s05-P-111

Stefan Jakschik (Namlab GmbH, Dresden, Germany), Walter M. Weber, Adriana Ispas, Andreas Bund, Thomas Mikolajick

Silicon and Nickel-Silicide Nano Wires as Anode Materials for Lithium Ion Batteries

s05-P-112

Veronika Laurinavichute (Department of Electrochemistry, Moscow State University, Moscow, Russia), Sergey Vassiliev, Khokhlov Aleksander, Levin Eduard, Tsirlina Galina

Cathodic electrocrystallization and electrochromic properties of doped rechargeable oxotungstates

s05-P-113

Mir Fazlollah Mousavi (Chemistry, TMU, Tehran, Iran)

Preparation and Electrochemical Characterization of Nano-Structured $NiMnO_3$ Bimetal Oxide for High Performance Supercapacitor Application

Symposium 6: Corrosion Science: Mechanisms and Methods

Corrosion Mechanisms

s06-P-001

Alicja Balkowiec (Warsaw University of Technology, Warsaw, Poland), Jakub Michalski, Herman Terryn, Iris De Graeve, Hubert Matysiak, Krzysztof Kurzydlowski

Defects of the Layers on Aa2024 Developed by Chromium (Vi) Oxide and Tartaric-Sulphuric Acid Anodizing

s06-P-002

Kata Berkesi (Institute of Radiochemistry and Radioecology, University of Pannonia, Veszprem, Hungary), David Horvath, Kalman Varga

Comparative radiotracer and voltammetric study of the adsorption of $Cl^-/ClO_4^-/SO_4^{2-}/BO_3^-$ anions on polycristalline platinum

s06-P-003

Laura Burgos-Asperilla (Química Física Aplicada, Madrid, Spain), Cristina García-Alonso, María Lorenza Escudero, Concepción Alonso

In situ electrochemical study of Ti/TiO_2 surface/osteoblast cells by EIS

s06-P-004

Jeng-Kuei Chang (Institute of Materials Science and Engineering, National Central University, Jhongli, Taiwan), Chien-Hsiung Tseng, Jhen-Rong Chen, Wen-Ta Tsai, I-Wen Sun, Ming-Jay Deng

Corrosion Resistance of Titanium, 304 Stainless Steel, and Carbon Steel in Aluminum Chloride ($AlCl_3$)–1-Ethyl-3-Methylimidazolium Chloride (EMIC) Ionic Liquid

s06-P-005

James DeRose (Laboratory for Corrosion and Materials Integrity, Abteilung 136, EMPA (Swiss Federal Institute of Materials Science), Dübendorf, Switzerland), Thomas Suter, Alicja Balkowiec, Jakub Michalski, Krzysztof Kurzydlowski, Patrik Schmutz

Localized Corrosion Behavior of an Al 2024 Alloy with a High Cu to Mg Ratio

s06-P-006

Luis Frederico P. Dick (Deto. of Metallurgy, Federal University of Rio Grande do Sul, Porto Alegre, Brazil), Pedro Carlos Hernandez Jr., Vincent Vignal

Micro-Electrochemical Characterization of Low Alloy Hot-Rolled Steels Scales

s06-P-007

Amany Mohamed Fekry (Chemistry Department, Faculty of Science, Cairo University, Giza, Egypt)

Corrosion Characterization of Titanium and Titanium Alloy in Oxalic Acid Solution

s06-P-008

Heon-Young Ha (Ferrous Alloys Group/ Korea Institute of Materials Science, Changwon, Korea), Tae-Ho Lee, Chang-Seok Oh, Sung-Joon Kim

Effects of Carbon, Nitrogen and Nickel on the General Corrosion Resistance and Hydrogen Evolution Rate of Low Nickel Stainless Steels in Acidic Solution

s06-P-009

Magaly Henriquez (Cirimat, Ensiacet, INPT, Toulouse, France), Nadine Pébère, Nathalie Ochoa, Alfredo Viloria

Corrosion inhibition of XC65 steel in CO_2 saturated medium by a green inhibitor

s06-P-010

Branimir Jugovic (Institute of Technical Science, Serbian Academy of Science and Arts, Belgrade, Serbia), Milica Gvozdenovic, Branimir Grgur

Corrosion studies of magnesium, aluminum and zinc in citrate containing electrolytes

s06-P-011

Saida Moussaoui (Chemistry, Algiers, Algeria), Abdelkader Benchettara

The Corrosion Behaviour of Zn and Zn-0.2Al Alloy in 3% NaCl

s06-P-012

Wolfgang Prieto (CIRIMAT, UPS, INPT, CNRS, ENSIACET, Toulouse, France), Nadine Pébère, Bernard Tribollet, Vincent Vivier

Effect of intermetallic particles on the corrosion behaviour of 2024 and 7075 aluminium alloys: an impedance approach

s06-P-013

Jesús Daniel Robles Salas (Instituto Politécnico Nacional, Escuela Superior de Ingeniería Mecánica y Eléctrica "ESIME-ZACATENCO", Departamento de Química, México, Mexico), María de Lourdes Elizalde Aguilar, Guadalupe Silva Oliver

Evaluation of the wall shear stress (Tw) in turbulent flow during the transport of crude oil to predict corrosion speed

s06-P-014

Marcela Vazquez (Corrosion Division, INTEMA, Mar del Plata, Argentina), Raul Procaccini, Wido Schreiner, Beatriz Valcarce, Silvia Cere

Surface Films Formed on Copper and Brass at Open Circuit Potential

s06-P-015

Maria Aurora Veloz Roddriguez (Instituto de Ciencias Basicas e Ingenieria, Universidad Autonoma del Estado de Hidalgo, Mineral de la Reforma, Mexico), Estella Ma. Esparza Zuñiga, Jorge Uruchurtu Chavarin, Victor E. Reyes Cruz

Corrosion behavior of carbon steel in sour waste water varying pH

s06-P-016

Maria Aurora Veloz Roddriguez (UAEH, Instituto de Ciencias Basicas e Ingenieria, Mineral de la Reforma, Mexico), Luis D. Lopez Leon, Victor E. Reyes Cruz, Facundo Almeraya C., Sergio A. Perez G.

Corrosion of carbon steel in a buffered solution like NACE TM 0177 in the presence of hydrocarbon

s06-P-017

Hercilio G. de Melo (Chemical Engineering Department, University of São Paulo, São Paulo, Brazil), Eric Y. M. Taga, Jean V. Ferrari, Nadine Pébère, Vincent Vivier

Comparative investigation of the electrochemical behaviour of high strength Al alloys in chloride containing media

Corrosion Modeling and Simulation

s06-P-018

Elsa Miriam Arce-Estrada (Departamento de Ingenieria en Metalurgia y Materiales, Instituto Politecnico Nacional, Mexico, Mexico), Antonio Hernandez-Espejel, Manuel Eduardo Palomar-Pardave, Roman Cabrera-Sierra, Mario Romero-Romo

Characterization of passive films formed by potentiostatic methods on steel immersed in sour acid media

s06-P-019

María de Lourdes Elizalde Aguilar (Instituto Politécnico Nacional, Escuela Superior de Ingeniería Mecánica y Eléctrica "ESIME-ZACATENCO", Departamento de Química, México, Mexico), Jesús Daniel Robles Salas, Guadalupe Silva Oliver

Evaluation of the inhibitor AT-3019 for the control of the corrosion in turbulent flow using the Cylindrical Rotating Geometry

s06-P-020

Emese Horváthné Deák (Institute of Radiochemistry and Radioecology, University of Pannonia, Veszprém, Hungary), Andrea Szabó Nagy, Kálmán Varga, Bernadett Baja, Zoltán Németh, Dezso Oravetz, János Schunk, Gábor Patek

Comprehensive studies of corrosion processes of austenitic stainless steel and carbon steel in permanganate solutions

s06-P-021

Emese Horváthné Deák (Institute of Radiochemistry and Radioecology, University of Pannonia, Veszprém, Hungary), Andrea Szabó Nagy, Bernadett Baja, Kálmán Varga, Zoltán Németh, Dezső Oravetz, Zoltán Homonnay, Ernő Kuzmann, János Schunk, Gábor Patek

Long-term trends in the corrosion state of the stainless steel tubes of steam generators decontaminated chemically

s06-P-022

Maritza Paez (Departamento de Química de los Materiales, Universidad de Santiago de Chile, Santiago, Chile), Mamie Sancy, Jorge Pavez, Esteban Vargas, Roberto Urzua, Jaime Henríquez-Roman, Bernard Tribollet, Jose Zagal

Influence of 8-Aminoquinoline on the Corrosion Behaviour of Copper in 0.1 M NaCl

s06-P-023

Michiel van Soestbergen (Materials Innovation Institute, Delft, Netherlands), Kaspar Jansen, Kouchi Zhang, Leo Ernst

Theoretical Model for Corrosion in Microelectronics

Corrosion Protection

s06-P-024

Habib Ashasi Sorkhabi (Dept. of Chemistry, Tabriz, Iran), Moosa Es Haghi

Evaluation of inhibition activity of new fuchsin towards corrosion mild steel in acid acetic solutions

s06-P-025

Christopher Brett (Departamento de Quimica Faculdade de Ciencias e Tecnologia, Universidade de Coimbra, Coimbra, Portugal), Andreia Romeiro, Carla Gouveia-Caridade

Characterization and Corrosion Protection Behaviour of Poly(neutral red) Films on Copper

s06-P-026

Juan Pablo Busalmen (Laboratorio de Bioelectroquímica, INTEMA (CONICET), UNMdP, Mar del Plata, Argentina), Agustin Paradiso, Silvia Simison, Juan Pablo Busalmen

Steps forward in the implementation of cathodic protection based on sediment energy

s06-P-027

Fabrizio Caprioli (Department of Chemistry, University Sapienza of Rome, Rome, Italy), Valeria Di Castro, Franco Decker

Comparison of Cu passivation by aromatic vs. alkylic thiols

s06-P-028

Mónica Carboneras (Centro Nacional de Investigaciones Metalúrgicas, Madrid, Spain), Edgar Onofre, Luis Salvador Hernández, Maria Cristina García-Alonso, Maria Lorenza Escudero

Biodegradation of surface-modified magnesium in biological environment for applications as absorbable implant material

s06-P-029

Ursula Mary Carragher (Department of Chemistry, National University of Ireland Maynooth, Maynooth, Ireland), Carmel Breslin

Development and analysis of a suitable protective conducting polymer coating, using polypyrrole against the corrosion of copper

s06-P-030

Silvia Cere (INTEMA, CONICET, Universidad Nacional de Mar del Plata, Mar del Plata, Argentina), Wido Schreiner, Alicia Duran, Josefina Ballarre

Corrosion Improvement of Surgical Grade Stainless Steel by Sol-Gel Hybrid Coatings Containing SiO_2 Nanoparticles and Glass-ceramic Particles

s06-P-031

Silvia Cere (INTEMA, Universidad Nacional de Mar del Plata, Conicet, Mar del Plata, Argentina), Ianina Santana, Andres Pepe

Coatings Containing Silica Nanoparticles and Cerium Salts by Sol Gel Applied on Carbon Steel

s06-P-032

Silvia Cere (INTEMA, CONICET, Universidad Nacional de Mar del Plata, Mar del Plata, Argentina), Andrea Gomez Sanchez, Gustavo Duffo

Electrochemical behavior of zirconium and titanium with different surface modification processes in simulated body fluid

s06-P-033

Norica Godja (Cest Center of Electrochemical Surface Technology, Wiener Neustadt, Austria), Löcker Christine, Andreas Schindel, Wendrinsky Josef, Nauer Gerhard E.

Characterization of Oxide Films Formed on Al-Alloy for Aerospace Applications, Prepared *via* AC/DC Spark Anodization in Alkaline Solutions for Corrosion Protection

s06-P-034

Milica Gvozdenovic (Department of Physical Chemistry and Electrochemistry, Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Branimir Jugovic, Branimir Grgur

Electrochemical synthesis and corrosion properties of polyaniline coating on aluminum

s06-P-035

Mohammed Hamdadou (EMP, Bordj El Bahri , Algeria), Nicolas Stein, Djamel Eddine Akretche, Abdenacer Merati

Electrochemical Study of Boric Acid Addition Influence on the Sulphuric Anodisation of Al-Mg Alloy “Ag3” by Electrochemical Impedance Spectroscopy

s06-P-036

Hiroki Habazaki (Faculty of Engineering, Hokkaido University, Sapporo, Japan), Santosh Sah, Yasuhiro Tatsuno, Koji Fushimi, Yoshitaka Aoki

Analysis of Dielectric Breakdown Films on Aluminium Formed by Single Pulse Anodizing

s06-P-037

Naoki Hondoh (Department of Applied Chemistry, Faculty of Engineering, Kogakuin University, Hachioji, Japan), Hidetaka Asoh, Sachiko Ono

Corrosion Resistance of Anodic Films Formed on Magnesium Alloys by Anodization under Sparking in Alkaline Phosphate Electrolyte

s06-P-038

Yueh-Lien Lee (Department of Materials Science and Engineering, National Taiwan University, Taipei, Taiwan)

Effect of post-sealing on the corrosion resistance on the stannate conversion coating AZ91D magnesium alloy

s06-P-040

Mohammad Mahdavian Ahadi (Department of Surface Coating & Corrosion, Institute for Color Science & Technology, Tehran, Iran), Mohammadreza Mohammadzadeh Attar, Shabnam Ashhari

Another approach in corrosion inhibition studies via EIS: Phase angle at high frequencies

s06-P-041

Youngbog Park (Water Distribution Section, Seoul Waterworks Research Institute, Seoul, Korea), Youngjune Chio, Insub Park, Hangyu Park, Byeonggu Hu

Stainless Steel corroded by a Dew Dissolved Chlorine Gaseous

s06-P-042

Maritza Paez (Departamento de Química de los Materiales, Universidad de Santiago de Chile, Santiago, Chile), Evelyn Gonzalez, Mamie Sancy, Nelson Vejar, Jorge Pavez, Ignacio Azocar, Jose Zagal, Esteban Vargas, Xiaorong Zhou

Nanoparticles and Inhibitors Modified Hybrid Polymer Coating on AA-2024 : Corrosion Behaviour

s06-P-043

Vaitea Roscol (Essonnes, Gif sur Yvette, France), Jean-Michel Lameille

Behavior in thermal corrosion environments of specific TiN coating

s06-P-044

Yoshiteru Sato (Department of Applied Chemistry, Faculty of Engineering, Kogakuin University, Hachioji, Japan), Hidetaka Asoh, Sachiko Ono

Dielectric Property of Crystalline Anodic Alumina Films Formed by Multistep Anodization in Various Electrolytes

s06-P-045

Ema Stupnisek-Lisac (Faculty of Chemical Engineering and Technology, University of Zagreb, Zagreb, Croatia), Ana Skrobica, Andreja Prtenjak, Katarina Marusic, Helena Otmacic Curkovic

Bronze Protection in Sulphate/Carbonate and Nitrate/Carbonate Media by a Nontoxic Corrosion Inhibitor

s06-P-046

Sadaf Tahmasebi (Polymer Engineering and Color Technology Department, Amir Kabir University of Technology, Tehran, Iran)

Comparing performance of anticorrosive Second and Third generation phosphate Pigments

s06-P-047

Cecilia Regina Tomachuk (CCTM/Instituto de Pesquisas Energéticas e Nucleares, Sao Paulo, Brazil), Cecilia I. Elsner, Alejandro R. Di Sarli, Jose D. Culcasi, Isolda Costa

Trivalent chromium conversion layer: A way of enhancing the electrogalvanized steel corrosion protection

s06-P-048

Delphine Veys-Renaux (Dept. Chemistry and Physics of Solids and Surfaces, Institut Jean Lamour-Nancy Université, Vandoeuvre les Nancy, France), Than Nam Vu, Emmanuel Rocca

Formation of bioactive coatings on AZ91D magnesium alloy by plasma electrolytic anodizing

s06-P-049

Iryna Voloshchuk (Institute of Physical Chemistry PAS, Warsaw, Poland), Tadeusz Zakroczymski

The effect of zirconia sol-gel coating on the electrochemical behaviour of iron in NaOH solution

s06-P-050

Yu-Chuan Yang (Materials Science and Engineering, National Taiwan University, Taipei, Taiwan), Cheng-Yang Tsai, Chao-Sung Lin

Formation and Properties of Titanium Conversion Coating on AZ31 Magnesium Alloy

s06-P-051

Lucia Yohai (División Corrosión, INTEMA, Facultad de Ingeniería, Universidad Nacional de Mar del Plata, Mar del Plata, Argentina), Beatriz Valcarce, Marcela Vázquez

Role of the Phosphate Ion as Corrosion Inhibitor of Copper and Brass in Chlorinated Tap Water

s06-P-052

Nobuko Yoshimoto (Graduate School of Science and Engineering, Yamaguchi University, Ube, Japan), Kazuhiro Matsushima, Minato Egashira, Masayuki Morita

Anodic Behavior of Titanium in Organic Electrolyte Solutions with Different Compositions

s06-P-053

Pedro de Lima-Neto (Analytical Chemistry and Physical Chemistry Department, Federal Ceara University, Fortaleza, Brazil), Glaydson L. F. Mendonça, Valder N. Freire, André F. de Moura, David L. Azevedo, Adriana N. Correia

Serine, cysteine and methionine as corrosion inhibitors of carbon steel in acid medium

s06-P-054

Hercilio G. de Melo (Chemical Engineering Department University of São Paulo, São Paulo, Brazil), Camila Boin, Rolf Jansen

Use of electrochemical techniques for developing integrated methodology to demonstrate the capability of the zinc plating and passivations processes

s06-P-055

Dalsik Woo (1Division of Water Environment Center, Korea Interfacial Science and Engineering Institute, CheonAnSi, Korea), Minchul Kim, Kyuwon Hwang, Seokmin Yoon, Jonggi Moon, Myunghwa Kwak

Development in Anti-Corrosion Technology on SWRO (Seawater Reverse Osmosis) Production Water

s06-P-056

Jaroslaw Mizera (Department of Materials Science and Engineering Warsaw University of technology, Warsaw, Poland), Lukasz Dolega, Boguslawa Adamczyk-Cieslak

Corrosion Resistance of Model Ultra Fine Grained Al-Li alloys obtained by Severe Plastic Deformation

Passivity and its Breakdown

s06-P-057

Eleonora Bettini (Chemistry, Stockholm, Sweden), Jinshan Pan, Christofer Leygraf, Tom Eriksson

Passivity Breakdown of Co-Based Biomedical alloys? An Electrochemical and *In-Situ* AFM Study

s06-P-058

Maria Vittoria Diamanti (Politecnico di Milano, Milan, Italy), Mariapia Pedeferri, Monica Santamaria, Francesco Di Quarto

Structural and Photocurrent Characterization of Anodic Oxides on Titanium

s06-P-059

Boris Dudic (Faculty of Biology, University of Belgrade, Belgrade, Serbia), Nebojsa Potkonjak, Tanja Potkonjak, Stevan Blagojevic

Bifurcation Analysis from Oscillatory to Steady State Transition of the Electrochemical System Copper / Trifluoroacetic Acid

s06-P-060

Elivelton Alves Ferreira (Departamento de Físico-Química, Instituto de Química, Universidade Estadual Paulista, Unesp, Araraquara, Brazil), Rodrigo Della Noce, Cecílio Sadao Fugivara, Assis Vicenti Benedetti

Corrosion resistance of AISI 316L SS in aqueous solution and water- ethanol mixture

s06-P-061

Elizabeth Garfias-García (Materials, Univesidad Autonoma Metropolitana, Azcapotzalco, Mexico), F. Alejandro Colín-Paniagua, Héctor Herrera-Hernández, Manuel Palomar-Pardavé, Mario Romero-Romo

EIS and microscopy characterization of corrosion effects in a sensitized AISI 304 SS

s06-P-062

Farida Kellou (Chemistry, Algiers, Algeria), Abdelkader Benchettara, Sif-Eddine Amara

Electrochemical Study of Anodic Behaviour of Pure Iron and Iron-Based Alloys in Acidic Environment

s06-P-063

Köksal Kurt (Department of Materials Science and Engineering, Norwegian University of Science and Technology, Trondheim, Norway), Kemal Nisancioglu

Effect of Annealing Temperature on Anodic Activation of Aluminium Alloys by Tin, Lead and Magnesium

s06-P-064

Maixent Cyprien Mouanga (Laboratoire Mecanique Physique UMR5469 CNRS, Université Bordeaux 1, Talence, France), Olivier Devos, Monique Puiggali

Electrochemical and Structural Investigation of Corrosion of Steel used for the Hydrogen Storage

s06-P-065

Esma Senel (The Department of Materials Science and Engineering, Norwegian University of Science and Technology, Trondheim, Norway)

Effect of Trace Element Gallium on the Surface Properties and Liquid Metal Embrittlement of Aluminium

s06-P-066

Djoudi Sidane (Laboratoire Mecanique Physique UMR5469 CNRS, Université Bordeaux 1, Talence, France), Olivier Devos, Monique Puiggali, Marie Touzet

Local and Global Electrochemical Investigation on Stainless Steel under Mechanical Stress

s06-P-067

Mariana Sikora (UFSCar, Sao Carlos, Brazil), E.C. Pereira

Nb_2O_5-doped titanium dioxide by Anodic Doping

s06-P-068

Janaina Soares Santos (Universidade Federal de São Carlos, São Carlos, Brazil), Ernesto Chaves Pereira

Nb-doped ZrO_2 prepared by anodic doping

s06-P-069

Sadaf Tahmasebi (Polymer Engineering and Color Technology Department, Amir Kabir University of Technology, Tehran, Iran)

Study on the effect of passivation on corrosion behavior of carbon steel *via* Electrochemical Noise and Polarization Methods

s06-P-070

Takatoshi Yamamoto (Hokkaido University, Sapporo, Japan), Koji Fushimi, Hiroki Habazaki, Hidetaka Konno

Current Transients from Anodized Aluminum Surface using Micro-indentation Test in Borate Solution

s06-P-071

Chen-Jui Liang (Department of Engineering Materials, University of Sheffield), Aleksey Yerokhin, Evgeny Parfenov, Allan Matthews

In-Situ Impedance Spectroscopy Studies into Effects of Electrolyte Characteristics on the Process of Plasma Oxidation of Al

Late registration

s06-P-072

Mikhail Pletnev (Izhevsk State Technical University, Izhevsk, Russia)

Cooperative effects in the iron acide corrosion

Symposium 11: Sensors and Biosensors

Imaging Techniques

s11-P-001

Haluk Bingol (Chemistry Deparment, Selcuk University, Konya, Turkey), Erdal Kocabas, Erhan Zor, Ahmet Ozgur Saf, Ahmet Coskun

Rapid and Highly Selective Azocalix[4]arene Derivative as a Chromogenic Chemosensor for Detection of Hg^{2+}

s11-P-002

Martin Jacobsen (Dept. of Chemistry, University of Rostock, Rostock, Germany), Gerd-Uwe Flechsig

Electrochemical detection of mismatches in DNA-strands using higher temperatures

s11-P-003

Md. Zaved Hossian Khan (Applied Physical Chemistry Laboratory, Department of Applied Chemistry, School of Science and Engineering, Waseda University, Tokyo, Japan), Takuya Nakanishi

Effect of surface roughness on potentiometric measurement of Indium Tin Oxide electrode

s11-P-004

Peter Smith (Cellular Dynamics Program, Marine Biological Laboratory, Woods Hole, USA), Emma Heart, Joshua Gray

Characterizing cell metabolism with electrochemical microelectrodes

s11-P-005

Vladimir Vetterl (Faculty of Medicine, Masaryk University, Brno, Czech Republic), Stanislav Hasoň, Raimo Silvennoinen, Stanislav Cvrček, Jiří Vaněk, Sonia Bartáková, Patrik Prachár, Lukáš Fojt, Luděk Strašák

Adsorption of Fibrinogen at Titanium and Titanium Carbide Surface

s11-P-006

Erhan Zor (Chemistry Deparment, Selcuk University, Konya, Turkey), Muge Durmaz, Haluk Bingol, Erdal Kocabas, Ahmet Coskun

Optical and Electrochemical Studies of Complexation Behaviors of a Novel Azocalix[4]arene Derivative with Heavy Metal Ions

In Vivo Sensing

s11-P-007

Madalina Maria Barsan (Departamento de Quimica, Universiadde de Coimbra, Coimbra, Portugal), Christopher Michael Ashton Brett

Poly(phenazine)-mediated Electrochemical Biosensors as Detectors in Flow Injection Analysis

s11-P-008

Shaneel Chandra (Department of Chemistry and Biomolecular Sciences, Faculty of Science, Macquarie University, Sydney, Australia), Simon McMullan, Philip, J. Martin, Avi Bendavid, Danny K. Y. Wong

Detection of dopamine *in vivo* using hydrogenated microelectrodes

s11-P-009

Claire Harley (Department of Chemistry, National University of Ireland Maynooth, Ireland), Niall Finnerty, John Colleran

The Electrochemical Detection of Dopamine using a Polymer Macrocyclic Composite Film

s11-P-010

Troy Hibbard (Biomedical Diagnostics Institute, Dublin City University, Dublin, Ireland), Karl Crowley, Zahra Shahbazian, Orla Smith, Anthony J. Killard

Investigation of an Inkjet Printed Gas Sensor For Detection and Quantification of Ammonia In Human Breath

s11-P-011

V. Jeseentharani (Department of Chemistry and Loyola Institute of Frontier Energy (LIFE), Loyola College, Chennai, TN-600034, Chennai, India), P. Tamil Selvi, A. Dayalan, K. S. Nagaraja

Electrochemical characterization of Ni(II) complex modified GCE and its simultaneous determination of Dopamine, Ascorbic Acid and Uric Acid

s11-P-012

Inês Miranda (Departamento de Química, Faculdade de Ciências, Universidade do Porto, Porto, Portugal), Mariana Araújo, José Adolfo Ribeiro, Fernando Silva, Carlos Pereira

In vivo Voltammetric Quantification of Catecholamines

s11-P-013

Maren Mix (Department of Chemistry, Analytical, Technical and Environmental Chemistry, University of Rostock, Rostock, Germany), Gerd-Uwe Flechsig

Electrochemical Detection of Genetically Modified Maize in Real Samples

s11-P-014

Abra Penezic (Ruđer Bošković Institute, Zagreb, Croatia),Andrew Nelson, Zachary Coldrick, Blaženka Gašparović

A lipid system ceramide-fatty acid as a sensing material to detect lipophylic aquatic pollutants

s11-P-015

Thomas Seppi (Department of Therapeutic Radiology and Oncology, Innsbruck Medical University, Innsbruck, Austria), Daniel Hekl, Sonja Lackner, Gottfried Stubauer, Peter Lukas

Online-recording of intracellular oxygenation pattern in cultured mammalian cells by using HPLC-ECD

s11-P-016

Joakim Wigström (Department of Chemical and Biological Engineering, Chalmers University of Technology, Göteborg, Sweden, Göteborg, Sweden), Michael Kurczy, Ann-Sofie Cans

Spatially resolved selective microelectrode array

Nanomaterials in Sensor Systems

s11-P-017

Mehdi Baghayeri (University of Mazandaran, Babolsar, Iran), Reza Ojani

Efficient Determination of Captopril using a Novel Carbon Paste Electrode Modified with TiO_2 Nanoparticles

s11-P-018

Rui Barbosa (Center for Neuroscience and Cell Biology and Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal), Ricardo Santos, Cátia Lourenço, Ana Ledo, Nuno Ferreira, Greg Gerhardt, João Laranjinha

Nanocomposite-modified Microelectrodes for Nitric Oxide Monitoring *in vivo* in the Rat Brain

s11-P-019

Erika Bustos (Center for Research and Tecnological Development in Electrochemistry, Pedro Escobedo, Mexico), Yunny Meas, Luis Godinez Mora-Tovar

Electrochemical Detection of Dopamine in Real Samples Using a Modified Electrode with Nanocomposites of PAMAM Dendrimers and Platinum Nanoparticles

s11-P-020

Nabila Cherchour (LTMGP, Université A. Mira-Béjaia, Béjaia, Algeria), Bouzid Messaoudi, Marie-Claude Bernard

pH-response of MnO_2 thin films synthesized by an electrochemical route on a glassy carbon electrode

s11-P-021

Zhenyu Chu (State Key Laboratory of Materials-oriented Chemical Engineering, Nanjing University of Technology, Nanjing, China), Wanqin Jin

Direct growth of nano-cubic Prussian blue on Pt electrode as the electrochemical biosensor

s11-P-022

Christelle Despas (LCPME, CNRS, Villers les Nancy, France), Maureen Rose-Helene, Marc Hebrant, Alain Walcarius

Electrochemical Detection of Copper(II) with 5-Phenyl-Azo-8-Hydroxyquinoline Functionalized Silica Modified Electrode

s11-P-023

Ali A. Ensafi (Department of Chemistry, Isfahan University of Technology, Isfahan, Iran)

Amperometric Nanosensor for Determination of Cysteamine in the Presence of Tryptophan Based On Modified Multiwall Carbon Nanotubes

s11-P-024

Ali A. Ensafi (Department of Chemistry, Isfahan University of Technology, Isfahan, Iran)

Voltammetric Nanosensor for Sequential Determination Of Benserazide and Levodopa using Modifed Multiwall Carbon Nanotubes with Chloranil

s11-P-025

Neidenei Gomes Ferreira (Instituto Nacional de Pesquisas Espaciais, São José dos Campos, Brazil), Adriana Azevedo

Detection of phenol at boron-doped nanocrystalline diamond electrodes

s11-P-026

Dana Gal (Tel-Aviv University, Tel-Aviv, Israel), Hila Einati, Alexandra Inberg, Yossi Shacham-Diamand

High-K Dielectrics as Gate Insulators for Bio-Sensing Applications

s11-P-027

Masouemh Ghalkhani (Sharif University of Technology, Tehran, Iran), Saeed Shahrokhian

Glassy Carbon Electrode Modified with a Film of Nanodiamond-Graphite/Chitosan: Application to Highly Sensitive Electrochemical Determination of Azathioprine

s11-P-028

Masoumeh Ghalkhani (Sharif University of Technology, Tehran, Iran), Saeed Shahrokhian

Electrochemical Oxidation of Mebendazole at a Carbon Nanoparticle/Chitosan Modified Glassy Carbon Electrode

s11-P-029

Fatemeh Ghorbani-Bidkorbeh (Department of Pharmaceutics, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran), Saeed Shahrokhian, Ali Mohammadi, Rasoul Dinarvand

Preparation and Comparison of Voltammetric and Potentiometric Sensors for Naltrexone HCl and their Analysis Applications in Pharmaceutical and Clinical Preparations

s11-P-030

Hedayatollah Ghourchian (University of Tehran, Tehran, Iran)

Carbon nanotubes-ionic liquid nano-composites as biocompatible matrixes for enzyme based electrochemichal biosensors

s11-P-031

Marilia Goulart (Instituto de Química e Biotecnologia, Universidade Federal de Alagoas, Maceio, Brazil), Erivaldo Costa, Cleylton Lopes, Francisco Silva, Phabyanno Lima

Chemical Sensor based on Electrochemically Triggered Reaction: 1-Amino-4-Nitrobenzene Covalently Attached To Nanostructured Platform For NADH Electrooxidation

s11-P-032

Takeshi Ito (Kanagawa Industrial Technology Center, Ebina, Japan), Satoru Kaneko, Yasuo Hirabayashi, Masayasu Soga, Koji Suzuki

Electrochemical Detection of Hydrogen Peroxide using Ultra Thin Layer of Pt Deposited by PLD on GC Substrate

s11-P-033

Nicole Jaffrezic-Renault (Laboratory of Analytical Chemistry, Claude Bernard University Lyon 1, Villeurbanne, France), Lucian-Gabriel Zamfir, Irina Geana, Camelia Bala, Lucian Rotariu, Sondes Bourigua, Abdelhamid Errachid

An impedimetric immunosensor and a surface plasmon resonance biosensor based on functionalized magnetic nanoparticles on gold surface for the detection of ochratoxin A

s11-P-034

JunHo Jang (Department of Chemistry, Yonsei University, Seoul, Korea), Han Nim Choi

Tris(2,2'-bipyridyl)ruthenium(II) Electrogenerated Chemiluminescence Sensor Based on Ionic Liquid/ Sol-Gel Ceramics/Nafion Composite Films

s11-P-035

Uffe Bjørnholt Jensen (iNANO, Aarhus University, Aarhus, Denmark)

Nanostructured Surfaces for Electrodes Prepared by Glancing Angle Deposition

s11-P-036

Zhi Jinfang (Technical Institute of Physics & Chemistry, Chinese Academy of Science, Beijing, China), Luo Daibing, Wang Yuning

Fabrication of boron-doped diamond nanorods electrode and its applications in amperometric biosensing

s11-P-037

Chang Hoon Kang (Department of Chemistry, Yonsei University, Seoul, Korea), Young-bong Choi, Hyug-Han Kim

Electrogenerated chemiluminescence sensor based on self-assembled monolayer of ruthenium(II)-bis(2,2'-bipyridyl)(aminopropyl imidazole) complex on gold deposited screen printed electrode

s11-P-038

Sook Mei Khor (Chemistry/UNSW, Sydney, Australia), Guozhen Liu, Sridhar G. Iyengar, J. Justin Gooding

Enhanced Label-free Electrochemical Immuno-Biosensor for Veterinary Drug Residues Detection in Complex Matrices

s11-P-039

Yang-Rae Kim (Department of Chemistry, Seoul National University, Seoul, Korea)

Electrochemical detection of dopamine in the presence of ascorbic acid using graphene modified electrodes

s11-P-040

Seul Ki Kim (Department of Chemistry and Institute of Basic Science, Chonnam National University, Gwangju, Korea), Jung-Min You, Ja Young Kim, Hyun Chul Choi, Seungwon Jeon

Determination of Hydrazine by Functionalized Palladium Nanoparticle on Multi-walled Carbon Nanotubes

s11-P-041

Zorica Knezevic-Jugovic (Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Milica Gvozdenovic, Branimir Jugovic, Dejan Bezbradica, Mirjana Antov, Branimir Grgur

Electrochemical determination of glucose using polyaniline electrode modified by glucose oxidize

s11-P-042

Ulrich Lange (Institut für Analytische Chemie, Chemo- und Biosensorik, Regensburg, Germany), Svetlozar Ivanov, Vessela Tsakova, Vladimir, M. Mirsky

Electrocatalytically active nanocomposite from palladium nanoparticles and polyaniline: oxidation of hydrazine

s11-P-043

Soodabeh Majdi (Department of Chemistry, Faculty of Science, K.N. Toosi University of Technology, Tehran, Iran), Jabbari Ali

Electrocatalytic oxidation and determination of Guaifenesin on a Nanohollow spheres β-$Ni(OH)_2$/carbon microparticle/ionic liquid composite

s11-P-044

Ievgen Mazurenko (LCPME, CNRS, Nancy University, Villers-lès-Nancy, France), Mathieu Etienne, Rainer Ostermann, Oksana Tananaiko, Alain Walcarius, Bernd Smarsly

Electro-assisted Deposition of Sol-Gel Bio-Composite on Platinum-Nanofibers

s11-P-045

Conor McCarthy (Chemistry Department, National University of Ireland Maynooth, Maynooth, Ireland)

Formation of polypyrrole/copper nano-composite for nitrate detection

s11-P-046

Zohre Mirahmadi zare (Chemistry, Isfahan, Iran), Ali Asghar Ensafi, Behzad Rezaei

Determination trace amount of captopril in patient urine using multiwall carbon nanotubes as a sensor and p-aminophenol as a mediator

s11-P-047

Zekra Mousavi (Laboratory of Analytical Chemistry, Åbo Akademi University, Åbo-Turku, Finland), Johan Bobacka, Andrzej Lewenstam, Ari Ivaska

All-Solid-State Potassium-Selective Sensors Based on Poly(3,4-ethylenedioxythiophene) Doped with Multi-Walled Carbon Nanotubes as Ion-to-Electron Transducer

s11-P-048

Miguel Angel Oliver-Tolentino (Departamento de Ingeniería Química. ESIQIE-IPN, México, D.F., Mexico), Ariel Guzmán-Vargas, Arturo Manzo-Robledo, Elsa-Miriam Arce-Estrada

Electrochemical response of glassy carbon electrode modified with Cu-ZSM5 in hydrogen peroxide-containing solutions

s11-P-049

Yasemin Oztekin (NanoTechnas-Centre of Nanotechnology and Materials Science Vilnius University, Vilnius, Lithuania), Almira Ramanaviciene, Asta Kausaite, Zafer Yazicigil, Arunas Ramanavicius

Biochemical Method for Synthesis of Conducting Polymers Suitable for Improvement of Characteristics of Electrochemical Sensors

s11-P-050

Tilia Patois (Institut UTINAM, team NCM, Besancon, France)

Chemical Sensors based on Electrodeposited Polymers

s11-P-051

José María Palacios Santander (Analytical Chemistry, Puerto Real, Cádiz, Spain), Chukwuemeka Ajaero, María Franco Romano, Joaquín Rafael Crespo Rosa, Almoraima Gil Montero, Ignacio Naranjo Rodríguez, José Luis Hidalgo Hidalgo de Cisneros, Laura M. Cubillana Aguilera

Development of new amperometric sensors based on gold nanoparticles and Sonogel-Carbon materials

s11-P-052

Aoife Power (Applied Electrochemistry Group, Dublin, Ireland), Anthony Betts, John Cassidy

Silver Polymer Nanocomposite based Humidity Sensor

s11-P-053

Aoife Power (Applied Electrochemistry Group, Dublin, Ireland), Anthony Betts, John Cassidy

Colloidal Silver Nanoparticles Analogues for Surface Enhanced Raman Spectroscopy (SERS)

s11-P-054

Jahan Bakhsh Raoof (University of Mazandaran, Babolsar, Iran), Reza Ojani, Mehdi Baghayeri

Glassy Carbon Electrode Modified with MWCNT and Ruthenium Oxide Composite Film as a Sensitive Sensor for Simultaneous Determination of Ascorbic Acid, Epinephrine and Uric Acid

s11-P-055

Julija Razumiene (Department of Bioanalysis, Institute of Biochemistry, Vilnius, Lithuania), Vidute Gureviciene, Valdas Laurinavicius

Study and implementation of ammonia-forming reactions catalyzed by urease

s11-P-056

Julija Razumiene (Department of Bioanalysis, Institute of Biochemistry, Vilnius, Lithuania), Nomeda Kuisiene, Edita Voitechovic, Jonita Stankeviciute, Liucija Marcinkeviciene, Irina Bachmatova, Donaldas Citavicius, Rolandas Meskys

Amperometric tagatose determination

s11-P-057

Behzad Rezaei (Department of Chemistry, Isfahan University of Technology (IUT), Isfahan, Iran), Ali Asghar Ensafi, Zohre Mirahmadi Zare

Multiwalled Carbon Nanotube Modified Pencil Electrode for Square Wave Voltammetric Determination of Dexamethasone

s11-P-058

Behzad Rezaei (Chemistry, Isfahan, Iran), Najmeh Majidi, Hassan Karimi-Maleh

Molecularly Imprinted-Multi Wall Carbon Nanotube Paste Electrode as a Sensor For Voltammetric Determination of Rutin

s11-P-059

Urszula Salaj-Kosla (Materials and Surface Science Institute, University of Limerick, Limerick, Ireland), Yi Ding, Roland Ludwig, Edmond Magner

Redox enzyme immobilization on porous gold electrodes

s11-P-060

Khene Samson (Rhodes University, Grahamstown, South Africa), Tebello Nyokong

The Electrocatalytic Activity of Nickel Tetraamino Phthalocyanine Derivatives Linked to Singled Walled Carbon Nanotubes

s11-P-061

Alessandro Sanginario (Electronics Dept., Politecnico di Torino, Torino, Italy), Danilo Demarchi, Mauro Giorcelli, Micaela Castellino

Carbon Nanotubes for Electrochemiluminescence Biosensor

s11-P-062

Jing-Juan Xu (Department of Chemistry, Nanjing University, Nanjing, China)

Selective detection of trace amount of Cu2+ using semiconductor nanoparticles in photoelectrochemical analysis

s11-P-063

Ji-Hoon Yang (Department of Chemistry Education, Seoul National University, Seoul, Korea), Hun-Gi Hong, Seung-Hyun Shin

Detection of Arsenic at Gold Nanoparticles Modified APTMS layer on ITO electrode

s11-P-064

Jung-Min You (Department of Chemistry and Institute of Basic Science, Chonnam National University, Gwangju, Korea), Seul Ki Kim, Ja Young Kim, Hyun Chul Choi, SeungWon Jeon

Determination of Hydrogen Peroxide on Modified Glassy Carbon Electrode by MWCNT-palladium Nanoparticles

s11-P-065

Hamid Reza Zare (Chemistry, Yazd University, Yazd, Iran), Zahra Ghanbari, Navid Nasirizadeh

Application of Ruthenium Oxide Nanoparticles for Simultaneous Voltammetric Determination of Uric acid, Adrenaline and Cysteine

s11-P-066

Hamid Reza Zare (Chemistry, Yazd University, Yazd, Iran), Navid Nasirizadeh

Electrochemical Properties and Electrocatalytic Activity of Oracet Blue Multi-Wall Carbon Nanotubes Modified Glassy Carbon Electrode toward Hydroxylamine Oxidation

s11-P-067

Hamid Reza Zare (Chemistry, Yazd University, Yazd, Iran), S. Hossein Hashemi

Simultaneous Voltammetric Determination of Hydrazine and Hydroxylamine Using a Bifunctional Electrocatalyst of Nano-Scale Islands of Ruthenium Oxide

s11-P-068

Ali Özcan (Chemistry, Eskisehir, Turkey), Yücel Sahin

A Simple Route for the Voltammetric Determination of Uric Acid in Blood Serum based on the Electrochemically Treated Pencil Graphite Electrode

POSTER SESSION 2

Symposium 4: Electrochemical Energy Conversion and Storage

Lithium Ion Batteries

s04-P-145

Marius Amereller (Institute of Physical and Theoretical Chemistry, University Regensburg, Regensburg, Germany), Dominik Moosbauer, Christian Schreiner, Heiner Jakob Gores

Potential Electrolytes with Fluoro-Oxalato-Borate Anions for Lithium-Ion-Batteries

s04-P-146

Wolfgang G. Bessler (German Aerospace Center (DLR), Stuttgart, Germany), Christian Hellwig, Seniz Soergel, Norbert Wagner, K. Andreas Friedrich

Electrochemical and thermal modeling of a LiFePO4-based lithium-ion battery

s04-P-147

Sonia R. Biaggio (Department of Chemistry, São Carlos Federal University, São Carlos, Brazil), Carla Dalmolin, Romeu C. Rocha-Filho, Nerilso Bocchi

Charge-Discharge of Polypyrrole Synthesized in Room-Temperature Ionic Liquids

s04-P-148

Milan Bousa (J. Heyrovsky Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, v.v.i., Prague, Czech Republic), Barbora Laskova, Marketa Zukalova, Jan Prochazka, Ladislav Kavan, Arnost Zukal

Lithium Insertion Electrochemistry in Polycrystalline TiO_2 Anatase with a Large Percentage of (001) Faces

s04-P-149

Lauréline Crepel (CEA, DRT, LITEN, DEHT, LBA, Grenoble Cedex 09, France), Fannie Alloin, Sébastien Martinet, Jean-Claude Lepretre

Development of a new aqueous lithium-ion technology

s04-P-150

Yanhua Cui (Institute of Electronic Engineering, China Academy of Engineering Physics, Mianyang, China), Xiaolin Wang, Wei Su, Xiaojiang Liu, Zhengwen Fu

Fabrication and electrochemical characterization of CoP_3 thin films by pulsed laser deposition

s04-P-151

Joaquin Geng (Laboratoire de Réactivité et Chimie du Solide, LRCS, Amiens, France), Jean Pierre Bonnet, Jean Marie Tarascon, Franck Dolhem, Philippe Poizot

Synthesis, characterization and electrochemical properties of new organic compounds for Li-ion battery electrodes

s04-P-152

Joaquin Geng (Laboratoire de Réactivité et Chimie du Solide, UMR, CNRS 6007, Amiens, France), Steven Renault, Jean Pierre Bonnet, Jean Marie Tarascon, Franck Dolhem, Philippe Poizot

Synthesis, characterizations and electrochemical properties of new organic compounds for Li-ion battery electrodes

s04-P-153

Robert Hartl (Institute of Physical and Theoretical Chemistry, University of Regensburg, Regensburg, Germany), Matthias Fleischmann, Heiner J. Gores, Ruth Gschwind

Association Constant and Lithium Transference Number of $LiAlCl_4$ in Sulphur Dioxide

s04-P-154

Akitoshi Hayashi (Department of Applied Chemistry, Osaka Prefecture University, Sakai, Osaka, Japan), Atsushi Sakuda, Masahiro Tatsumisago

Investigation of $LiCoO_2$ electrode / Li_2S-P_2S_5 electrolyte interface in all-solid-state lithium rechargeable batteries

s04-P-155

Nara Hiroki (Waseda University, Tokyo, Japan), Aoki Seiichi, Momma Toshiyuki, Osaka Tetsuya

Feasibility of diblock copolymer ion gel electrolyte used BMPFSA as plasticizer

s04-P-156

Jennifer Jones (Université de Tours Laboratoire PCMB/CIME, Tours, France), Meriem Anouti, Magaly Caillon-Caravanier, Patrick Willmann, Daniel Lemordant

Effect of SEI lithium salts on cyclability of lithium-ion batteries

s04-P-157

Eteri Kachibaia (R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Tbilisi, Georgia), Ruth Imnadze, Paikidze Tamara, Robert Akhvlediani

Modified lithium - nickel - manganese spinels as cathode materials for Li-ion accumulators

s04-P-158

Serife Kaymaksiz (Zentrum für Sonnenenergie- und Wasserstoff-Forschung, Baden-Württemberg, Ulm, Germany), Mario Wachtler, Florian Wilhelm, Margret Wohlfahrt-Mehrens

The Electrochemical Behavior of Redox Shuttle Additives for Overcharge Protection of Li-Ion Batteries

s04-P-159

Joo-Seong Kim (Div. Energy Systems Research, Ajou University, Suwon-si, Korea), Sun-il Mho, Won Il Cho, In-Hyeong Yeo

Size-Controlled $LiMn_2O_4$ Electrodes for Enhanced Rechargeable Batteries

s04-P-160

Daesoo Kim (Research Center for Energy Conversion & Storage, Seoul, Korea), Sangjin Park, Oh Byong Chae, Ji Heon Ryu, Seung M. Oh

Failure Mechanism of Spinel $LiMn_2O_4$ Positive Electrode for Lithium Secondary Batteries

s04-P-161

Stefan Klink (Analytische Chemie - Elektroanalytik & Sensorik, Bochum, Germany), Edgar Ventosa, Wei Xia, Martin Muhler, Wolfgang Schuhmann

Enhanced lithium intercalation in functionalized carbon nanotubes as a basis for lithium battery anodes

s04-P-162

Nina Kosova (Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia), Evgeniya Devyatkina

Mechanochemical synthesis of $LiFePO_4$/C in the presence of graphite

s04-P-163

Yoshiyuki Kubota (Power Engineering Research and Development Center, The Kansai Electric Power Company, Inc., Amagasaki, Japan)

First principles investigations on enthalpy of lithium intercalation into graphite

s04-P-164

Tatiana Kulova (Frumkin Institute of Physical Chemistry and Electrochemistry, RAS, Moscow, Russia), Alexander Skundin, Evgenii Terukov, Oleg Konkov, Sergei Gurevich, Vladimir Kozhevin

Silicon Anode with High Cycleability for LIB

s04-P-165

Jun-Tao Li (School of Energy Research, Xiamen University, Xiamen, China), Vincent Maurice, Ling Huang, Jolanta Swiatowska-Mrowiecka, Philippe Marcus, Shi-Gang Sun

Investigation of Electrode Processes in Lithium Ion Batteries by Advanced Methods

s04-P-166

Mikito Mamiya (National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Ibaraki, Japan), Yukako Shinbe, Junji Awaka, Junji Akimoto, Shunsuke Kasahara, Osamu Kikuchi, Yuka Terajima, Kazuyasu Tokiwa

Synthesis and Electrochemical Properties of Calcium-Ferrite type $LiMn_2O_4$

s04-P-167

Roberto Marassi (Science and Technology School, Chemical Section, University of Camerino, Camerino, Italy), Francesco Nobili, Roberto Tossici, Marilena Mancini, Sonia Dsoke, Sandra Giuli

Low-temperature behavior of graphite-tin composite anodes for Li-ion batteries

s04-P-168

Laure Monconduit (Institut Charles Gerhardt - AIME, Montpellier, France), Moulay Tahar Sougrati, Aurore Debenedetti, Julien Fullenwarth, Bernard Fraisse, Jean-Claude Jumas

TiSnSb as new negative electrode material for li-ion batteries

s04-P-169

M.F. Mousavi (Department of Chemistry, Tarbiat Modares University, Tehran, Iran), M.A. Kiani, M.S. Rahmanifar, A. Pendashteh

Electrochemical properties of nano- and micro-particles of $LiMn_2O_4$ as a cathode material in Li battery

s04-P-170

Haruno Murayama (Kyoto University, Kyoto, Japan), Eiichiro Matsubara, Tetsu Ichitsubo, Tomoya Kawaguchi, Fengqian Son, Yoshiharu Uchimoto, Zempachi Ogumi

Phase Transformation in Sn Anodes during Battery Reactions

s04-P-171

Chung-Ta Ni (Department of Materials Science and Engineering, National Cheng Kung University, Tainan, Taiwan), Kuan-Zong Fung

Eelectrochemical properties of $LiCoO_2$ thin film *via* hydrothermal process

s04-P-172

Kei Nishikawa (Japan Aerospace Exploration Agency, Tsukuba, Japan), Tetsuo Nishida, Hitoshi Naito

Fundamental Study of Ionic Liquid for Li Battery

s04-P-173

Sang-Hoon Park (Department of Material Science and Engineering, Yonsei University, Seoul, Korea), Jin-Go Kim

Cobalt Oxide/Graphene nanosheet(GNS) Nano-Hybrid Materials for Energy Storage Applications

s04-P-174

Salvatore Piazza (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Università di Palermo, Palermo, Italy), Germano Ferrara, Libero Damen, Catia Arbizzani, Rosalinda Inguanta, Carmelo Sunseri, Marina Mastragostino

Template Electrosynthesis of SnCo Nanowire Arrays for Lithium-ion Batteries

s04-P-175

Romeu C. Rocha-Filho (Chemistry Department, Sao Carlos Federal University, São Carlos, Brazil), Rogério Davoglio, Sonia Biaggio

Bilayered Nanofilm of Polypyrrole and Poly(DMcT) for High-performance Battery Cathodes

s04-P-176

Young-Gyoon Ryu (Battery Group, Emerging Technology Research Center, Yongin-Si, Korea), Seok Soo Lee, Dong Joon Lee, Dong Min Lim, In Sun Jung, Seok Gwang Doo

Electrochemical Behavior of Silicon/Graphite Composite Electrode in Organic Electrolyte Containing Fluoroethylene Carbonate

s04-P-177

Ivana Stojkovic (Faculty of Physical Chemistry, Belgrade, Serbia), Nikola Cvjeticanin, Slavko Mentus

Charging/discharging behavior of nanostructured $Li1.2V_3O_8$ in aqueous LiNO3 solution

s04-P-178

Ho-Jung Sun (Materials Science and Engineering, Kunsan National University, Kunsan, Korea), Jisu Kim, Yunkyoung Oh, Joongpyo Shim

Synthesis and performance of sodium substituted, $Li_{2-x}Na_xMnSiO_4$, cathodes in lithium ion batteries

s04-P-179

Shi-Gang Sun (Department of Chemistry, Xiamen University, Xiamen, China), Gui-Liang Xu, Shu-Ru Chen, Jun-Tao Li, Ling Huang

$LiFePO_4$/ordered mesoporous carbon composite as cathode of lithium-ion battery

s04-P-180

Ramesh T. Subramaniam (Faculty of Science, Kuala Lumpur, Malaysia)

Fumed silica-doped poly(vinyl chloride)-poly(ethylene oxide) (PVC/PEO)-based polymer electrolyte for lithium ion battery

s04-P-182

Roberto Torresi (Instituto de Química, Universidade de São Paulo, São Paulo, Brazil), Tânia Benedetti, Emily Redston, Willian Menezes, Dayane Reis, Marcela Oliveira, Jaísa Soares, Aldo Zarbin

Mg^{2+} and Li^+ insertion into nanostructured vanadium oxide electrode in different electrolytes

s04-P-183

Edgar Ventosa (Analytische Chemie – Elektoanalytik und Sensorik, Ruhr-Universität Bochum, Bochum, Germany), Stefan Klink, Wei Xia, Martin Muhler, Wolfgang Schuhmann

Functionalization of carbon cloth and its influence on lithium ion intercalation

s04-P-184

Lianbang Wang (Zhejiang University of Technology, Hangzhou, China), Junwei Chu, Sheng Li, Xingyue Zhan

Tin Alloy Composite Materials Used in Lithium-ion Batteries

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Lianbang Wang (Zhejiang University of Technology, Hangzhou, China), Sheng Li, Junwei Chu, Xingyue Zhan, Chunan Ma

Preparation and Properties of Carbon-coated $LiFePO_4$ by Sol-gel Technique

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Chihiro Yada (Battery Research Division, Toyota Motor Corporation, Susono, Shizuoka, Japan), Christopher E. Lee, Duncan C.A. Smith, Mark S. Beal, Thierry Le Gall, Xiaojuan Lu, Mehdi Mirsaneh, Claire Mormiche, Denis Pasero, Shoji Yokoishi, Brian E. Hayden

High-Throughput Screening of $LiO_{0.5}$-$LaO_{1.5}$-TiO_2 System: Proof-of-Concept Study

s04-P-187

In-Hyeong Yeo (Department of Chemistry Dongguk University, Seoul, Korea), Hung-Coung Dinh, Sun-il Mho, Won Il Cho

Preparation of Size-controlled $LiFePO_4$ and Their Characteristics as Cathode for Li^+ Battery

s04-P-188

Aishui Yu (Deparment of Chemistry, Institute of New Energy, Fudan University, Shanghai, China), Deng Zhang, Tao Huang

Manganese Oxide Catalyst for Rechargeable Lithium Oxygen Batteries

s04-P-189

Ekaterina Zhecheva (Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences, Sofia, Bulgaria)

A New Versatile Precursor Method for the Preparation of Nanosized Phospho-Olivine Cathodes

s04-P-190

Sandra Zugmann (Institute of Physical and Theoretical Chemistry, University of Regensburg, Regensburg, Germany), Heiner Jakob Gores

Transference number measurements for lithium-ion battery electrolytes

s04-P-191

Yong-yao Xia (Chemistry Department and Shanghai Key Laboratory of Molecular Catalysis and Innovative Materials, Institute of New Energy, Fudan University, Shanghai, China), Wang-jun Cui, Hai-jing Liu, Huan-ming Xiong

Alloy and Metal Oxide Anode Materials for Lithium-ion Batteries

Supercapacitors

s04-P-191

Cesar A. Barbero (Department of Chemistry, Universidad Nacional de Rio Cuarto, Rio Cuarto, Argentina), Rusbel Coneo Rodríguez, Luciano Tamborin, Diego F. Acevedo, Maria S. Orellano, N. Gustavo Cotella, Juan Balach, Gabriel A. Planes

Building and Testing Low Cost Supercapacitors

s04-P-192

Peter Beker (Department of Physical Electronics, School of Electrical Engineering, The Iby & Aladar Fleischman Faculty of Engineering, Tel Aviv University, Ramat Aviv, Israel), Gil Rosenman

Bioinspired Nanostructural Peptide Materialsfor Supercapacitor Electrodes

s04-P-193

Jaanus Eskusson (Institute of Chemistry, University of Tartu, Tartu, Estonia), Alar Jänes, Enn Lust

Characterisation of Carbide Derived Carbon Electrode for Double Layer Capacitors in Aqueous Electrolytes

s04-P-194

Min Heon (Materials Science and Engineering, Philadelphia, USA), James Applegate, Robert Nolte, Emma Cortes, Samuel Lofland, Jeffrey D. Hettinger, Pierre-Louis Taberna, Patrice Simon, Yury Gogotsi

Enhanced Capacitance of Carbide-derived Carbon Films

s04-P-195

Visnja Horvat-Radosevic (Rudjer Boskovic Institute, Zagreb, Croatia), Katja Magdic, Suzana Sopcic, Kresimir Kvastek, Zoran Mandic

Impedance of Glassy Carbon/RuO_x • nH_2O/Nafion® Composite Electrodes

s04-P-196

Kristy Jost (Drexel University, Fashion Design and Design and Merchandising Department, Philadelphia, USA), Carlos Perez, John McDonough, Genevieve Dion, Yury Gogotsi

Fabrics Capable of Capacitive Energy Storage

s04-P-197

Krzysztof Jurewicz (Institute of Chemistry and Technical Electrochemistry, Poznañ University of Technology, Poznañ, Poland), Elzbieta Frackowiak, François Béguin

Active Carbon Based Asymmetric Capacitors in Aqueous Electrolytes

s04-P-198

Krzysztof Jurewicz (Institute of Chemistry and Technical Electrochemistry, Poznañ University of Technology, Poznañ, Poland), Krzysztof Babel

Asymmetric Supercapacitors Based on Nitrogen-Enriched Active Carbons

s04-P-199

Grzegorz Lota (Institute of Chemistry and Technical, Poznan, Poznan University of Technology, Poland), Grzegorz Milczarek, Katarzyna Lota

Effect of Lignosulfonates on the Electrochemical Performance of Supercapacitors

s04-P-200

Katarzyna Lota (Institute of Non-Ferrous Metals Branch in Poznan, Central Laboratory of Batteries and Cells, Poznan, Poland), Grzegorz Lota, Agnieszka Sierczynska, Elzbieta Frackowiak

Supercapacitors Based on Nickel Oxide/Carbon Materials Composites

s04-P-201

Agnieszka Malak-Polaczyk (Institute of Chemistry and Technical Electrochemistry, Poznan University of Technology, Poznan, Poland), Cathie Vix-Guterl, Elzbieta Frackowiak

Layered double hydroxide derived Bi_2O_3/carbon composite for negative electrode of supercapacitor

s04-P-202

John McDonough (Drexel University, Philadelphia, USA), Teresa Ubieto, Vadym Mochalin, Yury Gogotsi, Patrice Simon, Pierre-Louis Taberna

Effect of Carbon Onion Annealing Temperature on Structure and Electrochemical Behavior

s04-P-203

Emmanuelle Perricone (LEPMI, CNRS, UJF, Grenoble INP, Domaine Universitaire, St. Martin d'Hères, France), Fannie Alloin, Jean-Claude Lepretre

New solvents for supercapacitor electrolyte: electrochemical and physico-chemical study

s04-P-204

Aleksandra Pacula (Institute of Catalysis and Surface Chemistry Polish Academy of Sciences, Krakow, Poland), Michał Mosiałek, Robert P. Socha, Małgorzata Ruggiero, Małgorzata Zimowska, Paweł Nowak

Electrode materials containing cobalt species and nitrogen-doped carbon nanotubes

s04-P-205

Soo-Gil Park (Dept. of Industrial Engineering Chemistry, Cheongju, Korea), Chang-Ho Shin, Jeong-Jin Yang, Han-Joo Kim

The electrochemical characteristics with various $Li_4Ti_5O1_2$/CNT composite materials for electrochemical capacitor

s04-P-206

Katja Pinkert (Institute for Complex Materials, IFW Dresden, Dresden, Germany)

Hybrid transition metal oxide - mesoporous carbon nanocomposites: Synthesis and characterization as electrode materials for electrochemical capacitors

s04-P-207

Silvia Roldán (National Institute of Coal, Oviedo, Spain), Zoraida González, Clara Blanco, Rosa Menéndez, Ricardo Santamaría

Novel redox-active electrolyte carbon-based supercapacitor

s04-P-208

Seung Hye Seo (Department of Chemical Engineering and Division of Energy Systems Research, Ajou University, Suwon, Korea), Sunil Kandalkar, Hae-Min Lee

Electrodeposition of Cobalt Oxide Electrode for Supercapacitor Applications

s04-P-209

Yasushi Soneda (National Institute of Advanced Industrial Science and Technology (AIST), Energy Technology Research Institute, Tsukuba, Japan), Junya Yamashita, Masaya Kodama

Electrochemical capacitor using nitrogen enriched carbons with high surface area from melamine and magnesium citrate

s04-P-210

Masahiro Toyoda (Department of Applied Chemistry, Faculty of Engineering, Oita University, Oita, Japan), Hiroyuki Hara, Susumu Kashihara, Takashi Kyotani, Taro Kinumoto, Tomoki Tsumura

Estimation of miniaturized carbon fibers obtained through exfoliation process

s04-P-211

Hyun Yoo (Seoul National University, Seoul, Korea), Yuwon Park, Seung Oh

Effects of Inert Pillar in Graphene Layer on Electrochemical Activation of Expanded Graphite

s04-P-212

Songhun Yoon (Green Chemical Technology Division, Korea Research Institute of Chemical Technology (KRICT), Daejeon, Korea), Chul Wee Lee

Characterization of Equivalent Series Resistance (ESR) of Electric Double-layer Capacitor (EDLC) Electrodes using Transient Analysis

Late Registrations

s04-P-213

Hyun-Soo Kim (Korea Electrotechnology Research Institute, Changwon, Korea) Kyung-Min Jin, Ji-Hwa Jeong, Bong-Soo Jin

Electrochemical properties of $LiMn_xFe_{1-x}PO_4$/C cathode materials

s04-P-214

Narayan Chandra Deb Nath (Department of Advanced Technology Fusion, Konkuk University, Seoul, Korea), A. J. Saleh Ahammad

The Study of Functionalized Multi-Walled Carbon Nanotubes (MWCNTs) Incorporated into the Photoanode of Dye-Sensitized Solar Cells

s04-P-215

Manuel Maréchal (CEA, INAC, SPrAM, UMR 5819, CNRS, UJF, Grenoble) France

Composite PVDF-HFP-based proton-exchange membranes embedding sulfonated polymer-grafted silica particles

s04-P-216

Sang-Heon Lee (Department of Chemistry, Korea University, Seoul, Korea), Soon-Sung Suh, Cheol-Woo Yi,Keon Kim

A study of rechargeable Zn-Air batteries

Symposium 7: Electrodeposition for Material Synthesis and Nanostructure Fabrication

Device

s07-P-001

Mohamad Hojeij (Laboratoire d'Electrochimie Physique et Analytique, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland), Hubert Girault

Quantum dots solar cell: Electron transfer between CdSe and CdSe@CdS nanoparticles

Electrodeposition

s07-P-002

Ahmed Bahloul (Laboratoire des Matériaux et Systèmes Electroniques, Bordj Bou Arrérid, Algeria), Belkacem Nessark, Farid Habelhames

Conducting polymer/EMD cathodic materials for Zn-MnO_2 cells

s07-P-003

Jelena Bajat (Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Mihael Bucko, Milorad Tomic, Miomir Pavlovic, Ljubica Pavlovic

Electrodeposition of Zn-Mn alloys from alkaline plating bath containing ascorbic acid

s07-P-004

Nassima Benbrahim (Physique/ Faculty of Science, Laboratoire de Physique et Chimie des Matériaux, Tizi-Ouzou, Algeria), Ali Chenna, Eric Chainet, Stephane Pairis, Abdelaziz Kadri

Physicochemical characterisation of NiFe thin films electroplated on n-Si

s07-P-005

Baya Benfedda (Université Mouloud Mammeri de Tizi Ouzou, Tizi Ouzou, Algeria), Eric Chainet, Charlot Frederic, Stephane Coindeau, Nassima Benbrahim, Abdelaziz Kadri

Effect of the Plating Mode on the Morphological and Structural Properties of the Mn-Bi Electrodeposited System

s07-P-006

Murilo Cabral (Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Marcelo Luis Calegaro, Antonio Spinola Machado Sergio

Characterization of the Pb upd on Se thin films by the electrochemical quartz crystal nanobalance technique

s07-P-007

Chih-Wei Chien (Department of Material Science & Engineering, National Taiwan University, Taipei, Taiwan), Fu-Je Chen, Chun-Ling Liu, Chao-Sung Lin

Effect of sulfur-containing compounds on trivalent chromium electroplating

s07-P-008

Paula Cojocaru (Department of Physical and Chemistry, "Dunarea de Jos" Galati University, 47 Domneasca Street, 800008- Galati, Romania), Geta Carac, Daniela Ecaterina Rusu, Constantin Gheorghies

Structure and corrosion resistance of electrodeposited Nickel from a Sulphamate baths

s07-P-009

Andrea Boldarini Couto (Instituto Nacional de Pesquisas Espaciais (INPE), São José dos Campos, Brazil), Laura C. Santos, Mauricio R. Baldan, Neidenei G. Ferreira, Jorge T. Matsushima

Electrodeposition of Cu nanoparticles on BDD electrode: Reactions and nucleation mechanisms

s07-P-010

Rodrigo Della Noce (Departamento de Físico-Química Instituto de Química, Universidade Estadual Paulista-Unesp, Araraquara, Brazil), José Eduardo de Oliveira, Daniel Reinaldo Cornejo, Vitória Maria Tupinambá Souza Barthem, Dominique Givord, Assis Vicente Benedetti

Electrodeposition of ferromagnetic FeRh thin films alloys

s07-P-011

Margarita Dergacheva (Institute of Organic Catalysis and Electrochemistry, Almaty, Kazakhstan), Nataly Penkova, Natali Gudeleva, Vitaly Malahov

The investigation of nanosize layers in SnO_2/CdS/CdTe heterostructures as result of electrodeposition

s07-P-012

Margarita Dergacheva (Institute of Organic Catalysis and Electrochemistry, Almaty, Kazakhstan), Kazhmukan Urazov, Nataly Penkova, Natali Gudeleva

$CuIn_xGa_{1-x}Se_2$ thin films prepared by the electrodeposition

s07-P-013

Christelle Despas (LCPME, CNRS, Villers les Nancy, France), Yann Guillemin, Alain Walcarius

Electrodeposited Silica Thin Films with Controlled Hydrophobic/Hydrophilic Balance

s07-P-014

Constanze Donner (Institut für Chemie und Biochemie, Freie Universität Berlin, Berlin, Germany), Kay-Oliver Thiel, Moritz Hintze, Antje Vollmer

Underpotential deposition of Bismuth on differently modified Au(111) electrodes

s07-P-015

Nadezhda Ermakova (Tyumen State University, Tyumen, Russia)

Electrodeposition of metals from solutions of complexes with organic ligands: Grom research of the mechanism of reactions to management of electrochemical technologies

s07-P-016

Laure Fillaud (Interfaces, Traitements, Organisation et Dynamique des Systèmes, Paris, France), Gaëlle Trippé, Rodrigues Lescouêzec, Pascal Martin, Hyacinthe Randriamahazaka, Jean-Christophe Lacroix, Yves Journaux

New Multi-Fonctional Materials: Towards single molecule magnets with electroswitchable ligands

s07-P-017

Daryl Fox (School of Chemical and Pharmaceutical Sciences, FOCAS Institute, Dublin, Ireland), A.J. Betts, J.F. Cassidy

Palladium catalysts for ethanol oxidation in neutral media for the DEFC

s07-P-018

Kuan-Zong Fung (Department of Materials Science and Engineering, National Cheng Kung University, Tainan, Taiwan), Sue-Wei Lin

The effect of surface treatment on imprinting behavior of electroformed Ni mold

s07-P-019

Silvana García (Inst. de Ing. Electroquímica y Corrosión, Universidad Nacional del Sur, Bahía Blanca, Argentina), E. Nicolás Schulz, Daniel Salinas

Comparative Study of Rh Electrodeposition onto a Pretreated and Non-pretreated Glassy Carbon Electrode

s07-P-020

Humberto Gomez (Instituto de Quimica, Facultad de Ciencias, Pontificia Universidd Catolica de Valparaiso, Valparaiso, Chile)

ZnO Nanowires Electrodeposition in Non-Aqueous Solvent Assisted by Porous Alumina Templates

s07-P-021

Humberto Gomez (Instituto de Quimica, Facultad de Ciencias, Pontificia Universidad Catolica de Valparaiso, Valparaiso, Chile)

Influence of Zn(II) Concentration on the Electrodeposition of ZnO Nanorods on Thin Anodic Alumina Membranes

s07-P-022

Paula Grez (Instituto de Quimica, Facultad de Ciencias, Pontificia Universidad Catolica de Valparaiso, Valparaiso, Chile)

Electrodeposition and Characterization of CuO Thin Films Obtained Onto FTO Electrode

s07-P-023

Sunyoung Ham (Yonsei University, Wonju-si, Korea), Seungun Choi, Yujin Chae, Ki-jung Paeng, Noseung Myung, Krishnan Rajeshwar, Insook Rhee Paeng

Square Wave Cathodic Stripping Voltammetric Determination of Tellurium (IV) using a Bismuth Film Electrode

s07-P-024

Rodrigo Henriquez (Instituto de Química, Facultad de Ciencias, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile)

One-Step Potentiodynamic Synthesis of In_2O_3 Thin Films From DMSO Solution

s07-P-025

Benoit Illy (Department of Materials and London Centre for Nanotechnology, Imperial College London, London, United Kingdom), Amy Cruickshank, Raffaello da Campo, Stefan Schumann, Tim Jones, Sandrine Heutz, Martyn McLachlan, David McComb, Jason Riley, Mary Ryan

Optimisation of the Electrodeposition of Thin ZnO Layers with a Controllable Orientation

s07-P-026

Virginie Lair (LECIME, UMR, CNRS 7575, ENSCP, Chimie ParisTech, Paris, France), Valérie Albin, Ljiljana Cerovic, Oleg Lupan, Armelle Ringuedé

Nanostructured Ceria-based Thin Layers Obtained by Electrodeposition

s07-P-027

Cornel Constantin Lalau ("Dunarea de Jos" University, Galati, Romania), Adriana Ispas, Andreas Bund, Geta Carac, Constantin Gheorghies

Characterization of Electrodeposited Zn-TiO_2 Nanocomposite Coatings

s07-P-028

Patricia Lammel (EADS Innovations Works Dept. Metallic Technologies and Surface Engineering, Munich, Germany), Helena Simunkova, Adam Whitehead, Bernhard Gollas

Nickel- and chromium based coatings against damage caused by liquid impact

s07-P-029

Fouad Maroun (Laboratoire de Physique de la Matière Condensée, CNRS, Ecole Polytechnique, Palaiseau, France), Alexis Damian, Philippe Allongue

In-situ STM Studies of Electrochemical Deposition on Bimetallic Surfaces and of Monolayer Alloys

s07-P-030

Hiroshi Matsubara (Department of Materials Science and Technology, Nagaoka University of Technology, Nagaoka, Japan), Daisuke Hashimoto, Hideyuki Hayashizaki, Hiroshi Nishiyama, Kazunori Hodouchi, Eiji Osawa

Codeposition behavior of Nanodiamond/Single Nanodiamond in Nickel-Plated Films

s07-P-031

Yasushi Morinaga (Graduate School of Science and Technology, Shizuoka University, Hamamatsu, Japan), Yoshiumi Kohno, Yasuhisa Maeda

Photoanodic deposition of metal oxides and conducting polymers on iron oxide electrode in aqueous solution

s07-P-032

Elsayed Mostafa (Central Metallurgical R&D institute (CMRDI), Tebbin, Egypt), Lee Chow, Chow

Electrodeposition and Characterization of Zinc Telluride

s07-P-033

Christine Mousty (Laboratoire des Matériaux Inorganiques, Université Blaise Pascal, Aubière, France), Vanessa Prevot, Claude Forano, Aicha Khenifi, Erika Scavetta, Barbara Ballarin, Domenica Tonelli

Template-electrosynthesis of NiAl layered double hydroxides thin films

s07-P-034

Marthe Ndjeri (LAMBE, Evry, France), Sophie Peulon, Michel Schlegel, Annie Chaussé

In-situ grazing-incidence X-Ray diffraction during electrochemical measurements: Examples of birnessite thin layers on SnO_2

s07-P-035

Nebojsa Nikolic (ICTM-Institute of Electrochemistry, Belgrade, Serbia), Goran Brankovic, Miomir Pavlovic

Formation of open and porous copper structures by the regime of pulsating current (PC)

s07-P-036

Svetla Nineva (Institute of Physical Chemistry, Bulgarian Academy of Sciences, Sofia, Bulgaria), Tsvetina Dobrovolska, Ivan Krastev

Ag-Co and In-Co Deposition – Electrolytes and Coating Properties

s07-P-037

Kei Nishikawa (Japan Aerospace Exploration Agency, Tsukuba, Japan), Tetsuo Nishida, Yasuhiro Fukunaka, Michel Rosso

Dendrite Growth Mechanism of Li Metal

s07-P-038

Hitoshi Ogihara (Tokyo Institute of Technology, Department of Chemistry & Materials Science, Tokyo, Japan), Kaori Udagawa, Tetsuo Saji

Electrodeposition of Ni-B alloy films with high hardness

s07-P-039

Magdalena Osial (Laboratory of Electrochemistry, Faculty of Chemistry, University of Warsaw, Warsaw, Poland), Ewelina Nadolna, Kamila Wodzynska, Krystyna Jackowska

Synthesis and characterization of electrochemically deposited CdTe thin films

s07-P-040

Piotr Ozga (Institute of Metallurgy and Materials Science of the Polish Academy of Sciences, Krakow, Poland)

The Development of the Stable Citrate Baths for the Electrodeposition of Zn-Sn, Zn-Sn-Mo and Zn-Sn-W Alloys

s07-P-041

Sumin Park (Yonsei University, Wonju-si, Korea), Taekyeong Joo, Sanghyuk Kang, Ki-Jung Paeng

The deposition of Fe-Ni alloy nanoparticles and application to reduction of perchlorate

s07-P-042

Laetitia Philippe (EMPA, Thun, Switzerland)

Electrodeposition of Stainless Steel

s07-P-043

László Péter (Research Institute for Solid State Physics and Optics, Hung. Acad. Sci. Metals Research Dept., Budapest, Hungary), Attila Csik, Kálmán Vad, György Molnár

Calculation of the transport coefficient of Fe^{2+} in the electrolyte from the composition depth profile of electrodeposited Fe-Co-Ni alloys

s07-P-044

Jakub Reiter (Institute of Inorganic Chemistry of the AS CR, v.v.i., Rez near Prague, Czech Republic), Tereza Uhlirova, Peter Barath

Mesoporous manganese dioxide for oxygen reduction reaction

s07-P-045

Ichino Ryoichi (EcoTopia Sci. Inst., Nagoya Univ., Nagoya, Japan), Yasunami Takehiro, Yamamoto Yuya, Okido Masazumi

Preparation of size-controlled Copper Particles by Chemical Reduction Process in Aqueous Solutions

s07-P-046

Raul Salazar (CEA-Grenoble, LETI-Minatec Department of Nanotechnology, Grenoble, France), Claude Lévy-Clément

Galvanostatic electrodeposition of ZnO 2D layers

s07-P-047

Daniel Salinas (Instituto de Ingeniería Electroquímica y Corrosión, Universidad Nacional del Sur, Bahía Blanca, Argentina), Lorena Meier, Silvana García

Formation of Au/Pd-Sn trimetallic particles onto vitreous carbon by electrochemical deposition

s07-P-048

Daniel Salinas (Inst. de Ing. Electroquímica y Corrosión - Universidad Nacional del Sur, Bahía Blanca, Argentina), Rubén Ambrusi, Silvana García

Electrochemical Formation of Ag-Cd Nanowires onto HOPG

s07-P-049

Derck Schlettwein (Institute of Applied Physics, Justus- Liebig University Gießen, Gießen, Germany), Kerstin Strauch, Melanie Rudolph, Thomas Loewenstein

Pulsed electrodeposition of porous ZnO on passivated metal filaments on the way towards textile-based dye-sensitized photoelectrodes

s07-P-050

Masayo Shibata (Division of Chemistry, Graduate School of Humanities and Sciences, Ochanomizu University, Tokyo, Japan), Takara Sakurai, Hitoshi Fukumitsu, Toshihiro Kondo, Takuya Masuda, Kohei Uosaki

In situ Structural Studies on Pt Ultra-thin Layers on Au Single Crystal Surfaces by RSXS

s07-P-051

Helena Simunkova (CEST GmbH, Wiener Neustadt, Austria), Patricia Lammel, Adam Whitehead, Bernhard Gollas

Electrodeposition of Ni-W Alloys and Ni-W-Based Dispersion Coatings at Different Current Densities – Changes in Structure and Physical Properties

s07-P-052

Svetlana Surviliene (Metal Electrochemistry, Institute of Chemistry, Vilnius, Lithuania), Asta Cesiuniene, Vitalija Jasulaitiene, Algirdas Selskis

Electrodeposition of Cr-Ni Alloyfrom Cr(III) Electrolytes

s07-P-053

Marek Szklarczyk (Department of Chemistry, Warsaw University, Warsaw, Poland), Marcin Strawski, Krzysztof Bieñkowski, Bartosz Maranowski

Studies of Solution Composition Influence on Electrochemically Grown CdSe Deposits

s07-P-054

Abdelhafed Taleb (UPMC, LECIME, ENSCP-Chimie, ParisTech, CNRS, UMR 7575, Paris, France)

Morphology Control of the Electrochemical Deposition of Silver on Self-Assembled Gold Nanoparticle Templates: Surface Mobility of Thiolate Covered Nanoparticles Surfaces

s07-P-055

Elli Theodoridou (Institute of Physical Chemistry, Aristotle University, Thessaloniki, Greece), Vasil Bachvarov, Marina Arnaudova, Rashko Rashkov, Rita Bretzler, Andreas Zielonka

Electrodeposition Of Ni-Fe-Co-P Nano Islands on Carbon Felt Support By Pulse Technique

s07-P-056

Marcela Vazquez (Universidad Nacional de Mar del Plata, CONICET, Mar del Plata, Argentina), Matías Valdés, Albert Goossens

Electrodeposition of $CuInSe_2$ on TiO_2 coated TCO electrodes

s07-P-057

Marcela Vazquez (Universidad Nacional de Mar del Plata, CONICET, Mar del Plata, Argentina), Mariana Berruet, Maria A. Frontini

Electrochemical Etching of $CuInSe_2$

s07-P-058

Lourdes Vazquez Gomez (CNR, IENI, Padova, Italy), Sandro Cattarin, Nicola Comisso, Marco Musiani, Enrico Verlato

Electrodeposition of porous cobalt layers and their use in electrocatalytic processes

Engineering of Energy Conversion Systems

s07-P-059

Peter Bressers (TNO Netherlands Organisation for Applied Research, Eindhoven, Netherlands), Arjan Hovestad, Henk Rendering, Wouter Maijenburg

Patterned electroless plating using self assembling molecules for electronic circuitry

Modelling

s07-P-060

Ralf Peipmann (Lehrstuhl für Physikalische Chemie / Elektrochemie, Technische Universität Dresden, Dresden, Germany), Benedetto Bozzini, Claudio Mele, Ivonne Sgura

Investigation of Cu Surfaces in the Presence of Organic Additives Using STM

Manostructure

s07-P-061

Vaskevich Alexander (Department of Materials and Interfaces, Weizmann Institute of Science, Rehovot, Israel), Alexander B. Tesler, Tali Sehayek, Yishay Feldman, Israel Rubinstein

Mobility and reshaping of Au islands evaporated on conductive oxides

s07-P-062

Stephane Bastide (ICMPE, GESMAT, UMR 7182, Thiais, France), Xiaodong Wang, Barbara Laik, Jean-Pierre Pereira-Ramos

Si nanowires arrays as anodic materials in Li-ion microbattery

s07-P-063

Yan-Xin Chen (State Key Laboratory for Physical Chemistry of Solid Surfaces, College of Chemistry and Chemical Engineering, Department of Chemistry, Xiamen University, Xiamen, China), Sheng-Pei Chen, Zhi-You Zhou, P. Fornasiero, Shi-Gang Sun, C. Bianchini

Shape-Controlled Synthesis of Fe Microflowers and their Catalytic Properties for Nitrite Reduction

s07-P-064

Susana Cordoba de Torresi (Instituto de Quimica, Universidade de São Paulo, São Paulo, Brazil), Mariana P. Massafera

Electrodeposition of Poly(Pyrrole) Nanostructures using both Template and Template-free Methods

s07-P-065

Catherine Debiemme-Chouvy (LISE, Paris, France), Dhia Ben Salem

Template-free electrodeposition of polypyrrole nanowire array

s07-P-066

Thi Minh Nguyet Doan (Department of Chemistry, School of Science and Technology, Aalto University, Espoo, Finland), Christoffer Johans, Kyösti Kontturi

Optical properties of silver nanostructures by electrochemical deposition using templates

s07-P-067

Thi Minh Nguyet Doan (Department of Chemistry, School of Science and Technology, Aalto University, Espoo, Finland)

Optical properties of silver nanostructures by electrochemical deposition using templates

s07-P-068

Kuan-Zong Fung (Department of Materials Science and Engineering, National Cheng Kung University, Tainan, Taiwan)

Macroporous Ni/YSZ anode derived from PMMA microspheres

s07-P-069

Marianna Gniadek (Department of Chemistry, University of Warsaw, Warsaw, Poland), Sylwia Malinowska, Mikołaj Donten, Zbigniew Stojek

Polymerization at the Boundary of Two Immiscible Dispersed Phases as a Method of Synthesis of Polypyrrole-Metal Nanocomposite

s07-P-070

Lamia Hamadou (Mouloud Mammeri university of Tizi-Ouzou, Tizi-Ouzou, Algeria), Eliane Sutter, Abdelaziz Kadri, Nassima Benbrahim, Hubert Cachet

Formation and EIS caracterisation of TiO2 nanotube films

s07-P-071

Rui Huang (Department of Chemistry, Xiamen University, Xiamen, China), Sheng-Pei Chen, Na Tian, Zhi-You Zhou, Han Zhang, Shi-Gang Sun

Carbon supported high-index faceted Pt nanocrystal catalyst and its electrochemical preparation

s07-P-072

Borka Jovic (Materials Science/Institute for Multidisciplinary Research, University of Belgrade, Belgrade, Serbia), Vladimir Jovic, Uros Lacnjevac, Goran Brankovic, Slavko Bernik, Aleksander Recnik

Mechanism of Mo-Ni-O powders electrodeposition based on the results of their TEM analysis

s07-P-073

Makoto Kawamori (Department of Materials Science and Engineering, Kyoto University, Kyoto City, Japan), Shunsuke Yagi, Eiichiro Matsubara

Nickel Alloying Effect on Fabrication of Cobalt Nanoparticles in Nonaqueous Solution

s07-P-074

Petr Krtil (J. Heyrovsky Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, Prague, Czech Republic), Valery Petrykin, Gert Goransson, Matthias Peter, Elisabet Ahlberg

Local structure of pulse plated Ni:Zn alloys

s07-P-075

Chun-an Ma (Zhejiang University of Technology, Hangzhou, China), Zhao Yang Chen, Feng Ming Zhao

Synthesis of W-WC with dodecahedral crystal structure and its electrocatalytic performance

s07-P-076

Joanna Malecka (Departament of Chemistry, University of Warsaw, Warsaw, Poland), Agnieszka Wieckowska, Bohdan Korybut-Daszkiewicz

The examination of properties of macrocyclic complexes as molecular devices

s07-P-077

Mirfazlollah Mousavi (Department of Chemistry, Tarbiat Modares University, Tehran, Iran)

High Performance Electrochemical Supercapacitor Based on Self-doped Polyaniline and Polypyrrole Nanofibers

s07-P-078

M. F. Mousavi (Chemistry, Tehran, Iran), S. Zahra Bathaie

In situ Synthesis and Electrochemical Characterization of a Novel Catechol Terminated Self Assembled Monolayer

s07-P-079

Carlos M. Müller (Department of Physical Chemistry, University of Barcelona, Barcelona, Spain), Beatriz Gastón-García, Eva García-Lecina, José A. Díez, Marc Belenguer

Development and effect of the burning phenomenon during the anodic oxidation of aluminium

s07-P-080

Gilbert Noell (Organic Chemistry, Siegen University, Siegen, Germany)

Electrochemical Switching of the Flavopotein Dodecin on Surfaces

s07-P-081

Michael Ongaro (Department of Physical Chemistry, University of Venice, Venice, Italy), Paolo Ugo, Andrea Mardegan, Alessandro Patelli, Paolo Scopece

TiO_2 Nanofibers for Energy Conversion by Improved Sol-Gel Template Synthesis

s07-P-082

Jorge Pavez (Departamento de Quimica de los Materiales, Facultad de Quimica y Biologia, Universidad de Santiago de Chile, Santiago, Chile)

Electrosynthesis of polyaniline nanowires using a hybrid template

s07-P-083

Jorge Pavez (Departamento de Quimica de los Materiales, Facultad de Quimica y Biologia, Universidad de Santiago de Chile, Santiago, Chile)

Surface Array of Gold nanowires by electrdeposition in porous alumina template

s07-P-084

Salvatore Piazza (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Università di Palermo, Palermo, Italy), Rosalinda Inguanta, Patrizia Livreri, Carmelo Sunseri

Template Electrodeposition of CIS and CIGS Nanowires for Application in Solar Cells

s07-P-085

Lidija Rafailovic (Centre of Electrochemical Surface Technology, CEST, Wiener Neustadt, Austria)

Characterization of Electrochemically Deposited Nanostructured Ternary NiCoFe Alloy Powders

s07-P-086

Monica Santamaria (Dipartimento di Ingegneria Chimica dei Processi e dei Materiali, Università di Palermo, Palermo, Italy), Patrizia Bocchetta, Francesco Di Quarto

Electrodeposition and physico-chemical characterisation of Fe, Ti and mixed Fe/Ti oxides nanotubes

s07-P-087

Ricardo Schrebler (Instituto de Química, Facultad de Ciencias Pontificia, Universidad Católica de Valparaíso, Valparaíso, Chile), Francisco Herrera, Paula Grez, Eduardo Muñoz, Ana Burgos, Luis Ballesteros, Hernán Altamirano, Enrique Dalchiele

Electrosynthesis and Photoelectrochemical Characterization of Nanostructured α-Fe_2O_3 Electrodes modified superficially

s07-P-088

Olga Swiech (Department of Chemistry, University of Warsaw, Warsaw, Poland), Natalia Hrynkiewicz-Sudnik, Michal Wojcik, Wiktor Lewandowski, Andrzej Kaim, Renata Bilewicz

Free-radical adsorption as a method of binding gold nanoparticles to gold electrode surfaces

s07-P-089

Abdelhafed Taleb (UPMC, LECIME, ENSCP, Chimie, ParisTech, CNRS, UMR 7575, Paris, France), Claire Mangeney

Silver electrodeposition on HOPG substrate: Electrocatalytic and patterning effects of self-assembled chemically anchored gold nanoparticle

s07-P-090

Zhong-Qun Tian (State Key Laboratory of Physical Chemistry of Solid Surfaces and College of Chemistry and Chemical Engineering, Xiamen, China), Qing-Ning Jiang, Huan Li, Ning Yang, Bing-Sheng Yin, Hai-Xin Lin, De-Yu Liu

The Cleaning Method for Removing Surfactants from Metal Nanocrystals for Surface Electrochemistry

s07-P-091

Yi-Min Wei (State Key Laboratory of Physical Chemistry of Solid Surfaces and Department of Chemistry, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China), Yong-Chun Fu, Jia-Wei Yan, De-Yin Wu

Iron Electrodeposition in an Ionic Liquid: Shape-ordered Growth of Nanostructures

s07-P-092

Paula Cojocaru (Politecnico di Milano, Milano, Italy), Luca Magagnin, Manuel Vazquez

Magnetic properties of Ni/Cu multilayer nanowires by electrodeposition in alumina template

Symposium 8: Electrochemical Process Engineering and Technology

Alternative Electrochemical Processes

s08-P-001

Ulker Bakir Ogütveren (Anadolu University, Environmental Engineering, Eskisehir, Turkey), Yusuf Yavuz, A. Savas Koparal

Electrocoagulation of Dairy Industry Wastewater by using Parallel Plate Iron-Aluminum Electrodes

s08-P-002

Rodnei Bertazzoli (Department of Materials Engineering- State University of Campinas, Campinas, Brazil), Marcos Lanza, Robson Rocha

Ethylene Fed TiO_2-RuO_2/PTFE Gas Diffusion Electrode for the Electrosynthesis of Ethylene Glycol

s08-P-003

Dancheng Chen (Laboratoire de Génie Chimique, UMR, CNRS 5503, Université Paul Sabatier, Toulouse, France), Paul-Louis Fabre, Olivier Reynes

Electrocatalytic carboxylation of chloroacetonitrile into cyanoacetic acid by a cobalt complex

s08-P-004

Arely Cárdenas (Centro de Investigación y Desarrollo Tecnológico en Electroquímica, SC, Sanfandila, Pedro Escobedo, Mexico), Carlos Frontana, Linda González

Optimizing the Chemical Conditions for the Construction of an Electrochemical Biotreatment Reactor for Azo Dyes

s08-P-005

Aracely Hernández (Facultad de Ciencias Quìmicas, Universidad Autónoma de Nuevo León, San Nicolas de los Garza, Mexico), Minerva Villanueva, Enric Brillas, Carlos M. Sánchez, Juan M. Peralta-Hernández

Electrochemical Study of Fe (VI) Electrogenerated on Boron-Doped Diamond Anode in Acidic Media

s08-P-006

Carmen Jiménez Borja (Departamento de Ingeniería Química, Universidad de Castilla La Mancha (UCLM), Ciudad Real, Spain), Alexandros Nakos, Fernando Dorado, Alexandros Katsaounis, José Luis Valverde

Induced osillations by NEMCA effect over Rh electrochemical catalyst

s08-P-007

Engracia Lacasa (Department of Chemical Engineering. Faculty of Chemistry, University of Castilla-La Mancha, Ciudad Real, Spain), Cristina Sáez, Francisco Jesús Fernández, Javier Llanos, Manuel Andrés Rodrigo, Pablo Cañizares

Nitrate-polluted water treatment by means of enhanced electroreduction

s08-P-008

Rubén López-Vizcaíno (Departamento de Ingeniería Química, Facultad de Ciencias Químicas, Universidad de Castilla La Mancha, Ciudad Real, Spain), Pablo Cañizares, Manuel Andrés Rodrigo, Cristina Sáez

Study of the electrokinetic transport of surfactants in clayed soils

s08-P-009

Chun-an Ma (Zhejiang University of Technology, Hangzhou, China), Zhaohua Li, You Qun Chu

Indirect Electrochemical Synthesis of Benzaldehyde Mediated by Ce(IV)/Ce(III) in Methanesulfuric Acid

s08-P-010

María José Martín de Vidales (Department of Chemical Engineering, Faculty of Chemistry, University of Castilla-La Mancha, Ciudad Real, Spain), Manuel Andrés Rodrigo, Cristina Sáez, Pablo Cañizares

Removal of progesterone from waters and wastewaters by conductive-diamond electrochemical oxidation

s08-P-011

Michele Mascia (Dipartimento di Ingegneria Chimica e Materiali, Università di Cagliari, Cagliari, Italy), Annalisa Vacca, Simonetta Palmas, Anna Maria Polcaro, Anna Da Pozzo

An experimental study on the electrochemical oxidation of glycerol to obtain valuable products

s08-P-012

Piotr Ochal (Department of Materials Science and Engineering, Norwegian University of Science and Technology (NTNU), Trondheim, Norway), Jose Lius Gomez de la Fuente, Mikhail Tsypkin, Frode Seland, Svein Sunde

CO stripping at Ru nanoparticles

s08-P-013

Edward Roberts (School of Chemical Engineering and Analytical Science, University of Manchester, Manchester, United Kingdom), Charles Osarinmwian, Ian Mellor

Modelling of the Cambridge FFC Process: Solid Phase Reduction of Metal Oxides in a Molten Salt Electrolyte

s08-P-014

Nataliia Rybakova (CEST, Centre of Competence in Electrochemical Surface Technology, Wr. Neustadt, Austria)

Electrochemical Co-deposition of TiB_2 and TaB_2 Layers out of FLiNaK Electrolyte

s08-P-015

Sakina Seghir (Institut Jean Lamour, UMR, CNRS 7198 - Groupe Electrochimie des Matériaux Université Paul Verlaine Metz, Nancy Université, Metz cedex 3, France), Nicolas Stein, Clotilde Boulanger, Jean-Marie Lecuire

Mobility of cations into Chevrel compounds for their electrochemical selective extraction

s08-P-016

Michail Tsampas (Chemical Engineering, University of Patras, Patras, Greece), Foteini Sapountzi, Sofia Divane, Evangelos Papaioannou, Constantinos Vayenas

Enhanced performance of CO poisoned PEM fuel cells *via* triode operation

s08-P-017

Reidar Tunold (Department of Materials Science and Engineering, Trondheim, Norway), Geir M. Haarberg, Karen S. Osen, Ana M. Martinez

Anode Processes on Carbon in Chloride-Oxide Melts

s08-P-018

Ogutveren Ulker Bakir (Anadolu University, Eskisehir, Turkey), Umran Tezcan Un

Electrocoagulation of Reactive Blue using Bach Aluminum Reactor

s08-P-019

Martins Vanags (Insitute of Solid State Physics, University of Latvia, Riga, Latvia), Janis Kleperis, Gunars Bajars, Andrejs Lusis

Peculiarities of water electrolysis with high voltage short pulses

s08-P-020

Hai Yang (GE Global Research Center, Shanghai, China), Wei Cai, Rihua Xiong, Chang Wei

High Water Recovery Electrochemical Technology Development for Water Reuse

s08-P-021

Yusuf Yavuz (Anadolu University, Environmental Engineering, Eskisehir, Turkey), A. Savas Koparal, Ulker Bakir Ögütveren

Treatment of Dairy Industry Wastewater by Electrocoagulation Using Bipolar Trickle Tower Reactor

Electrochemical Technology for Reduced Emissions

s08-P-022

Rodnei Bertazzoli (Mechanical Engineering Department, Applied Electrochemistry and Corrosion Laboratory, State University of Campinas, Campinas, Brazil), Leticia Ferreira, Yohannes Kiros, Ann Cornell

CO_2 Electroreduction to Formic Acid Production

s08-P-023

Karel Bouzek (Department of Inorganic Technology, Institute of Chemical Technology Prague, Prague, Czech Republic), Kristyna Vitkova, Roman Kodym, David Tvrznik, Dalimil Snita

Determination of Hydraulic Characteristic of an Industrial Electrodialysis Unit

s08-P-024

Karel Bouzek (Department of Inorganic Technology, Institute of Chemical Technology Prague, Prague, Czech Republic), Petr Panek, Roman Kodym, Dalimil Snita

3D Mathematical Modeling of Electrodialysis Process in the Industrial-Scale

s08-P-025

Yuliya Dzyazko (Department of Membrane and Sorption Processes and Materials, V.I. Vernadskii Institute of General & Inorganic Chemistry, Kiev, Ukraine)

Electromembrane processes: Transport in the system of granulated ion-exchanger [xxx] solution

s08-P-026

Raissa El-Haddad (Department of Mechanical & Industrial Engineering, Concordia University, Montreal, Canada), Rolf Wuthrich

Measuring the Electro Active Surface of Nickel Nanoparticles

s08-P-027

Alexandros Katsaounis (Environmental Engineering, Technical University of Crete, Chania, Greece), Dimitrios Kalderis

Electrochemical degradation of Reactive Red 120 using DSA and BDD anodes

s08-P-028

Carlos Alberto Martinez Huitle (CCET, Department of Chemistry, Universidade Federal do Rio Grande do Norte, Natal, Brazil), Djalma Ribeiro da Silva

Electrochemical Oxidation Process for Removing Petroleum Hydrocarbons from Produced Water Generated by Brazilian Petrochemical Industry

s08-P-029

Jessica O'Brien (CSIRO, Energy Technology, Mayfield West, Australia), Jim Hinkley, Scott Donne

The Electrochemical Oxidation of Aqueous Sulfur Dioxide: Reaction Sensitivities and Sulfur Catalysis

s08-P-030

Romeu C. Rocha-Filho (Dept. of Chemistry, S. Carlos Federal University, S. Carlos, Brazil), José M. Aquino, Nerilso Bocchi, Sonia R. Biaggio

Electrochemical degradation of the Direct Black 22 dye on a β-PbO_2 anode assessed by the response surface methodology

s08-P-031

Ignasi Sirés (Department of Physical Chemistry, Faculty of Chemistry, Universitat de Barcelona, Barcelona, Spain), Carlos Ponce de León, Frank C. Walsh

Preparation of PbO_2 deposits in an FM01-LC electrolyzer for the decontamination of dye solutions

s08-P-032

Chun-An Ma (Zhejiang University of Technology, Hangzhou, China), Hua hua Jiang, Yin hua Xu

Indirect Electrochemical Reduction of Indanthren Dye

s08-P-033

Chun-An Ma (Zhejiang University of Technology, Hangzhou, China), Cheng Pu Chu, Yin Hua Xu

Preparation Insoluble Saccharin Sodium by Indirect Electo-oxidation of O-toluene Sulfo Namide

Engineering of Energy Conversion Systems

s08-P-034

Giorgi Agladze (Technical University of Georgia, Tbilisi, Georgia), Paata Nikoleishvili, Gigla Tsurtsumia, Giorgi Gorelishvili, Valentina Kveselava

Generation of Hydrogen Peroxide, Hydroxyl Radicals and Sodium Perborate in Various Electrochemical Reactors and Fuel Cell Systems

s08-P-035

Karel Bouzek (Department of Inorganic Technology, Institute of Chemical Technology Prague, Prague, Czech Republic), Petr Mazur, Martin Paidar, Vitezslav Knotek, Dalibor Vojtech

Magnesium alloys as the hydrogen carriers for PEM type fuel cell

s08-P-036

Karel Bouzek (Department of Inorganic Technology, Institute of Chemical Technology Prague, Prague, Czech Republic), Roman Kodym, Svein Sunde

Mathematical Modeling of Platinum Catalyst Dissolution and Redistribution in the PEM Type Fuel Cells

s08-P-037

Jaromir Hnat (Institute of Chemical Technology Prague, Prague, Czech Republic), Martin Paidar, Karel Bouzek, Jakub Polonsky, Jan Schauer

Novel Heterogeneous Anion Exchange Membrane for the Alkaline Water Electrolysis

New Electrode Materials for Processes

s08-P-038

Henry Bergmann (Anhalt University, FB 6/7, Koethen, Germany), Tatiana Yurchuk, A. Savas Koparal

Electrolysis of waters containing nitrate ions at mg dm^{-3} level of concentration using BDD anodes

s08-P-039

Henry Bergmann (Anhalt University, FB 6/7, Koethen, Germany), Tatiana Iourtchouk

Formation of bromate and perbromate on BDD anodes

s08-P-040

Neidenei G. Ferreira (Instituto Nacional de Pesquisas Espaciais, São José dos Campos, Brazil), Andrea B. Couto, Leonardo I. Medeiros, Jorge T. Matsushima, Maurício R. Baldan

Reversibility behavior of nanocrystalline diamond coating grown on carbon fibers produced at different temperatures

s08-P-041

Shigenori Kashimura (Science, Higashiosaka, Japan), Manabu Ishifune, Yoshihiro Murai, Hiroya Kakegawa

Evaluation of Anodic 0xidation Durability of PAN Based Carbon Fibers

s08-P-042

Nurcan Mamaca (Department of Chemistry, Université de Poitiers, LaCCO, UMR 6503 Poitiers, France), Karine Servat, Teko Napporn, Boniface Kokoh

Synthesis and characterization of Ruthenium Iridium nanoparticles for oxygen evolution reaction

s08-P-043

Evangelos Papaioannou (Chemical Engineering, University of Patras, Patra, Greece), Stamatios Souentie, Foteini Sapountzi, Ahmad Hammad, Diamantoula Labou, Susanne Brosda, Constantinos Vayenas

The role of TiO_2 layers deposited on YSZ on the electrochemical promotion of C_2H_4 oxidation on Pt

s08-P-044

Miomir Pavlović (ICTM, Department of Electrochemistry, University of Belgrade, Belgrade, Serbia), Ljubica Pavlović, Miroslav Pavlović, Uroš Lačnjevac

Electrodeposition of Iron Powder Particles of Different Morphologies, Structures and its Corrosion Protection

s08-P-045

Ljubica Pavlović (ICTM, Department of Electrochemistry, University of Belgrade, Belgrade, Serbia, Belgrade, Serbia), Miomir Pavlović, Uroš Lačnjevac, Milorad Tomić

The Influence of Electrolyte Types and Current Density on the Morphology of Fe Powder

s08-P-046

Charlotte Racaud (Laboratoire de Génie Chimique UMR 5503, Toulouse, France), Karine Groenen Serrano, André Savall, Philippe Rondet, Nathalie Bertrand

Potentialities of boron doped diamond for the electrochemical regeneration of Ag(II)

s08-P-047

Sandra Rondinini (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Gabriele Aricci, Ottavio Lugaresi, Alessandro Minguzzi, Alberto Vertova

Nanostructured Silver Gas Diffusion Electrodes for the Direct Hydrodehalogenation of Gaseous Trichloromethane

s08-P-048

Mauro Santos (Laboratório de Eletroquímica e Materiais Nanoestruturados, Centro de Ciências Naturais e Humanas, Unversidade Federal do ABC, Santo André, Brazil), Mônica Helena Assumpção, Rodrigo Fernando De Souza, Marcelo Calegaro, Marcos Lanza

Comparative Study of W/C Electrocatalysts with Vulcan and Printex Carbon for *in situ* Generation of H_2O_2

s08-P-049

Heidi Van Parys (Research Group of Electrochemical and Surface Engineering, Vrije Universiteit Brussel, Brussels, Belgium), Flora Tomasoni, Tim Aerts, Jeroen van Beeck, Annick Hubin, Johan Deconinck, Herman Terryn

Hydrogen bubble evolution during the AC electrograining of aluminium

s08-P-050

Codruta Vlaic (Faculty of Chemistry and Chemical Engineering, Babes Bolyai University, Cluj-Napoca, Romania), Sorin Aurel Dorneanu, Petru Ilea

Optimisation of Graphite Electroactivation for Hydrogen Peroxide Electrosynthesis

s08-P-051

Sachio Yoshihara (Department of Advanced Interdisciplinary Sciences, Graduate School of Engineering, Utsunomiya University, Utsunomiya, Japan), Vembu Suryanarayanan, Muthu Murugananthan, Yanrong Zhang

Recent Trends in Diamond Electrochemistry

s08-P-052

Chun-An Ma (Zhejiang University of Technology, Hangzhou, China), Dan Dan Bao, Mei Chao Li

Electrocatalytic activity of cathode materials for brominated benzoic acids

s08-P-053

Chun-An Ma (Zhejiang University of Technology, Hangzhou, China), Yan He, Yin Hua Xu

The preparation of Pd-Ag alloy using electrochemical method and its catalytic activity for reductive dechlorination

Late registration

s08-P-053

Aracely Hernández-Ramírez (Universidad Autonoma de Nuevo Leon, San Nicolàs de los Garza, Mexico), Yazmin López-Zamora, Laura H. Reyes, Jorge L. Guzmán-Mar

Degradation of real pesticide mixture in aqueous medium by electro-Fenton process using carbon cloth cathode

Symposium 9: Molecular Electrochemistry - Methods, Models, Molecules, Materials

Electrosynthesis and Electrochemical Methods

s09-P-001

Milka Avramov Ivic (ICTM, Institute of Electrochemistry, University of Belgrade, Belgrade, Serbia)

Voltammetric Determination of Roxithromycin in Human Urine and Runac Tablets Compared to its Simultaneous HPLC Determination

s09-P-002

Nicola Bortolamei (Department of Chemical Sciences, University of Padova, Padova, Italy), Abdirisak Ahmed Isse, Armando Gennaro

Dissociative Electron Transfer to Alkyl Halides of Relevance to Atom Transfer Radical Polymerization. Mechanism of Activation by Copper(I) Complexes

s09-P-003

Toshio Fuchigami (Department of Electronic Chemistry, Tokyo Institute of Technology, Yokohama, Japan), Takahiro Sawamura, Shotaro Hayashi, Shinsuke Inagi

Direct and Indirect Anodic Fluorination of Organic Molecules and Conducting Polymers in Ionic Liquids

s09-P-004

Julien Godeau (Laboratoire de Chimie des Molécules Bioactives et des Arômes, Université de Nice-Sophia Antipolis, CNRS, UMR 6001, Institut de Chimie de Nice, Nice, cedex 2, France), Elisabet Dunach, Sandra Olivero, Christine Pintaric

Electrochemical preparation of allylboronic esters

s09-P-005

Abdirisak Ahmed Isse (Department of Chemical Sciences, University of Padova, Padova, Italy), Patrizia De Paoli, Nicola Bortolamei, Armando Gennaro

Kinetics of Activation of Alkyl Halides by Copper(I) Complexes used as Catalysts in Atom Transfer Radical Polymerization

s09-P-006

Anny Jutand (Departement de Chimie, Ecole Normale Superieure, Paris Cedex 5, France), Christian Amatore, Chama Cammoun

Electrooxidation and catalytic $Pd(OAc)_2$/benzoquinone as a versatile procedure for reactions involving Ar-H, Ar-B or C-H activations

s09-P-007

Nadia Ktari (Physicochimie des Electrolytes, Colloïdes et Sciences Analytiques - UMR 7195 ESPCI, Paris, France), Bruno Teste, Jean-Michel Siaugue, Frédéric Kanoufi, Catherine Combellas

Patterning of Polystyrene by Scanning Electrochemical Microscopy. Application to Nanoparticles Immobilization

s09-P-008

Elene Kvaratskhelia (R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Tbilisi, Georgia)

The Electrolytic Dissociation of 1,1-Cyclopentane- and 1,1-Cyclohexanedicarboxylic Acids

s09-P-009

Dominique Lucas (ICMUB, UMR 5260, Université de Bourgogne, Dijon, France), Jean-Cyrille Hierso, David Evrard, Charles Devillers, Caihong Luo

Electrochemical studies on ferrocenyl polyphosphine palladium complexes in relation to their catalytic activity

s09-P-010

Hirofumi Maekawa (Department of Materials Science and Technology, Nagaoka University of Technology, Nagaoka, Japan), Yuhei Shimizu, Ikuzo Nishiguchi

Reductive Cross-Coupling Reaction of Coumarin and Ethyl Trifluoroacetate by Electron Transfer from Magnesium

s09-P-011

M. J. Medeiros (University of Minho, Braga, Portugal), A.C. Duraes, A. Esteves, M. Machado, D. Pletcher

Reductive Cyclisation of D-Glucose-based Unsaturated Substrates by Indirect Electrochemical Approach in "Green" Media

s09-P-012

Dmitry Mikhaylov (A. E. Arbuzov Institute of Organic and Physical Chemistry, Kazan, Russia), Yulia Budnikova, Tatyana Gryaznova, Oleg Sinyashin

Nickel-catalyzed Electrochemical Fluoroalkylation

s09-P-013

Raquel Oliveira (Departamento de Química, Universidade do Minho, Braga, Portugal), M. Fátima Bento, A. Paula Bettencourt, M. Dulce Geraldo

Electrochemical Generation of Hydroxyl Radicals for the Characterization of Antioxidants Activity

s09-P-014

Carolin Regenbrecht (Kekulé Institute for Organic Chemistry and Biochemistry, Bonn, Germany), Siegfried Waldvogel

Electrochemical Conversion of Lignin

s09-P-015

Sandra Rondinini (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Christian Amatore, Gabriele Aricci, Ottavio Lugaresi, Alessandro Minguzzi, Alberto Vertova, Zhong-Qun Tian

Surface Effects in the Electroreduction of Benzyl Chloride at Silver Electrodes

s09-P-016

Galyna Shapoval (Institute of Bioorganic Chemistry and Petrochemistry, National Academy of Sciences of Ukraine, Kyiv, Ukraine), Olga Kruglyak, Nataliia Nestiuk

Electrochemical Modeling of Antioxidant Action of Sulfur-Containing Biologically Active Substances

s09-P-017

Esmail Tammari (Chemistry Department, Payame Noor University, Asadabad, Iran), Davood Nematollahi, Zahra Kohzadi

Electrochemical Oxidation of Hydroquinone in the Presence of Tetraphenylcyclopentadienone. Investigation of Electrochemically Induced Diels-Alder Reaction

s09-P-018

Pascale Tremel (Université de Nice Sophia-Antipolis ICN LCMBA, Nice Cedex 2, France), Sandra Olivero, Elisabet Dunach

Diene cycloisomerization by electro-oxydation

s09-P-019

Saitoh Tsuyoshi (Department of Chemistry, Keio University, Yokohama, Japan), Chika Shimada, Eriko Suzuki, Rika Obata, Yuichi Ishikawa, Kazuo Umezawa, Shigeru Nishiyama

Synthesis of novel epoxyquinol analogs and evaluation of NF-κB inhibitory activity

s09-P-020

Marcelo Firmino de Oliveira (USP, Faculdade de Filosofia, Ciencias e Letras de Ribeirão Preto - Departamento de Química, Ribeirão Preto, Brazil), Marco Antonio Balbino, José Fernando de Andrade

Voltammetric analysis of Δ9-tetrahydrocannabinol in glassy carbon electrode

Modelling for and through Electrochemistry

s09-P-021

Ali A. Ensafi (Department of Chemistry, Isfahan University of Technology, Isfahan , Iran)

Voltammetric Determination of Enrofloxacin and Ciprofloxacin using Multiwall Carbon Nanotubes Modified Glassy Carbon Electrode By Least-Squares Support Vector Machines

s09-P-022

Maxim Fedorov (Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany), Andrey Frolov, Alex Rozhin

Selective Ion Interactions with Biopolymers and Nano-objects

s09-P-023

Patrizia Romana Mussini (Dipartimento di Chimica Fisica, Università degli Studi di Milano, Milano, Italy), Armando Gennaro, Abdirisak Ahmed Isse, Serena Arnaboldi, Manuela Rossi

The solvent effect on the electrocatalytic cleavage of carbon-halide bonds on silver and gold electrodes: A comparison between concerted and stepwise DET cases

s09-P-024

Martín Patrito (Dpto. Fisicoquímica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Daniela Jacquelín, Manuel Perez, Fernando Cometto, Patricia Paredes-Olivera

Switching Properties of Mixed Carboxylic Acid Terminated Self Assembled Monolayers on Au(111)

s09-P-025

Leandro Pinto (Department of Chemistry, UNESP, Bauru, Brazil), Antonio Carlos Ângelo, Vinícius Lima

First-Principles Calculations on PtSn and AuSn Intermetallic Phases Surfaces

s09-P-026

Carmen Maria Soto (Universidad de Murcia, Departamento Quimica-Fisica, Murcia, Spain), Angela Molina, Joaquin González, Leslaw Bieniasz

Application of exponential current-time perturbations for reaching stationary polarization curves

s09-P-027

Encarnacion Torralba (Departamento de Química-Física, Universidad de Murcia, Murcia, Spain), Angela Molina, Joaquín. A. Ortuño, Carmen Serna

Chronopotentiometric studies of ion transfer across liquid membranes

s09-P-028

Jay Wadhawan (Department of Physical Sciences (Chemistry), The University of Hull, Kingston-upon-Hull, United Kingdom), Louise Evans, Matthew Thomasson, Stephen Kelly

Quantifying Two-Dimensional Axiosymmetric Diffusion Anisotropy using Ultramicrodisc Electrodes

s09-P-029

Hisatsugu Yamasaki (Battery Research Division, Toyota Motor Corporation, Higashifuji Technical Center, Susono, Japan), Akio Mitsui, Yuki Kato

Consistency of the prediction of Li ion path between simulations and experiment in Li_4GeS_4 electrolyte

s09-P-030

Damien Arrigan (Nanochemistry Research Institute, Department of Chemistry, Curtin University of Technology, Perth, Australia), Jorg Strutwolf, Courtney Collins, Wojciech Adamiak, Mary Manning

Microfluidic potentiometry for monitoring of ion reactions: Use of diffusion potentials to detect protonation and complexation

Redox-active Materials

s09-P-031

Joaquin Arias-Pardilla (Center for Electrochemistry and Intelligent Materials, Universidad Politécnica de Cartagena, Cartagena, Spain), Toribio F. Otero, Maria Ines Roca, Mercedes Alfaro

Electrolyte and solvent influence on the polypyrrole oxidation kinetics: Reaction orders and kinetic coefficients

s09-P-032

Diana Fernandes (Department of Chemistry, Aveiro, Portugal), Christopher Brett, Ana Cavaleiro

Electrochemical Behaviour of Modified Electrodes Based on PEDOT and Keggin-type Polyoxtungstates

s09-P-033

Pier Parpot (Dept. Chemistry, University of Minho, Braga, Portugal), Marta Ferreira, Isabel Neves, António Fonseca, Fernando Pereira, José Figueiredo

Carbon nanotubes as electrocatalysts for the oxidation of organic compounds in water

s09-P-034

Manuela Rueda (Department of Physical Chemistry, University of Seville, Seville, Spain), Francisco Prieto, Inmaculada Navarro, Reyes Romero

Gramicidin modified-phospholipid-coated mercury electrodes as model system of partially blocked electrodes

s09-P-035

Jose Zagal (Department of Chemistry of Materials, Faculty of Chemistry and Biology, Santiago, Chile), Ramiro Arratia

Similarity between Tafel plots and Volcano Plots when Comparing the Electrocatalytic Activity of Surface-Confined Metal Complexes

Redox-active Molecules

s09-P-036

Ana Paula Bettencourt (Departamento de Química, Universidade do Minho, Braga, Portugal)

Electrochemical evaluation of the antioxidant activity of a family of 2-phenolic adenine derivatives

s09-P-037

Valentina Bonometti (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Francesco Sannicolò, Giovanni Rampinini, Angela Digennaro, Tiziana Benincori, Simona Rizzo, Monica Panigati, Cristina Cerqui, Patrizia Romana Mussini

Towards a Rationalization of Electronic Properties of (Thiophene+Fluorene) Semiconductors: Modulating the HOMO-LUMO Gap by Modyifing the Fluorene Core

s09-P-038

Leïla Boubekeur-Lecaque (Département de Chimie UMR, CNRS, ENS, UPMC, Ecole Normale Supérieure, Paris, France), Koyel X. Bhattacharyya, Bernd Schollhorn, Emmanuel Maisonhaute, Christian Amatore

Organometallic derivatives of BAPTA: Towards Electrochemically Controlled Cation Release

s09-P-039

Ahmet Coskun (Chemistry Deparment, Selcuk University, Konya, Turkey), Ziya Erdem Koc, Haluk Bingol, Ahmet Ozgur Saf, Sabri Alpaydin

Structural, Electrochemical and Spectroscopic Characterizations of Novel Tripodal-benzimidazoles from 2,4,6-tris(p-formylphenoxy)-1,3,5-triazine

s09-P-040

Thomas Doneux (Chimie Analytique et Chimie des Interfaces, Faculte des Sciences, Université Libre de Bruxelles, Bruxelles, Belgium), Veronika Ostatna, Emil Palecek

Mechanism of Hydrogen Evolution Catalysis by Peptides and Proteins. A Case Study with Bovine Serum Albumin

s09-P-041

Christian Durante (Chemical Sciences, University of Padova, Padova, Italy), Andrea Mattarei, Mario Zoratti, Cristina Paradisi, Armando Gennaro

Redox Properties of New Quercetin-Based Potential Prodrugs

s09-P-042

Teodor Adrian Enache (University of Coimbra, Coimbra, Portugal), Ana Maria Oliveira-Brett

Cysteine and Methionine Electrochemical Oxidation at Glassy Carbon and Boron Doped Diamond Electrodes

s09-P-043

Gert Göransson (Department of Chemistry, University of Gothenburg, Göteborg, Sweden)

A study of surface bound Cu-[N_2S_2] complexes

s09-P-044

Yutaka Harima (Graduate School of Engineering, Hiroshima University, Higashi-Hiroshima, Japan)

Charge-Modulation Spectroscopy for Optical Characterization of Cation Radicals in Molecular Films

s09-P-045

Teruo Hinoue (Department of Chemistry, Faculty of Science, Shinshu University, Matsumoto, Japan), Shoko Furuhashi, Hirosuke Tatsumi, Takashi Kimoto

Current Generation at a NitrobenzenelWater Interface Arising from Photochemical Reaction of Fullerene

s09-P-046

Magdaléna Hromadová (J. Heyrovsky Institute of Physical Chemistry of ASCR, v.v.i., Prague, Czech Republic), Viliam Kolivoška, Lubomír Pospíšil, Michal Valášek

Redox properties of Extended Viologen Molecules – From Monomer to Hexamer

s09-P-047

Matteo Iurlo (Department of Chemistry, Univertity of Bologna, Bologna, Italy), G. Dan Pantos, Emiliano Tamanini, Massimo Marcaccio, Francesco Paolucci

Electrochemical Studies on Supramolecular Nanotubes and their Inclusion Complexes

s09-P-048

Patricia Janeiro (Departamento de Quimica, Universidade de Coimbra, Coimbra, Portugal), M.J. Matos, E. Uriarte, A.M. Oliveira-Brett

Synthesis and Voltammetric Study of a New Series of Coumarin Derivatives

s09-P-049

Frantisek Jelen (Institute of Biophysics, Brno, Czech Republic), Libuse Trnkova, Nilay Aladag, Mehmet Ozsoz

Electrochemical Analysis of Aminopurines at Graphite Electrodes - Effect of Copper Ions

s09-P-050

Toshihiro Kondo (Division of Chemistry, Graduate School of Humanities and Sciences, Ochanomizu University, Tokyo, Japan), Kaori Sato, Kayo Hasegawa, Mizuki Kageyama, Shoko Sano

Construction of Flatly Adsorbed Porphyrin Self-Assembled Monolayers on Au Single Crystal Surfaces

s09-P-051

Eric Labbe (École Normale Supérieure Département de Chimie, Paris Cedex 05, France), Valentina Bonometti, Olivier Buriez, Patrizia Mussini, Christian Amatore

Activation of alkyl- and benzyl halide initiators by an electrogenerated Fe(II)-Salen complex : Electrochemically-triggered ATRP ?

s09-P-052

Chun-an Ma (Zhejiang University of Technology, Hangzhou, China), Ting Liu, Li Tao Chen

Density Functional Theory Study of Methanol Decomposition on Pt/WC(0001) surface

s09-P-053

Patrizia Romana Mussini (Dipartimento di Chimica Fisica, Università degli Studi di Milano, Milano, Italy), Marta Viganò, Fabio Ragaini, Manuela Rossi

Electrochemistry of the innovative, quinone-mimicbis-(arylimino)acenaphthene (Ar-BIAN) compound class

s09-P-054

Patrizia Romana Mussini (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Giuseppe D. Alfonso, Monica Panigati, Alessio Raimondi, Pierluigi Mercandelli, Daniela Donghi, Elsa Quartapelle Procopio, Matteo Mauro

Electrochemistry of dinuclear Re(I) complexes with bridging 1,2 heteroaromatic chromophore ligands

s09-P-055

Patrizia Romana Mussini (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Giuseppe D. Alfonso, Monica Panigati, Elsa Quartapelle Procopio, Francesco Sannicolò, Giovanni Rampinini, Valentina Bonometti

Electrochemical study of a novel metallo-polymer conjugatecontaining a dinuclear Re(I) complex cromophore

s09-P-056

Lubomir Pospisil (J. Heyrovsky Institute of Physical Chemistry, Prague, Czech Republic), Magdalena Hromadova, Viliam Kolivoska, Michal Valasek, Nicolangelo Fanelli

Electron Transfer to Large Extended Viologens Follow a Route to the Deterministic Chaos

s09-P-057

Loredana Preda (Electrochemistry, Institute of Physical Chemistry, Bucharest, Romania), Constantin Logofatu, Mihail Lazarescu, Maria Marcu, Valentina Lazarescu

EIS Investigations on Hemin Reduction at Thiolate-Modified n-GaAs (110) Electrode

s09-P-058

Princia Salvatore (Nanochemistry Group, Department of Chemistry, Technical University of Denmark, Kgs. Lyngby, Denmark), Allan G. Hansen, Kasper K. Karlsen, Kasper Moth-Poulsen, Jesper Wengel, Jens Ulstrup

Voltammetry and in situ STM of monolayers of thiol derivatives of Osmium-complexes on an Au(111) electrode surface

s09-P-059

Romana Sokolova (J. Heyrovsky Institute of Physical Chemistry, Prague, Czech Republic), Sarka Ramesova, Ilaria Degano, Magdalena Hromadova, Lubomir Pospisil, Jan Zabka

On the Difference in Oxidation Mechanism of Flavonoids Related to their Chemical Structure

s09-P-060

Hirosuke Tatsumi (International Young Researchers Empowerment Center, Shinshu University, Matsumoto, Japan)

Voltammetric Study on the Mechanism of Electron Transfer Reactions at Liquid|Liquid Interfaces Using Ferrocene Derivatives with Long-Hydrocarbon Chains

s09-P-061

Joanne Tory (Department of Chemistry, University of Reading, Reading, United Kingdom), Frantisek Hartl

Trends in Reactivity of Two-Electron-Reduced -Delocalized Complexes $[M(CO)_3(á\text{-diimine})]^{n-}$ (M = Mn, Re, n = 1; M = Cr, Mo, W, n = 2) towards Carbon Dioxide

s09-P-062

Libuse Trnkova (Department of Chemistry, Faculty of Science, Masaryk University, Brno, Czech Republic), Frantisek Jelen, Zdenka Balcarova

An Electrochemical Study of DNA and RNA Short Fragments by Elimination Voltammetry

s09-P-063

Tadaharu Ueda (Kochi University, Kochi, Japan), Jun-ichi Nambu, Sousuke Yokoyama, Daisuke Kaneno, John Boas, Alan Bond

Voltammetric behavior of Vanadium(V)-substituted Keggin-type Polyoxometalates

s09-P-064

Tadaharu Ueda (Kochi University, Kochi, Japan), Miho Ohnishi, Sousuke Yokoyama, Daisuke Kaneno, John Boas, Alan Bond

Voltammetric behavior of Vanadium(V)-substituted Wells-Dawson type Polyoxometalates

s09-P-065

Neus Vila (Molecular Chemistry Department, Universite Joseph Fourier Grenoble I, Grenoble, France), Alain Deronzier, Guy Royal

Electrochromic, Photochromic and Thermochromic Properties of Bis-Terpyridine Ruthenium Complexes Bridged by Dimethyldihydropyrene Units

s09-P-066

Guobao Xu (The State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China), Lianzhe Hu, Zheng Bian, Haijuan Li, Shuang Han, Yali Yuan, Lianxun Gao

$[Ru(bpy)_2dppz]^{2+}$ electrochemiluminescence switch and its applications for DNA interaction study and label-free ATP aptasensor

s09-P-067

Antonio Albuquerque de Souza (Universidade Federal de Alagoas, Instituto de Química e Biotecnologia, Maceió, Brazil), Maria Aline Fidélis Barros de Moura, Eufrânio N. da Silva Júnior, Fabiane Caxico de Abreu, Marília Oliveira Fonseca Goulart

Electrochemical Studies of nor-β-lapachone derivatives: Evidence of Oxidative Stress and DNA Damage

s09-P-068

Ludmila Simková (Department of Molecular Electrochemistry, J. Heyrovsky Institute of Physical Chemistry of the ASCR, v. v. i., Prague, Czech Republic), Jirí Ludvík, Jirí Klíma

Electrochemical degradation of new explosive 2,2-dinitroethene-1,1-diamine (FOX-7)

Symposium 10: Interfacial Electrochemistry: Recent Advances from Experiment and Theory

Charge Transfer Theory

s10-P-001

Jingyuan Chen (Department of Applied Physics, University of Fukui, Fukui, Japan), Koichi Aoki

Comparison of Voltammograms at the Polymer-coated Nano-electrode with Those at the Glass Sealed One

s10-P-002

Nadim Darwish (University of New South Wales, Sydney, Australia), Paul Eggers, Yujin Tong, Shen Ye, Michael Paddon-Row, Justin Gooding

Redox Behavior of Ferrocene and Anthraquinone Terminated Norbornylogous Bridges Assembled on Gold Surfaces: Position and Environmental Effects

s10-P-003

Victor Emets (A.N.Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, Moscow, Russia), Boris Damaskin

Influence of sp-metal nature and solvent nature on specific adsorption of haloids ions

s10-P-004

Lucia Fernandez-Macia (Department Materials and Chemistry (MACH), Vrije Universiteit Brussel, Research Group of Electrochemical and Surface Engineering (SURF), Brussels, Belgium), Els Tourwé, Annick Hubin

Determination of a reliable mechanism for an electrochemical reaction: From experiment to model

s10-P-005

Coralie Gaulard (CEA Saclay DEN, DPC, SECR, L3MR, Gif -sur-Yvette, France), Nathalie Larabi-Gruet, Frederic Miserque, Jean Radwan, Cécile Ferry, Annie Chausse

Study of oxidation and dissolution of uranium dioxide in acidic media non complexing

s10-P-006

Eneli Härk (Institute of Chemistry, University of Tartu, Tartu, Estonia), Rutha Jäger, Kersti Vaarmets, Enn Lust

Electroreduction of europium (III), hexaamminecobalt (III) and chromium (III) ions on bismuth single crystal electrode

s10-P-007

Eneli Härk (Institute of Chemistry, University of Tartu, Tartu, Estonia), Enn Lust

Investigation of electroreduction of hexaamminecobalt(III) cations at electrochemically polished Bi(hkl) using impedance spectroscopy method

s10-P-008

Vladimir Jovic (Materials Science, Institute for Multidisciplinary Research, University of Belgrade, Belgrade, Serbia), Borka Jovic

Processes of adsorption/desorption of iodide anions and cadmium cations onto Ag(111)

s10-P-009

Ferhat Kaykal (Chemistry Deparment, Selcuk University, Konya, Turkey), Haluk Bingol, Emine Guler Akgemci, Mustafa Durmaz, Abdulkadir Sirit

Interfacial Facilitated Transfers of Alkali and Alkaline-Earth Metal Ions by a Calix[4]arene Derivative Across Water/1,2-DCE Microinterface

s10-P-010

Erdal Kocabas (Chemistry Deparment, Selcuk University, Konya, Turkey), Haluk Bingol, Ferhat Kaykal, Emine Guler Akgemci, Tevfik Atalay

Complexation Studies of Alkaline-earth Metal Ions with A Calix[4]arene Derivative and Electrochemical Recognition of Ca^{2+} and Ba^{2+} at MicroITIES

s10-P-011

Gerd Mutschke (Inst. Fluid Mech., Dresden University of Technology, Dresden, Germany), Denis Koschichow, Andreas Bund, Jochen Fröhlich

On kinetic aspects of the start-up of copper electrolysis

s10-P-012

Jessica O'Brien (CSIRO Energy Technology, Mayfield West, Australia), Jim Hinkley, Scott Donne

The Electrochemical Oxidation of Aqueous Sulfur Dioxide: Observed Electrochemical Oscillations

s10-P-013

Ralf Peipmann (Lehrstuhl für Physikalische Chemie / Elektrochemie, Technische Universität Dresden, Dresden, Germany)

Determination of Magentohydrodynamic Transfer Functions by MHD Impedance Spectroscopy

s10-P-014

Paola Monica Quaino (Institute of Theoretical Chemistry, Ulm, Germany), Elisabeth Santos, Wolfgang Schmickler

The Behavior of the Overpotential and Underpotential Deposited Hydrogen on Pt(111) Electrodes: A Theoretical Study

s10-P-015

Yixian Wang (Department of Chemistry and Biochemistry, Queens College-City University of New York (the Graduate Center), Flushing, USA), Jeyavel Velmurugan, Michael Mirkin

Steady-State Voltammetry of Charge-Transfer Reactions at Nanointerfaces

In situ Interfacial Spectroscopy

s10-P-017

Tom Breugelmans (Vrije Universiteit Brussel Electrochemical and Surface Engineering Group, Brussel, Belgium), Els Tourwé, Bart Geboes, Kitty Baert, Annick Hubin

Investigation of the adsorption process of heterocyclic molecules on copper by means of potentiodynamic ORP-EIS and SERS

s10-P-018

Dejun Chen (Department of Chemistry, Georgetown University, Washington DC, USA), Dejun Chen, Augusta Hofstead-Duffy, In-Su Park, Dianne Osena Atienza, Shi-Gang Sun, YuYe Tong

In Situ ATR-FTIR Investigation of Absorbed CO Oxidation on M@Pt (M=Ru, Au)

s10-P-019

Alvaro Colina (Departamento de Quimica, Universidad de Burgos, Burgos, Spain), Aranzazu Heras, Jesus Lopez-Palacios

Long optical path-length spectroelectrochemical cell with a moving slit

s10-P-020

Janaina Fernandes Gomes (Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Germano Tremiliosi-Filho

Glycerol Electro-oxidation on Platinum and Gold Catalysts in Acidic and Alkaline Medium: A FTIR Study

s10-P-021

Juergen Janek (Institute of Physical Chemistry, Justus Liebig University, Giessen, Germany), Hendrik Poepke, Eva Mutoro, Bjoern Luerssen

Electrochemically controlled Segregation – *In situ* Microspectroscopy of the electrode system Pt(Fe)/YSZ

s10-P-022

Heili Kasuk (Institute of Chemsitry, University of Tartu, Tartu, Estonia), Silvar Kallip, Vitali Grozovski, Enn Lust

Impedance spectroscopy and *in situ* STM studies of 4, 4' - bipyridine and 2, 2'- bipyridine adsorption at Bi(111) electrode

s10-P-023

Wolfgang Kautek (Department of Physical Chemistry, University of Vienna, Vienna, Austria), Christian Zafiu, Ferencz Karsei, Marlene Handrea-Haller, Guenter Trettenhahn

In-situ FTIR and quartz microbalance study of buffer ions in the electrochemical double layer at gold

s10-P-024

Jun-Tao Li (Department of Chemistry, Xiamen University, Xiamen, China), Li Tian, Chun-Hua Zhen, Shi-Gang Sun

In situ FTIR studies of coadsorption of CN- and CO on Pt single crystal electrodes

s10-P-025

Elena Madrid (School of Chemistry, Birmingham, United Kingdom), Sarah L. Horswell

Self-organisation of phospholipid bilayers on Au electrodes

s10-P-026

Severino Carlos Oliveira (Departamento de Química, Universidade de Coimbra, Coimbra, Portugal), Ana Maria Brett

Voltammetric and Electrochemical Impedance Spectroscopy Characterization of a Cathodic and Anodic Pre-Treated Boron Doped Diamond Electrode

s10-P-027

Letícia Perez (Department of Chemistry, Unesp, Bauru, Brazil), Antonio Carlos Dias Ângelo

EIS Study of Methanol Oxidation Reaction on Ordered Intermetallic Platinum Phases.

s10-P-028

Shingo Sakamoto (Graduate School of Science and Technology, Kumamoto University, Kumamoto, Japan), Masato Tominaga

In-situ Raman Spectroelectrochemical Investigation of Single-Walled Carbon Nanotube Interface

s10-P-029

Andrea del P. Sandoval (Departamento de Química Física e Instituto Universitario de Electroquímica, Universidad de Alicante, Alicante, Spain), Antonio Rodes, Juan Feliu

Adsorption Of Glycine, Alanine And Serine On Au Electrodes: A Spectroelectrochemical Study

s10-P-030

Klaas Jan Schouten (Leiden University, Leiden, Netherlands), Zhisheng Qin, Marc Koper

From Carbon Dioxide to Hydrocarbons

s10-P-031

Eric Sibert (LEPMI, Saint Martin d'Hères Cedex, France), Yvonne Soldo-Olivier, Manon Lafouresse, Christelle Lebouin, Maurizio de Santis

Hydrogen Insertion in Thin Palladium Films: Correlation between Electro-insertion Isotherm and *in situ* Surface X-ray Diffraction Characterization

s10-P-032

Jonathon Speed (University of Southampton, Southampton, United Kingdom), Andrea Russell

Ultra-thin metal overlayers on sphere segment void substrates for borrowed SERS

s10-P-033

Jian Yang (LIC, Leiden, Netherlands)

Electrocatalytic Reduction of Nitrate: How to form N_2

s10-P-034

Christian Zafiu (Department of Physical Chemistry, University of Vienna, Vienna, Austria), Thomas Werzer, Guenter Trettenhahn, Wolfgang Kautek

In-situ investigations of the role of borate and perchlorate adsorption on the surface dynamics and reactivity of gold

s10-P-035

Shouzhong Zou (Department of Chemistry and Biochemistry Miami University, Oxford, USA), Jianbo Zeng, Deok-Im Jean

In-Situ Surface-enhanced Raman Spectroscopic Studies of Nafion Adsorption on Au and Pt Nanoparticle Array Electrodes

Nano-electrocatalysis

s10-P-036

Shunsuke Asahina (JEOL SAS, Croissy sur Seine, France), Franck Charles, Mitsuo Suga, Hidetoshi Nishiyama

The study of electrochemical phenomena using *In situ* observation by Electron microscope

s10-P-037

Tine Brülle (Department of Physics, Technische Universitaet Muenchen, E19, Garching, Germany), Andrej Denisenko, Ulrich Stimming

Investigations of reactivity of catalyst nanostructures on planar carbon supports

s10-P-038

Marcelo Correa Ribeiro (Departamento de Física, Universidade Federal de Santa Catarina, Florianópolis, Brazil), Leonardo Lauck, Paulo Cesar Tettamanzy D'Ajello

Electrochemical Deposition in Nanometric Three-Dimensional Systems

s10-P-039

Vitali Grozovski (Instituto de Electroquímica, Universidad de Alicante, Alicante, Spain), Víctor Climent, Enrique Herrero, Juan M. Feliu

Methanol oxidation on stepped surfaces studied by pulsed voltammetry

s10-P-040

Nagahiro Hoshi (Department of Applied Chemistry and Bio-Technology, Graduate School of Engineering, Chiba University, Chiba, Japan), Masashi Nakamura, Risa Kajiwara

Structural Effects on Hydrogen Oxidation Reaction on High-index Planes of Platinum

s10-P-041

Nagahiro Hoshi (Department of Applied Chemistry and Bio-Technology, Graduate School of Engineering, Chiba University, Chiba, Japan), Aya Hitotsuyanagi, Masashi Nakamura

Structural Effects on Oxygen Reduction Reaction on Pd(S)-[n(111)X(100)] Electrodes

s10-P-042

Ryosuke Jinnouchi (Toyota Central R&D Labs., Inc., Nagakute, Japan), Eishiro Toyoda, Tatsuya Hatanaka, Yu Morimoto

Localized Effects of Carbon Supports on the Activity and Stability of Pt Particles

s10-P-043

Steven Kleijn (Leiden Institute of Chemistry, Leiden, Netherlands), Alexei Yanson, Marc Koper

Electrocatalysis using lithographyically produced nanoelectrodes

s10-P-044

Aleksey Kuznetsov (LMSPC-ECPM-UdS, Strasbourg, France), Vladimir Zaikovskii, Elena Savinova

CO electrooxidation on selective site blocked platinum nanoparticles

s10-P-045

Ezequiel Pedro Marcos Leiva (Departamento de Matemática y Física, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina)

Effect of the adsorption of atoms and molecules on the surface dipole of the surface: A DFT study

s10-P-046

Chun-An Ma (Zhejiang University of Technology, Hangzhou, China), Xiao Juan Wang, Guo Hua Li

High Performance of WC/Carbon Nanotubes Catalysts for the Electroreduction of Nitrobenzene

s10-P-047

Vedrana Marinovic (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Sanja Marinovic, Mica Jovanovic, Jovan Jovanovic, Svetlana Strbac

Electrochemical Reduction of Trinitrotoluene on a Modified Platinum Electrode

s10-P-048

Hiroshi Okamoto (Division of Science, School of Science and Engineering, Tokyo Denki University, Hatoyama, Japan), Yukari Bundo, Orimi Furuyama, Yoshiharu Mukouyama

Novel Oscillation Pattern during Methanol Oxidation

s10-P-049

Igor Pasti (Faculty of Physical Chemistry, Belgrade University, Belgrade, Serbia), Nemanja Gavrilov, Slavko Mentus

Chlorine adsorption on Pd and Pt based alloy surfaces and its effects on the catalysis of oxygen reduction reaction

s10-P-050

Yvonne Pluntke (Institut für Elektrochemie, Universität Ulm, Ulm, Germany), Ludwig Kibler, Dieter Kolb

Hydrogen evolution reaction at AgPd(111) electrodes

s10-P-051

Paola Monica Quaino (Institute of Theoretical Chemistry, Ulm, Germany), Elisabeth Santos, Wolfgang Schmickler

Electrocatalysis of Nanostructures: Monolayers of Pd on Different Metal Electrodes M(111)

s10-P-052

Annukka Santasalo-Aarnio (Research Group of Fuel Cells, Department of Chemistry, School of Science and Technology, Aalto University, Aalto, Finland), Tanja Kallio, Kyosti Kontturi

Electrocatalysis of Alcohol Oxidation on Pt based Nanoparticles for Alkaline Direct Alcohol Fuel Cells

s10-P-053

Ave Sarapuu (Institute of Chemistry, University of Tartu, Tartu, Estonia), Heiki Erikson, Aarne Kasikov, Naomi Wong, Chris A. Lucas, Gita Sedghi, Richard J. Nichols, Kaido Tammeveski

Electroreduction of Oxygen on Nanostructured Pd Films

s10-P-054

Wilai Siriwatcharapiboon (School of Chemistry, University of Birmingham, Birmingham, United Kingdom)

Synthesis and Electrochemical Properties of Au-Rh Nanomaterials

s10-P-055

Germán Soldano (Institut für Theoretische Chemie, Universität Ulm, Ulm, Germany), Elisabeth Santos

Catalytic properties of graphite-supported nanowires – a DFT study

s10-P-056

Svetlana Strbac (ICTM-Institute of Electrochemistry, Belgrade, Serbia), Vedrana Marinovic, Zlatko Rakocevic

Oxygen Reduction on Polycrystalline Pt Electrode Modified by Acetonitrile in Neutral Electrolyte

s10-P-057

Holger Wolfschmidt (Physik Department E19, Technische Universität München, Garching, Germany), Daniel Weingarth, Ulrich Stimming

Reactivity on Pt/Au(111) towards Hydrogen Reactions - Local *vs*. Large Scale Investigations

Surface Structural Control at Nanoscale

s10-P-058

Alexander Björling (Instituto Universitario de Electroquímica, Universidad de Alicante, Alicante, Spain), Juan M. Feliu

Oxygen Adsorption at Well-defined Pt Surfaces

s10-P-059

João Borges (Centro de Investigação em Química UP, L4, Departamento de Química, Faculdade de Ciências da Universidade do Porto, Porto, Portugal), Carlos M. Pereira, Fernando Silva

Electrochemical Determination of Dopamine and Ascorbic Acid at Modified Gold Electrodes

s10-P-060

Zachary Coldrick (Center for Molecular NanoScience, Leeds, United Kingdom), Andrew Laurance Nelson, Paul Steenson, Abra Penezić, Blazenka Gasparovica

Potential Induced Desorption, Adsorption and Real Time Monitoring of Organised Phospholipid Structures on Mercury Electrodes

s10-P-061

Marta Costa Figueiredo (Instituto Universitario de Electroquímica, Universidad de Alicante, Alicante, Spain), Victor Climent, Juan Feliu

Nitrate and nitrite reduction on Pt (111) surfaces modified by Bi adatoms

s10-P-062

Robert Dryfe (University of Manchester, Manchester, United Kingdom), Konstantin Novoselov, Ernest Hill, Ian Kinloch, Jeffrey Martin

Graphene Electrochemistry

s10-P-063

Mohammad El Jawad (SIMAP, Grenoble, France), Bruno Gilles, Frederic Maillard, Jean Louis Chemin

Development of a portable transfer chamber for *in situ* electrochemistry on UHV prepared surfaces

s10-P-064

Thomas Esterle (School of Chemistry, University of Southampton, Southampton, United Kingdom), Philip Bartlett

Study of carbon monoxide oxidation on mesoporous platinum

s10-P-065

Lukas Fojt (Center for Dental and Craniofacial Research, Faculty of Medicine, Masaryk University, Brno, Czech Republic), Vladimír Vetterl, Thomas Doenux

Adsorption and 2D condensation of 5-fluorocytosine on different surfaces

s10-P-066

Mariano Fonticelli (Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas (INIFTA), Facultad de Ciencias Exactas, Universidad Nacional de La Plata–CONICET, La Plata, Argentina), Gastón Corthey, María Floridia Addato, Rubert Aldo, Guillermo Benitez, Roberto Salvarezza

Alkanethiols Adsorbed on Platinum and Palladium Surfaces: Composition and Stability Studies by Electrochemical Techniques and X-ray Photoelectron Spectroscopy

s10-P-067

Blaženka Gašparović (Ruđer Bošković Institute, Zagreb, Croatia), Sanja Frka, Abra Penezić, Andrew Nelson, Zachary Coldrick, Dubravko Risovic

The study of ceramide adsorption at the mercury/electrolyte and air/water interfaces

s10-P-068

Tobias Peter Johansson (CINF, Department of Physics, Technical University of Denmark (DTU), Kgs. Lyngby, Denmark), Ifan E.L. Stephens, Alexander S. Bondarenko, Ib Chorkendorff

Sub-nanometre Pt overlayers on Pt bimetallic alloys as new oxygen reduction electrocatalysts

s10-P-069

Clemens Kubeil (TU Dresden Physikalische Chemie und Elektrochemie, Dresden, Germany), Michael Ansorge, Andreas Bund

Ion Fluxes at Nanopores and Nanopore Electrodes – Experimental and Theoretical Results

s10-P-070

Marina Lebedeva (Laboratoire des Matériaux, Surfaces et Procédés pour la Catalyse, Ecole de Chimie, Polymères et Matériaux, Université de Strasbourg, Strasbourg, France), Veronique Pierron-Bohnes, Elena R. Savinova

Electrochemical and physical properties of PtCo (1:1) films depending on the chemical and crystallographic order

s10-P-071

Ezequiel Leiva (Department of Mathematics and Physics, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Martín Zoloff Michoff

Carboxylate Based Nanoworires – A DFT Study of the Mechanical and Electronic Properties.

s10-P-072

Martín Patrito (Dpto. de Fisicoquímica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Federico Soria, Patricia Paredes-Olivera

On the Mechanism of Thermal Oxidation of Si (111)-H by H_2O and O_2. A Density Functional Theory Investigation.

s10-P-073

Stephen Price (University of Southampton, Southampton, United Kingdom), Andrea E. Russell

Studies of Organised Supported Catalyst Particles Below 10 nm

s10-P-074

José A. Ribeiro (Departamento de Química da Faculdade de Ciências, Universidade do Porto, Porto, Portugal), Carlos M. Pereira, Fernando Silva

Electrochemical study of catecholamines transfer at an interface between two immiscible electrolyte solutions

s10-P-075

Knag Shi (Department of Chemistry, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China)

Electrochemical oxidation of the end-edge planes of vertically aligned multi-walled carbon nanotubes: On the role of rigid structure in their electrochemical behaviors

s10-P-076

Ifan Stephens (Department of Physics, Technical University of Denmark, DK-2800, Kongens Lyngby, Denmark), Alexander Bondarenko, Francisco Perez-Alonso, Rasmus Frydendal, Anders Jepsen, Brian Knudsen, Lone Bech, Federico Calle-Vallejo, Jan Rossmeisl

Electrocatalysis on model surfaces: Overlayers, near-surface alloys and surface alloys of Cu-Pt

s10-P-077

Maria Elena Vela (INIFTA, Fac. Cs. Exactas, Univ. Nac. de La Plata, La Plata, Argentina), Carolina Vericat, Gustavo Andreasen, Roberto Salvarezza

ECSTM imaging of alkanethiol electrodesorption: An evidence for Au adatoms in the SAM?

s10-P-078

Cristina Vaz (Instituto de Química Física, Madrid, Spain), Asier Aranzábal

In Situ STM Observation of Stable Dislocation Networks during the Initial Stages of the Lifting of the Reconstruction on Au(111) Electrodes

s10-P-079

Zhaoxiong Xie Xie (Department of Chemistry, Xiamen University, Xiamen, China), Qing-Ning Jiang, Lei Zhang, Hai-Xin Ning, Ning Yang, Huan Li, Zhi-Yuan Jiang, Zhong-Qun Tian

Shape - controlled Gold Nanocrystals with Open Surface Structure and their High Electro-catalytic Performances

Symposium 11: Sensors and Biosensors

New Sensing Architectures

s11-P-069

Hanna Ayoub (Unité Pharmacologie Chimique et Génétique et Imagerie, CNRS 815, INSERM U1022, Université Paris Descartes, Chimie ParisTech, Paris, France), Sophie Griveau, Virginie Lair, Philippe Brunswick, Michel Cassir, Fethi Bedioui

Investigation of the behavior of nickel electrodes used in a new medical device for early detection of diabetes

s11-P-070

A. J. Saleh Ahammad (Department of Advanced Technology Fusion, Konkuk University, Seoul, Korea)

Differential Pulse Voltammetric Cholesterol Biosensor based on Bi-enzyme Immobilized Conducting Poly(thionine) Film

s11-P-071

A. J. Saleh Ahammad (Department of Advanced Technology Fusion, Konkuk University, Seoul, Korea)

Highly Sensitive and Simultaneous Determination of Hydroquinone and Catechol at Poly(thionine) Modified Glassy Carbon Electrode

s11-P-072

Masahiro Akiya (Biomedical Engineering, Tokyo City University, Tokyo, Japan)

Odor detection using LB film sensors

s11-P-073

Wendel Alves (Federal University of ABC, Santo André, Brazil), Thiago C. Cipriano, Pedro M. Takahashi, Daísa Lima, Gerard Froyer, Olivier Chauvet, Fady El Haber

Immobilization of MP11 in peptide nanotubes and its application in electrochemical devices for H2O2 detection

s11-P-074

Tal Amzel (Department of Physical Electronics, School of Electrical Engineering, Faculty of Engineering, Tel Aviv University, Tel-Aviv, Israel), Hadar Ben-Yoav, Amihay Freeman, Shimshon Belkin, Alva Biran, Rami Pedahzur, Marek Sternheim, Yosi Shacham-Diamand

Effects of External Electrical Fields on Biochip Integrated Bacterial Biofilms for Biosensing Applications

s11-P-075

Céline Christophe (LAAS, CNRS, Toulouse, France), Fadhila Sekli, Jérôme Launay, Pierre Gros, Emmanuel Questel, Pierre Temple-Boyer

Electrochemical Microsensors: Performance of Integrated Microelectrodes

s11-P-076

Rui Campos (Durham University Department of Chemistry, Durham, United Kingdom), Ritu Kataky

Influence of osmotic pressure in Bilayer Lipid Membranes studied by Cyclic Voltammetry and Electrochemical Impedance Spectroscopy

s11-P-077

Maria Fernanda Cerda Bresciano (Laboratorio de Biomateriales, Facultad de Ciencias, UdelaR, Montevideo, Uruguay), Eduardo Méndez, Michael Wörner

Trapping of $[Ru(NH_3)_6]^{3+}$ by modified containing myoglobin electrodes

s11-P-078

Kun Chen (Organic Chemistry I, Institution of Chemie-Biology, University of Siegen, Siegen, Germany), Rochus Breuer, Michael Schmittel

Selective Binding and Controllable Release of the Anticoagulant Heparin by Electroactive BFD-SAMs in Biological Buffer Solution

s11-P-079

Nicolaj Cruys-Bagger (Research Unit for Functional Biomaterials (NSM), Roskilde University, Roskilde, Denmark), Hirosuke Tatsumi, Kim Borch, Peter Westh

Development of isothermal microcalorimetry with *in-situ* electrochemical biosensors

s11-P-080

Hua Cui (Department of Chemistry, University of Science and Technology of China, Hefei, China), Yi He, Hao Zhang, Ying Chai

DNA Sensor Based on Electrochemiluminescence of Acridinium Ester in the Presence of Tripropylamine

s11-P-081

Alexey Davydov (D.I. Mendeleev University of Chemical Technology of Russia, Moscow, Russia), Mogely Khubutiya, Alexey Chzhao, Mark Goldin, Anatoly Evseev, Peter Hall, Anastasiya Salienko, Vladimir Kolesnikov

The Monitoring of Blood Serum Redox Potential in Patients after Liver Transplantation

s11-P-082

Frederique Deiss (Department of Chemistry and Chemical Biology, Harvard University, Cambridge, USA), Zhihong Nie, Xinyu Liu, George M. Whitesides

Microfluidic Paper-based Electrochemical Devices using a Glucometer for on-field Detection of Multiple Analytes

s11-P-083

Alice Delcourt Lancon (Department of Chemistry, Durham University, Durham, United Kingdom), Ritu Kataky, David Wood, Andrew Gallant

Microelectrode Array Supported by Microfluidic Channel for High-Throughput Sensing: Fabrication Optimisation and Characterisation

s11-P-084

Ronaldo Faria (Federal University of São Carlos, Sao Carlos, Brazil), André Afonso, Bianca Zanetti, Adelita Santiago, Flávio Silva, Luiz Mattoso

A Piezoelectric Immunosensor for Citrus Canker using QCM-D

s11-P-085

Ronaldo Faria (Federal University of São Carlos, Sao Carlos, Brazil), Quésia Silva, Nathália Barbosa, Estela Troiani

Determination of Adrenaline and Noradrenaline using Poly(1,5-Diaminonaphthalene) Modified Electrode

s11-P-086

Marco Frasconi (Department of Chemistry and Drug Technologies, Sapienza University of Rome, Rome, Italy), Cristina Tortolini, Franco Mazzei

Supramolecular layer-by-layer bionanoassemblies for efficient reagentless enzyme electrodes

s11-P-087

Laura Gonzalez-Macia (Dublin City University, Dublin, Ireland), Aoife Morrin, Malcolm R. Smyth, Anthony J. Killard

Enhancement of Hydrogen Peroxide Reduction by Surfactant/Salt Modified Silver Electrodes

s11-P-088

Anita Hamilton (National University of Ireland, Maynooth, Co. Kildare, Ireland), Carmel Breslin

Entrapment of biological entities into a conducting polymer matrix

s11-P-089

Eunseon Jeong (Department of Chemistry and Institute of Basic Science, Chonnam National University, Gwangju, Korea), Mohammad Shamsuddin Ahmed, Haesang Jeong, Eunhee Lee, Seungwon Jeon

Novel Silver (I) Ion Selective PVC Membrane Electrodebased on Schiff Base ($N^2E,N^{2'}E$)-$N^2,N^{2'}$-bis(thiophen-2-ylmethylene)-1,1'-binaphthyl-2,2'-diamine

s11-P-090

Sayed Yahya Kazemi (Department of Basic Science, Sari, Iran)

Optimization of a new thallium (I) - PVC membrane selective electrode by using experimental design

s11-P-091

Ronan Le Lagadec (Instituto de Química, Universidad Nacional Autónoma de México, México DF, Mexico), Cerón Camacho Ricardo

Peroxidase electrocatalysis with cyclometalated osmium complexes $[Os(C\sim N)_x(N\sim N)_{3-x}]^{m+}$ (x = 0 – 3)

s11-P-092

Therese Leblois (Institut FEMTO-ST, Besancon, France)

Towards the miniaturization of (hhl) resonant sensors for biochemical and environmental applications

s11-P-093

Hye Jin Lee (Chemistry, Kyungpook National University, Daegu, Korea), Shaikh Nayeem Faisal, Min Jeong Kwon, Eun Ji Nam

Multifunctional Amperometric Proton Selective Sensors with Micro-Liquid/liquid Interfaces

s11-P-094

Grzegorz Lisak (Laboratory of Analytical Chemistry, Process Chemistry Centre, Åbo Akademi, Åbo, Finland), Michal Wagner, Carita Kvanström, Johan Bobacka, Ari Ivaska, Andrzej Lewenstam

Poly(benzopyrene) Films Doped with Eriochrome Black T as a Pb(II)-Selective Sensors

s11-P-095

Fred Lisdat (Biosystems Technology, Wildau University of Applied Sciences, Wildau, Germany), Christian Witte

Label-free detection of DNA binders by an impedimetric DNA sensor

s11-P-096

Paula Lopes (Durham University, Durham, United Kingdom), Ritu Kataky, David Wood, Andrew Gallant

Electrochemistry of Chiral Molecules at Micro-Liquid|Liquid Interface

s11-P-097

Judith López-Montero (Department of Analytical Chemistry, Faculty of Chemistry, University Complutense of Madrid, Madrid, Spain), Araceli González-Cortés, José M. Pingarrón

Label-free electrochemical immunosensor for detection of testosterone

s11-P-098

Nadherna Martina (Institute of Inorganic Chemistry of the AS CR, v.v.i., Rez near Prague, Czech Republic), Frantisek Opekar, Jakub Reiter

Amperometric sensor for NO_2 with polymer–ionic liquid electrolyte

s11-P-099

Kohji Mitsubayashi (Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, Tokyo, Japan), Tomoko Gessei, Daishi Takahashi, Takahiro Arakawa, Hiroyuki Kudo, Hirokazu Saito

Bioelectronic Gas Sensor (Bio-Sniffer) for Formaldehyde

s11-P-100

Christine Mousty (Laboratoire des Matériaux Inorganiques, (LMI UMR 6002), Université Blaise Pascal, Aubière, France), Marta Sanchez-Paniagua Lopez, Franck Charmantray, Laurence Hecquet, Virgil Helaine

Electrochemical detection of transketolase activity using a tyrosinase biosensor

s11-P-101

Arnaud Musa (Nanotech, Technical University of Denmark (DTU), Kongens Lyngby, Denmark), Natalia Abramova, María Asunción Alonso-Lomillo, Olga Domínguez-Renedo, María Julia Arcos-Martínez Arcos-Martínez, Francisco Javier del Campo, Monica Brivio, Detlef Snakenborg, Oliver Geschke, Jörg P. Kutter

Miniaturized screen-printed Ion-Selective-Electrodes for clinical applications

s11-P-102

Reza Ojani (University of Mazandaran, Babolsar, Iran), Jahan-Bakhsh Raoof, Ebrahim Zarei

Simultaneous electrochemical determination of dopamine and uric acid using a new microwave assisted synthesized MFI type zeolite

s11-P-103

Peter Palatzky (Institut für Analytische Chemie, Chemo- und Biosensorik, Universität Regensburg, Regensburg, Germany), Frank-Michael Matysik

Application of Novel Capillary Probes for SECM Studies of Electrochemically Assisted Injection

s11-P-104

Maria Pesavento (Dipartimento di Chimica Generale, Universita di Pavia, Pavia, Italy), Girolamo D'Agostino, Raffaela Biesuz, Giancarla Alberti

MIP-modified Screen Printed Carbon Electrodes as Selective Sensors

s11-P-105

Mamantos Prodromidis (University of Ioannina, Ioannina, Greece), Maria Panagopoulou, Dimitrios Stergiou, Ioannis Roussis

A Faradic Impedimetric Biosensor for Quality Control in Cheese Production

s11-P-106

Mamantos Prodromidis (University of Ioannina, Ioannina, Greece), Panagiotis Dimovasilis, Vassiliki Kostaki, Ageliki Florou

Novel Electrochemical Sensors for Uranium

s11-P-107

Maria Teresa Ramirez-Silva (Departamento de Química, Área de Química Analítica, Universidad Autónoma Metropolitana-Iztapalapa, Mexico, Mexico), Pedro Ibarra-Escutia, Manuel Palomar-Pardave, Jean Louis Marty, Mario Romero-Romo

Amperometric Biosensor SPE for Phenolic Compounds Monitoring in Tea Infusions

s11-P-108

Alice René (ENSCR, Université de Rennes 1, Rennes, France), Cyril Cugnet, Didier Hauchard, Laurent Authier

Elaboration of screen-printed microband electrodes working as generator/collector

s11-P-109

Mutlu Sahin (Department of Chemistry, Eskisehir, Turkey), Levent Ozcan, Betul Usta, Yucel Sahin

Preparation of Polypyrrole Potentiometric Detector for Ascorbic acid

s11-P-110

Mamié Sancy (Departamento de Química de los Materiales, Facultad de Química y Biología, Universidad de Santiago de Chile, Santiago, Chile), José H. Zagal

Simultaneous electrochemical determination of dopamine, ascorbic acid and uric acid using MWCNTs functionalized with phthalocyanines

s11-P-111

Rostam Shabani (Chemistry, Tehran, Iran), Mohammad Saber Tehrani, Seyed Ahmad Mozaffari

Selective Determination of Copper(II) by a Gold Cysteamine self- assembled amonolayer Functionalized with L-Lysine

s11-P-112

Kang Shi (Department of Chemistry, College of Chemistry and Chemical Engineering, Xiamen University, xiamen, China)

Electrochemical Polymerization of Stimuli-Sensitive Hydrogels for the Fabrication of Biosensor

s11-P-113

Qinghai Shu (Organic Chemistry I, Institution of Chemie-Biology, University of Siegen, Siegen, Germany), Hengwei Lin, Michael Schmittel

Electrochemiluminescence (ECL) Sensorics of Electropolymerized Ruthenium(II) Tris(1,10-phenanthroline)complexes on ITO

s11-P-114

Biljana Sljukic (Faculty of Physical Chemistry, University of Belgrade, Belgrade, Serbia), Craig Banks

Manganese Oxide Screen Printed Sensing Platforms and Their Application

s11-P-115

Vernon Somerset (CSIR, NRE, Stellenbosch, South Africa), Charlton Van der Horst, Emmanuel Iwuoha

Electrochemical Characteristics and Detection of Platinum Group Elements using Stripping Voltammetry

s11-P-116

Maria Sotomayor (Analytical Department, Chemistry Institute, São Paulo State University, Araraquara, Brazil), Ademar Wong

Development and Application of a Selective Biomimetic Sensor for Captopril, an Important Ally in Hypertension Control

s11-P-117

Viswanathan Subramanian (Requimte, Instituto Superior de Engenharia do Porto, Porto, Portugal), Ana Pinho, Cristina Delerue-Matos

Microfluidic Biosensor Based on Cotton Thread and Polyaniline for Pesticides determination

s11-P-118

Katarzyna Tyszczuk (Maria Curie-Sklodowska University, Faculty of Chemistry, Lublin, Poland)

New Electrochemical Technique for Preparation of a Lead Film Electrode with using a Reversibly Deposited Mediator Metal

s11-P-119

Tanja Vidakovic-Koch (Otto-von-Guericke University Magdeburg, Magdeburg, Germany), Ivan Ivanov, Kai Sundmacher

Kinetics of Glucose Oxidation in an Enzymatic Electrode Assembly

s11-P-120

Alireza Allafchian (Chemistry, Isfahan, Iran), Ali Asghar Ensafi

New ion selective electrode for the determination of some multidrug resistance reversers based on N-(1-naphthyl)ethylenediamine dihydrochloride-tetraphenyl borate

s11-P-121

Petra □hévajsová (Department of Biological and Biochemical Sciences, Faculty of Chemical Technology, University of Pardubice, Pardubice, Czech Republic), Gabriela Bilíková, Jarmila Vytřasová, Karel Vytřas

Electrochemical biosensor for detection of Aspergillus species

s11-P-122

Ali Özcan (Chemistry, Eskisehir, Turkey), Yücel Sahin

Electrochemical Determination of Paracetamol in Human Blood Serum in the Presence of Uric Acid

Symposium 12: Electrochemistry on a Local Scale

Combined Imaging Techniques

s12-P-001

K. Andreas Friedrich (German Aerospace Center, Stuttgart, Germany), Ines Wehl, Alexander Bauder, Renate Hiesgen

Investigation of physical and chemical surface properties including conductivity of polymer electrolytes by AFM

s12-P-002

Alex Goddard (Department of Chemistry, University of Leicester, Leicester, United Kingdom), Robert Hillman, John Bond

Imaging and Enhancement of Latent Fingerprints on Alloys

s12-P-003

Stefanie Hild (DECHEMA e.V. Karl-Winnacker-Institut, Frankfurt am Main, Germany), Klaus-Michael Mangold, Peter Schrems

Combination of a Fibre-Optical System with Rotating Disc Electrode

s12-P-004

Kelly Leonhardt (University of Southampton, Southampton, United Kingdom), Guy Denuault, Bernhard Gollas

Modelling of AFM-SECM systems: Influence of tip geometry and insulation defects on limiting current for approach curves and images

s12-P-005

Sorin Munteanu (PECSA, ESPCI, Paris, France), Yasmina Fedala, Cécile Flammier, Jean-Paul Roger, Gilles Tessier, Fabien Amiot, Catherine Combellas, Frédéric Kanoufi

Light reflectivity - a real-time imaging tool to monitor the electrografting of microelectrodes

s12-P-006

Maryna Taryba (Instituto Superior Técnico, Lisbon, Portugal), Svetlana Lamaka, Darya Snihirova, Fatima Montemor, Mario Ferreira

Combined use of localized electrochemical techniques to assess self-healing ability of coating on galvanized steel

Ex-Situ Microanalysis of Reactive Systems

s12-P-007

Imad A. Abu-Yousef (Department of Chemisty, American University of Sharjah, Sharjah, United Arab Emirates), Sofian Kanan, Nathir Al-Rawashdeh

Electrochemical Study of Unsymmetrical Trityl Di- and Trisulfides

From Local Reactions to Macroscopic Properties

s12-P-008

Philippe Allongue (Physique de la Matière Condensée, CNRS, Palaiseau, France)

Electrochemical Nano Lithography of Metallic Films

s12-P-009

Helmut Baltruschat (Electrochemistry, University of Bonn, Bonn, Germany)

Atomic Friction on Electrode Surfaces

s12-P-010

Stacey Handy (University of Wolverhampton, Wolverhampton, United Kingdom), Chike Oduoza

Decorative Chromium Plating Using White Bronze as a Potential Replacement for Nickel

s12-P-011

Alexey Koltsov (ArcelorMittal Global R&D, Maizières Process Research Centre, Maizières-Lès-Metz, France), Marie-José Cornu, Claire Ghibaudo

On pickling behavior of flat carbon steels

s12-P-012

Juan Gualberto Limon-Petersen (Physical and Theoretical Chemistry Laboratory, Department of Chemistry, Oxford University, Oxford, United Kingdom), Richard G. Compton, Edmund J. F. Dickinson

Cyclic voltammetry under weakly supported conditions.

s12-P-013

Emmanuel Maisonhaute (Ecole Normale Supérieure, Paris, France), Philippe Fortgang, Bernd Schöllhorn, Christian Amatore

Electronic switching in adsorbed molecular nano-objects

Local Reactivity Analysis

s12-P-014

Salma Besbes Hentati (Faculté des Sciences de Bizerte Laboratoire de Thermodynamique et d'Electrochimie, Département de Chimie, Zarzouna, Tunisia), Hechmi Said

Prediction of the anodic oxidation of the p-tert butyl anisole dimer and trimer cyclic voltammetry and controlled potential electrolyses have been applied to study and compare the electrochemical

s12-P-015

Augusta Hofstead-Duffy (Department of Chemistry, Georgetown University, Washington DC, USA), Dejun Chen, YuYe J. Tong

An *in-situ* Surface Enhance IR Spectroscopic Investigation of Poly (vinylpyrrolidone) on Pt Nanoparticles

s12-P-016

Frederic Kanoufi (Physicochimie des Electrolytes, Colloïdes et Sciences Analytiques, CNRS 7195, ESPCI-ParisTech, Paris, France), Renaud Cornut, Sandra Nunige, Christine Lefrou

Theoretical and experimental studies of electro-erosion of thin Cu films

s12-P-017

David Khamis (Université Pierre et Marie Curie, PECSA, UMR 7195, Paris, France), Eric Mahé, Didier Devilliers

Scanning electrochemical microscopy of peroxodisulfate electrogeneration on boron-doped diamond microelectrodes array

s12-P-018

Ronny Lange (LISE, UPR15 du CNRS, Université Pierre et Marie Curie, Paris, France)

Imaging Localized Catalytic Reduction of Nitrate Using Scanning Electrochemical Microscopy

s12-P-019

Takara Sakurai (Division of Chemistry, Graduate School of Humanities and Sciences, Ochanomizu University, Tokyo, Japan), Masayo Shibata, Ichizo Yagi, Toshihiro Kondo

Electrochemical Quartz Crystal Microbalance Study on Dissolution of Pt Electrode into the Electrolyte Solution

s12-P-020

Quang-Dao Trinh (Laboratoire Interfaces et Systèmes Électrochimies LISE, Ivry-Sur-Seine, France)

Impedance of a microelectrode in SECM experiments: Positive and negative feedback modes

s12-P-021

Vincent Vivier (LISE, UPR 15 du CNRS, Paris, France), Jean V. Ferrari, Hercilio de Melo, Bernard Tribollet

Investigation of a partially blocked electrode by local electrochemical impedance spectroscopy

s12-P-022

Vincent Vivier (LISE, CNRS, Paris, France)

Study of Redox Processes on Small Area Defined by the Electrochemical Microcell

s12-P-023

Gunther Wittstock (Department of Pure and Applied Chemistry, Carl von Ossietzky University of Oldenburg, Oldenburg, Germany), Sascha E. Pust, Mark Salomo, Egbert Oesterschulze

Kinetic window at nanometer sized SECM electrodes

s12-P-024

Mathieu Etienne (LCPME, CNRS, Nancy University, Villers-lès-Nancy, France)

Shear-Force Control in SECM: From the Feasibility to the Application

s12-P-025

Frank Marken (Department of Chemistry, University of Bath, Bath, United Kingdom), Liza Rassaei, Robert W. French, Norahim B. Ibrahim

Electroanalytical Processes in Submicron Generator-Collector Electrode Junctions

Symposium 13: Surface Functionalization

Electroactive Nano-objects and Devices

s13-P-001

Jean Christophe Lacroix (ITODYS, UMR, CNRS 7086, University Paris Diderot, Paris, France), Marion Janin, Jalal Ghilane, Pascal Martin, Hyacinthe Randraimahazaka

Atomic contacts *via* electrochemistry in water/surfactant media

s13-P-002

ZhongFan Liu (College of Chemistry and Molecular Engineering, Peking University, Beijing, China), Nan Liu, Liming Zhang, Lei Fu, Boya Dai, Xun Liu

Segregation Growth of Graphene and Photocatalytic Paper-Cutting Electronics

s13-P-003

Gabriel Loget (Nsysa, Université de Bordeaux 1, ISM, ENSCPB, Pessac, France), Guillaume Larcade, Véronique Lapeyre, Patrick Guarrigue, Warakulwit Chompunuch, Jumras Limtrakul, Marie-hélène Delville, Valérie Ravaine, Alexander Kuhn

Localized surface functionalization of micro- and nano-objects using bipolar electrochemistry

s13-P-004

Sylwia Malinowska (Department of Chemistry, Uniwersity of Warsaw, Warsaw, Poland), Marianna Gniadek, Mikołaj Donten, Zbigniew Stojek

Modification of Electrode Surface: Multiple, Deposition of Thin Layers of Polypyrrole-Au Nanoparticle Materials Using a Combination of Interphase Synthesis and Dip-in Method

s13-P-005

Iwona A. Rutkowska (Department of Chemistry, University of Warsaw, Warsaw, Poland), Pawel J Kulesza

Development of alternative inorganic charge mediators for dye sensitized solar cells

s13-P-006

Nick Vlachopoulos (Department of Physical and Analytical Chemistry, Uppsala University, Uppsala, Sweden), Gerrit Boschloo, Anders Hagfeldt, Leif Häggman, Lars Kloo, Kazuteru Nonomura, Licheng Sun

Electrochemical reactions related to the operation of dye-sensitised solar cells and to the characterisation of their components

Electrografting

s13-P-007

Christophe Aucher (EA 2664 - Laboratoire Génie des Matériaux et Procédés Associés, Nantes, France), Daniel Bélanger, Thierry Brousse, Daniel Guay

Polyaniline Electropolymerisation on Lead Surface Functionalized *via* a Molecular Grafting Pre-treatment

s13-P-008

Riaz Hussain (Institute de Chimie et des Matériaux Paris-Est, Thiais, France), Rachid Barhdadi, Christine Cachet-Vivier, Stéphane Bastide, Pierre Dubot

Preparation of Charged Modified Glassy Carbon Electrodes: Application to Nitrate Electroreduction.

s13-P-009

Corinne Lagrost (Sciences Chimiques de Rennes, Université de Rennes 1, UMR CNRS n°6226, Rennes, France), Jean Pinson

Poly(para-phenylene) layers attached on metals

Surface and Interface Functionalization

s13-P-010

Wendel Alves (Federal University of ABC, Santo André, Brazil), Clóvis A. Silva, Marcio Vidotti, Susana I. Córdoba de Torresi, Roberto M. Torresi

The electrochromic behavior of iron(II,III) mixed-valence supramolecular system containing tetra(2-pyridyl-1,4-pyrazine) ligand

s13-P-011

Olivier Alévêque (CNRS, Université Angers, Angers, France), Tony Breton, Christelle Gautier, Eric Levillain, Marylène Dias

Phase segregation on electroactive mixed SAMs: A numerical approach for describing interactions

s13-P-012

Ryoichi Aogaki (Electronic System Engineering, Polytechnic University, Sagamihara, Japan), Makoto Miura, Yoshinobu Oshikiri

Nanobubble Evolution *via* Vacancy in Water Electrolysis

s13-P-013

Md. Abdul Aziz (Department of Material Chemistry, Kyoto, Japan)

A Facile Preparation of Carboxylic Acid Functionalized Gold Nanoparticles: Application as Electrode Material

s13-P-014

Philippe Banet (Laboratoire de Physicochimie des Polymères et Interfaces, Fédération de Recherche, Institut des Matériaux, Université de Cergy-Pontoise, Neuville-sur-Oise, France), Florent Tatard, Guillaume Lamblin, Cédric Plesse, Pierre-Henri Aubert, Claude Chevrot

Modified gold electrodes with silver nanoparticles for electrochemical biosensors

s13-P-015

Madalina Maria Barsan (Departamento de Química, Faculdade de Ciências e Tecnologia, Universidade de Coimbra, Portugal, Coimbra, Portugal), Christopher M.A Brett, Edilson Moura Pinto

EQCM Monitoring of Layer-by-Layer Deposition of Myoglobin/Hyaluronic Acid Films and their Electrochemical Properties

s13-P-016

Avni Berisha (Physicochimie des Electrolytes, des Colloides et Sciences Analytiques, UMR7195, CNRS, ESPCI ParisTech, Paris, France), Catherine Combellas, Frederic Kanoufi, Jean Pinson, Fetah Podvorica

Photochemical grafting of acetonitrile and iodoacetonitrile on metallic surfaces

s13-P-017

Valentina Bonometti (Dipartimento di Chimica Fisica ed Elettrochimica, Università di Milano, Milano, Italy), Francesco Sannicolò, Giovanni Rampinini, Tiziana Benincori, Simona Rizzo, Wlodzimierz Kutner, Krzysztof Noworyta, Patrizia Romana Mussini, Roberto Cirilli

Inherently chiral thiophene-based electrode surfaces

s13-P-018

Yuliya Dzyazko (Department of Membrane & Sorption Processes and Materials, V.I. Vernadskii Institute of General & Inorganic Chemistry, Kiev, Ukraine), Yurii Volfkovich, Valentin Sosenkin, Nadejda Nikolskaya

Diagnostics of Inorganic Membranes Functionalized for Electromembrane Processes

s13-P-019

Yuliya Dzyazko (Department of Membrane & Sorption Processes and Materials, V.I. Vernadskii Institute of General & Inorganic Chemistry, Kiev, Ukraine), Ludmila Belyakova

Diagnostics of Functionalized Silica using Impedance Spectroscopy

s13-P-020

Ali A. Ensafi (Department of Chemistry, Isfahan University of Technology, Isfahan, Iran), Lotfi M.

Electrocatalytic Oxidation of Hydrazine at Poly(4,5–Dihydroxy–1,3–Benzenedisulfonic Acid) Multiwall Carbon Nanotubes Modified Glassy Carbon Electrode: Improvement of the Catalytic Activity

s13-P-021

António Fonseca (Dept. Chemistry, University of Minho, Braga, Portugal), Marta Ferreira, Mara Pinto, Isabel Neves, Pier Parpot, Fernando Pereira, José Figueiredo, J. Orfão, O. Soares

Electrocatalytic oxidation of organic compounds with noble metal supported on carbon nanotubes

s13-P-022

Iwona Grabowska (Department of Biosensors, Polish Academy of Sciences, Olsztyn, Poland), Wienand Nulens, Huynh Thien Ngo, Wim Dehaen, Hanna Radecka, Jerzy Radecki

Characterization of redox-active corrole and Cu(III)-corrole self assembled monolayers deposited onto gold electrodes

s13-P-023

Sophie Griveau (Chimie ParisTech, UPCGI, UMR 8151, INSERM 1022, Paris, France), Megan Coates, Eva Cabet, Tebello Nyokong, Fethi Bedioui

Combination of Scanning Electrochemical Microscopy and Click Chemistry for the Microstructuration of Surfaces

s13-P-024

Paola Jara-Ulloa (Universidad de Chile, Santiago, Chile), Arturo Squella

Determination of polyphenols on molecularly imprinted polymer modified glassy carbon electrode

s13-P-025

Tomonori Kajita (Department of Material Chemistry, Graduate School of Engineering, Kyoto University, Kyoto, Japan)

Wet Chemical Nanostructuring of Gold on Indium Tin Oxide Electrodes

s13-P-026

Antonis Karantonis (Department of Materials Science and Engineering, School of Chemical Engineering, National Technical University of Athens, Athens, Greece), Evangelos Bourbos, Niki Kouloumbi

The functioning of the electrochemical interface as a resonator: Experimental manifestation for the electrodissolution of copper in trifluoroacetic acid

s13-P-027

Jussi Kauppila (Department oF Chemistry, University of Turku, Turku, Finland), Antti Viinikanoja, Ermei Mäkilä, Jarkko Leiro, Jukka Lukkari

Preparation of Water-Soluble Non-Covalently Functionalized Graphene Sheets

s13-P-028

Christina Knöfel (Fuel Cells and Solid State Chemistry Division, Risø National Laboratory for Sustainable Energy, Technical University of Denmark, Roskilde, Denmark), Mogens Mogensen

Electrochemical performance of nanoparticle impregnated SOFC cathode materials

s13-P-029

Ezequiel Pedro Marcos Leiva (INFIQC, Departamento de Matemática y Física, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina)

Hydrogen peroxide reduction on a carboxyl functionalized graphene sheet: A DFT study

s13-P-030

Chang-Jian Lin (Department of Chemistry/Xiamen University, Xiamen, China), Zequan Lin, Yuekun Lai, Ronggang Hu, Ronggui Du

A Highly Efficient ZnS/CdS@TiO_2 Photoelectrode for Photogenerated Cathode Protection of Metals

s13-P-031

Noelia Beatriz Luque (Institute for Theoretical Chemistry, Ulm University, Ulm, Germany), Frederik Tielens, Elizabeth Santos

Theoretical Study of Thiol Self Assembled Monolayer Formation on Au(111) surfaces

s13-P-032

Iwao Mogi (Institute for Materials Research, Tohoku University, Sendai, Japan)

Chiral Behavior of Magnetoelectrodeposited Film Surfaces of Ag and Cu

s13-P-033

Kuniaki Murase (Department of Materials Science and Engineering, Kyoto University, Kyoto, Japan), Mingxiu Zhao, Takashi Ichii, Hiroyuki Sugimura

Redox Behaviors of Ferrocene Derivatives Directly Anchored on Si(111) by Different Tethering Bonds

s13-P-034

Ngoc Hoa Nguyen (Unité de Chimie Organique Moléculaire et Macromoléculaire (UCO2M, UMR, CNRS 6011), Le Mans, France), Frederic Gohier, Daniel Bélanger, Jean-Luc Duvail, Charles Cougnon

Electrochemistry and reactivity of surface-confined catechol groups prepared by diazonium reduction

s13-P-035

Yoshinobu Oshikiri (Department of Environmental Engineering, Yamagata, Japan), Makoto Miura, Aogaki Ryoichi

Examination of Precision in the Measurement of Ionic Vacancy

s13-P-036

Tilia Patois (Institut UTINAM, team NCM, Besancon, France)

Microtribological and corrosion behaviors of 1H,1H,2H,2H-perfluorodecanethiol self-assembled films on copper surfaces

s13-P-037

Patricia Paredes-Olivera (Dept. de Matemática y Física, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Martín Patrito, Fernanda Juárez

Quantum Mechanical Investigation of the Influence of the Local Environment on the Vibrational Properties of Si(111)-H

s13-P-038

Patricia Paredes-Olivera (Dept. de Matemática y Física, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Federico Soria, Martín Patrito

Theoretical Investigation of the Reactivity of Halogenated and Hydrogenated Si(100)-2x1 Surfaces toward NH_3

s13-P-039

Martín Patrito (Dept. Fisicoquímica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Fernando Cometto, Andrea Calderón, Matías Berdakin, Daniela Jacquelín, Vicente Macagno

Thermal Stability of Alkanethiolate Monolayers Investigated by Electrochemical Detection of Thermal Decomposition Products

s13-P-040

Martín Patrito (Dept. Fisicoquímica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina), Andrea Calderón, Fernando Cometto, Vicente Macagno

Formation of Surface Disulfide Bonds in Self Assembled Monolayers of alcanedithiols. Influence of the Forming Solution

s13-P-041

Martín Patrito (Dept. Fisicoquímica, INFIQC, Fac. Ciencias Químicas, Univ. Nacional de Córdoba, Córdoba, Argentina), Andrea Calderón, Vicente Macagno, Patricia Paredes-Olivera

Interaction of Oxidized Copper Surfaces with Alkanethiols in Organic and Aqueous Solvents. The Mechanism of Cu_2O Reduction

s13-P-042

Thierry Pauporte (LECIME, CNRS, ENSCP, Paris, France), Victoire Marie Guerin, Constance Magne, Oleg Lupan

A Comparative Study of Dye Sensitized Solar Cells Based on Electrodeposited and Sol-Gel ZnO Functionalized Nanostructures.

s13-P-043

Damien Quinton (UPCGI, Chimie ParisTech, Paris, France), Edith Antunes, Eva Cabet, Sophie Griveau, Fethi Bedioui, Tebello Nyokong

Mn Phthalocyanine Molecular Electrode formed by Electrochemical Grafting and Azide-Alkyne Click Chemistry for the Biomimetic Activation of Molecular Oxygen

s13-P-044

Jekaterina Reut (Materials Science, Tallinn University of Technology, Tallinn, Estonia), Vitali Syritski, Jevgeni Kaev, Robert Gyurcsanyi, Andres Opik

Covalent surface imprinting strategy of electrosynthesized PEDOT films for protein recognition

s13-P-045

Nobuyuki Sakai (Institute of Industrial Science, The University of Tokyo, Tokyo, Japan), Atsushi Kogo, Tetsu Tatsuma

Visible and Near Infrared Light Induced Charge Separation at Au_{25} Cluster-TiO_2 Interfaces

s13-P-046

Renato Seeber (Department of Chemistry, Università di Modena e Reggio Emilia, Modena, Italy), Chiara Zanardi, Clara Baldoli, Claudio Fontanesi, Emanuela Licandro, Stefano Maiorana, Patrizia Romana Mussini, Laura Pigani, Fabio Terzi

Nanostructured surfaces for amperometric and impedimetric biosensors

s13-P-047

Alexander Vaskevich (Department of Materials and Interfaces, Weizmann Institute of Science, Rehovot, Israel), Alexander B. Tesler, Tanya Karakouz, Yishay Feldman, Israel Rubinstein

Single crystalline Au island films on glass substrates: Control over stability and morphology

s13-P-048

Pallavi Verma (Paul Scherrer Institut, Villigen, Switzerland), Pascal Maire, Petr Novak

Bridging Electrografting and Chemical Modification to Prepare Carbonate Modified Carbon Surfaces

s13-P-049

Ana Viana (Chemistry and Biochemistry Centre Faculty of Sciences, Lisbon University, Lisboa, Portugal), Inês Almeida, António Cascalheira

Exploring CS2-Amine Reaction for One-step Covalent Attachment of Biomolecules on Gold

s13-P-050

Antti Viinikanoja (Department of Chemistry, University of Turku, Turku, Finland), Kari Karhunen, Zhijuan Wang, Carita Kvarnström, Jukka Lukkari

Vibrational Spectroscopy Study of Electrochemical Reduction of Graphene Oxide

s13-P-051

Jiawei Yan (Department of Chemistry, State Key Laboratory for Physical Chemistry of Solid Surfaces, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China), Yongan Tang, Feng Zhu, Chunfeng Sun, Bingwei Mao

A Comparative Electrochemical Scanning Tunneling Microscopy Study of Nonionic Fluorosurfactant Zonyl FSN Self-Assembled Monolayers on Au(111) and Au(100): Potential-induced Structural Transition

s13-P-052

Zafer Yazicigil (Department of Chemistry, Faculty of Science, Selcuk University, Konya , Turkey), Zafer Yazicigil, Yasemin Oztekin, Arunas Ramanavicius

The Electrochemical Investigation of some Polyphenols Properties and Their Copper (II) interactions

s13-P-053

Christophe Innocent (IEM, Montpellier, France), Ai-Fu Che, Vincent Germain, Sophie Tingry, Marc Cretin, David Cornu

Electrospun carbon nanofibers as efficient electrode for electrocatalytic reduction of O_2

s13-P-054

Juan Claudio Mancilla Gamboa (Universidade de São Paulo, São Paulo, Brazil)

Morphology changes of copper surface after potential activation

Symposium 14: Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel Cells

Bioelectrochemical Systems

s14-P-001

Cristina Gutiérrez-Sánchez (Instituo Catálisis y Petroleoquímica, CSIS, Madrid, Spain), Cristina Vaz-Domínguez, Marcos Pita, Sergey Shleev, Víctor M. Fernández, Antonio L. De Lacey

Direct electrochemistry of laccase on modified electrodes

s14-P-002

Hu Huaining (University of Bath, Bath, United Kingdom), Rebecca Thorne, Andrew Dent, Paolo Bombelli, Adrian Fisher, Petra Cameron

Bio-Photo-Voltaic Fuel Cells Configured for Operation under Continuous Flow Conditions

s14-P-003

Ivan Ivanov (Chair for Process Systems Engineering, Otto-von-Guericke University Magdeburg, Magdeburg, Germany), Tanja Vidakovic-Koch, Kai Sundmacher

Enzymatic glucose fuel cell – influence of structural and operational parameters on performance

s14-P-004

Mieke C. A. A. Jansen (Sub-department of Environmental Technology, Wageningen University, Wageningen, Netherlands), Anna B. Veldhoen, Hubertus V.M. Hamelers, Cees J.N. Buisman

Modeling Mass Transfer at a Biocathode of a Methane Producing Microbial Electrolysis Cell

s14-P-005

Shinichi Komaba (Department of Applied Chemistry, Tokyo University of Science, Shinjuku, Japan), Shinya Watanabe, Yuichi Yanagisawa, Eiji Katsuno, Naoaki Yabuuchi, Toshihiko Mitsuhashi, Soshi Shiraishi

Enzyme Electrods with Polyion for the Application to Biofuel Cells

s14-P-006

Deepak Pant (Separation and Conversion Technology, VITO, Flemish Institute for Technological Research, Mol, Belgium), Gilbert Van Bogaert, Yolanda Alvarez Gallego, Ludo Diels, Karolien Vanbroekhoven

A Comparative Analysis of Four Industrial Wastewaters as Substrate in Low Cost Microbial Fuel Cells

s14-P-007

Frankie James Rawson (Deaprtment of Chemistry, University of Canterbury, Christchurch, New Zealand), Alison Downard

Investigations using a double mediator matrix to probe intracellular and extracellular catabolic electron transfer in *Saccharomyces cerevisia*e

s14-P-008

Katarzyna Skorupska (Helmholtz-Zentrum Berlin, Berlin, Germany)

Evidence for Direct Charge Transfer at the Contact between Electrochemically Nanostructured Silicon and the Metalloprotein Laccase

s14-P-009

Robert Slade (Chemistry, University of Surrey, Guildford, United Kingdom), Alfred Thumser, Xuee Wu, Feng Zhao

Fructose-air biological fuel cells with composite enzymatic bio-electrodes formed from multi-walled carbon nanotubes and cellulose cast from an ionic liquid solvent

s14-P-010

Emmanuel Suraniti (Centre de Recherche Paul Pascal (CRPP), CNRS UPR 8641, Pessac, France), Vincent Studer, Charlie Gosse, Neso Sojic, Nicolas Mano

Hydrogel Photopolymerization for Enzymatic Cathodes

s14-P-011

Ruud Timmers (Environmental Technology, Wageningen University, Wageningen, Netherlands), David Strik, Bert Hamelers, Marjolein Helder, Kirsten Steinbusch, Cees Buisman

Ion transport determines maximum current during polarization of the plant microbial fuel cell

s14-P-012

Christophe Innocent (IEM, Montpellier, France), Geraldine Merle, Karine Servat, Boniface Kokoh, Marc Cretin, Sophie Tingry

Concentric biofuel cell based on porous electrochemical contactor

Bioenergy

s14-P-013

Xingxing Chen (Analytische Chemie - Elektroanalytik & Sensorik, Ruhr-Universitaet Bochum, Bochum, Germany), Wolfgang Schuhmann, Minling Shao, Yvonne Ackermann, Dmitrii Guschin, Wenzhi Jia, Leonard Stoica

Development of PQQ-sGDH-based and CDH-based anodes using Os-complex modified electrodeposition polymers and carbon nanotubes for biofuel cell

s14-P-014

Ryuhei Nakamura (Department of Applied Chemistry, University of Tokyo, Tokyo , Japan), Akihiro Okamoto, Nozomi Tajima, Kazuhito Hashimoto

Geo-inspired Approaches for Improving Performance of Bioanode Materials in Microbial Fuel Cells

s14-P-015

Matthieu Picot (UMR 6226, Science Chimique de Rennes, Rennes, France), Frederic Barriere, Olivier Schaetzle, Jean-Marie Fontmorin, Christina Arampatzoglou

Modified Electrode for Microbial Fuel Cells

s14-P-016

Rebecca Thorne (Department of Chemistry, Bath, United Kingdom), Huaining Hu, Andrew Dent, Paolo Bombelli, Adrian Fisher, Petra Cameron

Materials for Algal Bio-Photo-Voltaic Fuel Cells

Electro-active Biofilms

s14-P-017

Plamen Atanassov (Department of Chemical and Nuclear Engineering, UNM Center for Emerging Energy Technologies, Albuquerque, USA), Carolin Lau

Incorporating *Shewanella onedensis* in Silica Films Derived by Chemical Vapor Deposition

s14-P-018

Antonio Berná Galliano (Instituto de electroquímica - Universidad de Alicante, Alicante, Spain), Abraham Esteve-Nuñez, Juan Pablo Busalmen, Juan Miguel Feliu

Respiratory strategies in Geobacter sulfurreducens as revealed by ATR-SEIRAS

s14-P-019

Anand Jain (School of Biotechnology, Dublin , Ireland), Giulio Gazzola, Jack Connolly, Satheesh Krishnamurthy, Jean-Paul Mosnier, Enrico Marsili

Spectroelectrochemistry of electroactive biofilms

s14-P-020

Françoise Stéphanie Ketep (Centre Technique du Papier, Grenoble Cedex 9, France), Eric Fourest, Alain Bergel

Screening Electro Active biofilms in pulp and paper production wastewater

s14-P-021

Uyen Nguyen Hoang Phuong (Laboratoire des Matériaux et du Génie Physique, Grenoble, France), Valérie Stambouli, Didier Delabouglise, Marianne Weidenhaupt, Thierry Douki

Electrochemistry of Bacterial Extracellular Redox Compounds

s14-P-022

Akihiro Okamoto (Department of Applied Chemistry, School of Engineering, University of Tokyo, Tokyo, Japan), Ryuhei Nakamura, Kazuhito Hashimoto

Identification of *In-vivo* Electrochemical Signals from Shewanella oneidensis MR-1 and Effects of Outer-membrane Cytochrome Gene Deletion

s14-P-023

Akihiro Okamoto (Department of Applied Chemistry, School of Engineering, University of Tokyo, Tokyo, Japan), Ryuhei Nakamura, Kazuhito Hashimoto

Roles of Outer Membrane C-type Cytochromes inside the *Shewanella* Biofilm: Implication for a Long-Distance Electron Transfer Pathway Mediated by Cytochromes

s14-P-024

Gabriele Pastorella (School of Biotechnology, Dublin City University, Dublin, Ireland), Giulio Gazzola

Genetic technology to improve biofilms electroactivity for bioremediation applications

s14-P-025

Ramaraja P. Ramasamy (The University of Georgia, Athens, USA)

Electrochemical Characterization of the Biofilm in Microbial Fuel Cells

Redox Enzymes

s14-P-026

Hendrik A. Heering (Leiden Institute of Chemistry, Leiden University, Leiden, Netherlands), Sara Rea, Dubravka Arandjelovic, Frank G. M. Wiertz, Franco Mazzei, Oliver-M. Richter, Carolin Werner, Bernd Ludwig

Electro-enzymology of respiratory complex IV: Exploring the far side of the moon

s14-P-027

Paul Kavanagh (School of Chemistry, NUI Galway, Galway, Ireland)

Combining mediator and enzyme libraries for biocatalytic fuel cell performance

s14-P-028

Sara Rea (Department of Chemistry and Drug Technologies, Sapienza University of Rome, Rome, Italy), Frank G. M. Wiertz, Franco Mazzei, Oliver-M Richter, Bernd Ludwig, Hendrik A. Heering

Titrating the proton and electron affinities of respiratory complex IV by protein film voltammetry

s14-P-029

Minling Shao (Analytische Chemie - Elektroanalytik & Sensorik, Ruhr-Universitaet Bochum, Bochum, Germany), Xingxing Chen, Dmitrii Guschin, Yvonne Ackermann, Leonard Stoica, Wolfgang Schuhmann

Utilizing Os-complex modified electrodeposition polymers for a CDH-based biofuel cell

s14-P-030

Krzysztof Stolarczyk (Faculty of Chemistry, Warsaw University, Warsaw, Poland), Małgorzata Sepelowska, Kamila Sadowska, Jan F. Biernat, Renata Bilewicz, Jerzy Rogalski

Nanotubes-Modified Biocathodes for Laccase Catalyzed Reduction of Dioxygen

s14-P-031

Muhammad Nadeem Zafar (Biochemistry and Structural Biology Department, CMPS, Lund, Sweden), Federico Tasca, Susan Boland, Magdalena Kujawa, Ilabahen Patel, Clemens K. Peterbauer, Donal Leech, Lo Gorton

Wiring of pyranose dehydrogenase with osmium polymers of different redox potentials

Symposium 15: Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells

Computational Electrochemistry

s15-P-001

Perla Balbuena (Department of Chemical Engineering and Materials Science and Engineering Program, Texas A&M University, College Station, USA), Gustavo Ramirez-Caballero, Pussana Hirunsit

Oxygen Reduction Reaction Catalysts with Enhanced Properties against Dissolution

s15-P-002

Thomas Boëdec (AREVA NP, Lyon, France), Dounia Lhachemi, Magali Reytier, Gérard Delette, Pierre Baurens, Christian Perret, Pierre Louat, Denis Tschumperlé

A Numerical Tool to Optimize High Temperature Steam Electrolyser Design

s15-P-004

Vladislav Ivaništšev (Institute of Chemistry, University of Tartu, Tartu, Estonia)

A DFT study of the water adsorption at Bi, Hg, and Ga electrode surfaces

s15-P-005

Akos Kriston (Department of Physical Chemistry, Institute of Chemistry, Eötvös Loránd University, Budapest, Hungary), Balázs B. Berkes, Péter Simon, György Inzelt

Investigation of oxygen reduction reaction on Pt by using electrochemical quartz crystal nanobalance and numerical simulation

s15-P-006

Gustavo Ramirez-Caballero (Materials Science and Engineering Program, Texas A&M University, College Station, USA)

Dissolution-Resistant Materials for Oxygen Reduction Catalysts

s15-P-007

Peter L. Simon (Department of Applied Analysis and Computational Mathematics, Eötvös Loránd University, Budapest, Hungary), Ákos Kriston

Bifurcations in a Model of Oxygen Reduction Reaction at Platinum in Acidic Media and Nafion

s15-P-008

Eckhard Spohr (Faculty of Chemistry, University of Duisburg-Essen, Essen, Germany)

Chemical Reactivity and Transport in Fuel Cell Materials. Atomistic Simulations and Theory

s15-P-009

Valentina Vetere (Commissariat à l'Energie Atomique (CEA), Grenoble, LITEN, Laboratoire des Composants pour les Piles à Combustible et Electrolyseurs, et de Modélisation (LCPEM), Grenoble Cedex 9, France), Alejandro Franco, Ali Kachmar

Bio-inspired materials for H_2 production: A first principles-based multiscale modeling study of the electrocatalytic properties

Fuel Cell Modeling

s15-P-010

M. Paola Carpanese (Chemical and Processing Engineering Department (DICheP), University of Genoa, Genoa, Italy), Marco Panizza, Marina Delucchi, Massimo Bandini, Giacomo Cerisola, Cristiano Nicolella, Antonio Barbucci

Experimental and Theoretical Study of LSM/YSZ Cathodes Behaviour, Based on Morphological and Electrochemical Investigation

s15-P-011

Jérôme Dillet (LEMTA, Nancy-University, CNRS, Vandoeuvre-les-Nancy, France), Gaël Maranzana, Julia Mainka, Olivier Lottin, Adrien Lamibrac

Study of Shut-down/start-up cycling degradation in proton exchange membrane fuel cell

s15-P-012

István Faragó (Institute of Mathematics, Eötvös Loránd University, Budapest, Hungary), Ferenc Izsák, Tamás Szabó, Ákos Kriston

A three-dimensional model of PEM fuel cells with heterogeneous material parameter distributions

s15-P-013

Alexey Gavrilov (Faculty of Physics, Lomonosov Moscow State University, Moscow, Russia), Alexander Chertovich

A dynamic model of an intermediate temperature hydrogen fuel cell

s15-P-014

Sergey Gusarov (National Institute for Nanotechnology, Edmonton, Alberta, Canada), Andrey Tokarev, Vladimir Neburchilov, Andriy Kovalenko

Study of Activity and Stability of Pt-based Catalyst on Ta/N Doped Ti_xO_y Support in PEMFC

s15-P-015

Róbert Horváth (Budapest University of Technology and Economics, Budapest, Hungary), Ágnes Havasi, Tamás Szabó, Ákos Nemes

Parameter estimation in a PEMFC model

s15-P-016

Anne-Katrin Huber (Justus-Liebig-University Gießen, Institute of Physical Chemistry, Gießen, Germany), Mareike Falk, Marcus Rohnke, Bjoern Luerßen, Jürgen Janek

In situ examination of lanthanum strontium manganate (LSM) model electrodes on yttria stabilized zirconia (YSZ) with Time of Flight Secondary Ion Mass Spectrometry (ToF-SIMS)

s15-P-017

Sangsoon Hwang (Department of Mechanical Engineering, University of Incheon, Incheon, Korea), Sangseok Han, Bongil Park, Pilhyong Lee

Transient Response of Polymer Electrolyte Fuel Cell under Non-Isothermal Condition

s15-P-018

Mi Hyun Kim (Karlsruhe Institute of Technology (KIT), Engler-Bunte-Institut, Bereich Gas, Erdöl und Kohle, Karlsruhe, Germany), Henrik Timmermann, Rainer Reimert, Ellen Ivers-Tiffée

Modelling and Simulation of Anode-Supported SOFC Fuelled with Diesel Reformate

s15-P-019

Alexander Kromp (Institute of Materials for Electrical Engineering (IWE), Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany), André Leonide, Henrik Timmermann, André Weber, Ellen Ivers-Tiffée

Modeling Internal Reforming Kinetics in SOFC-Anodes

s15-P-020

Mathieu Le Ny (Laboratoire d Electrochimie et de Physico-Chimie des Materiaux et des Interfaces (LEPMI), Saint Martin d'Hères, France), Yann Bultel, Olivier Chadebec, Gilles Cauffet, Jean Marc Dedulle

D Model of PEMFC Stack

s15-P-021

Julia Mainka (LEMTA, CNRS, Nancy University, Vandoeuvre-lès-Nancy, France), Gaël Maranzana, Jérôme Dillet, Sophie Didierjean, Olivier Lottin

Experimental Analysis of the Origin of the Low Frequency Loop in Electrochemical Impedance Spectra of a PEMFC

s15-P-022

Serguei Martemianov (Institut Pprime UPR, CNRS 3346, Université de Poitiers, ENSMA, Poitiers, France), Ludovic Madier, Alina Ilie, Jean Philippe Garnier

Generic models of fuel cells and determination of MEA parameters

s15-P-023

Ehab Mostafa (Institute of Physical and Theoretical Chemistry, Bonn, Germany), Abd-El-Aziz Ali Abd-El-Latif

DEMS study on methanol electrooxidation at monocrystalline platinum electrodes: The effect of adsorption time, surface structure, Ru adatom and potential

s15-P-024

Ákos Nemes (Department of Physical Chemistry, Institute of Chemistry, Eötvös Loránd University, Budapest, Hungary), Ákos Kriston, György Inzelt, Tamás Szabó

Analysis of the effects of variation of the MEA microstructure at different Pt/Nafion ratios, pressures and temperatures

s15-P-025

Jan Philipp Schmidt (Institute of Materials for Electrical Engineering (IWE), Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany), Dino Klotz, André Weber, Ellen Ivers-Tiffée

Dynamic Electrochemical Model for SOFC-Stacks

s15-P-026

Chunli Song (Division of Chemistry, Graduate School of Humanities and Sciences, Ochanomizu University, Tokyo, Japan), Naoko Hayashi, Takara Sakurai, Ichizo Yagi, Toshihiro Kondo

Electro-catalytic Activity for Oxygen Reduction Reaction at Pt and Pd Monolayers on Au Single Crystal Surfaces

s15-P-027

Toshimasa Wadayama (Department of Materials Science, Graduate School of Engineering, Tohoku University, Sendai, Japan), Naoto Todoroki, Yoshinori Yamada, Tatsuya Sugawara, Yuki Iijima, Kanji Miyamoto

Electrocatalytic properties of MBE fabricated Pt-Ni surface alloys

Multiscale Methods

s15-P-028

Wolfgang G. Bessler (German Aerospace Center (DLR), Stuttgart, Germany), Marcel Vogler, Florian Leucht, Josef Kallo, Moritz Henke, K. Andreas Friedrich

Multi-scale modeling of solid oxide fuel cells: From patterned anodes to a hybrid power plant system

s15-P-029

Akizuki Ken (Nissan Motor Co., Ltd., Kanagawa, Japan), Lyonnard Sandrine, Gebel Gerard, Abe Mitsutaka, Ohma Atsushi, Shinohara Kazuhiko

Observation of Ionomer Structure in Catalyst Layers by Small Angle Neutron Scattering Techniques

s15-P-030

Ákos Kriston (Department of Physical Chemistry, Institute of Chemistry, Eötvös Loránd University, Budapest, Hungary), Karl Dobos, Norbert Molnár, Szabó Tamás, Soma Vesztergom, Balázs B. Berkes, Ákos Nemes

The application of multi-level simulation during the development of a hydrogen fuel cell vehicle

s15-P-031

Hiromitsu Takaba (Department of Chemical Engineering, Tohoku University, Sendai, Japan), Ryo Nagumo, Ryuji Miura, Ai Suzuki, Hideyuki Tsuboi, Nozomu Hatakeyama, Akira Endou, Momoji Kubo, Akira Miyamoto

Experiment Integrated Multi-level Simulation of Li-ion Battery

Transport Phenomena Simulation

s15-P-032

Gunars Bajars (Institute of Solid State Physics, University of Latvia, Riga, Latvia), Evalds Pentyush, Andrejs Lusis, Jevgenijs Gabrusenoks

Simulation of Voltammetric Characteristics of Electrochemical Electrodes by Variable RC Chain at a Potential Sweep Condition

s15-P-033

Gaël Maranzana (LEMTA, Nancy University, CNRS, Vandoeuvre les Nancy, France), Julia Mainka, Jerome Dillet, Sophie Didierjean, Olivier Lottin

A proton exchange membrane fuel cell impedance model which takes into account the convection in the channel direction

s15-P-034

Stephen Paddison (Chemical & Biomolecular Engineering, University of Tennessee, Knoxville, USA), Bradley Habenicht

The Hydration and Transport of Protons in Model Polymeric Systems with High Perfluorosulfonic Acid Density and Minimal Water

Late registrations

s15-P-035

Alejandro Franco (CEA, DRT, LITEN, DETH, Laboratoire des Composants pour Piles à combustibles et Electrolyseurs et de Modélisation, Grenoble, France), Christian Jallut, Luiz Fernando Lopes Oliveira

Multiscale Modeling of a PEM-Water Electrolyser

s15-P-036

Alejandro Franco (CEA, DRT, LITEN, DETH, Laboratoire des Composants pour Piles à combustibles et Electrolyseurs et de Modélisation, Grenoble, France), Wolfgang G. Bessler, Romain Coulon

A 1D Model for the Chemical Degradation of Nafion: Impact of microstructure modification on cell potential

Symposium 16: General Session

s16-P-001

Elene Kvaratskhelia (R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Tbilisi, Georgia), Ramaz Kvaratskhelia

The Regularities of Distribution of the Ionized and Non-ionized Forms in the Dilute Solutions of Weak Multibasic Organic Acids

s16-P-002

Laura Cubillana Aguilera (Department of Analytical Chemistry, University of Cádiz, Puerto Real, Cádiz, Spain), María Franco Romano, Almoraima Gil Montero, Joaquín Rafael Crespo Rosa, Ignacio Naranjo Rodríguez, José Luis Hidalgo Hidalgo de Cisneros, José María Palacios Santander

Optimization procedure for the synthesis of gold sononanoparticles using experimental design

s16-P-003

Liana Anicai (Direction of Research, PSV Company SA, Bucharest, Romania), Andreea Florea, Stefania Costovici, Aurora Petrica, Teodor Visan

Evaluation of Corrosion Behaviour in the case of Ni Alloys Coatings Obtained from Choline Chloride Based Ionic Liquids

s16-P-004

Luis Alberto Avaca (Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil), Giancarlo Salazar-Banda, Adriana E. de Carvalho, Leonardo S. Andrade, Romeu C. Rocha-Filho

The physical degradation of boron-doped diamond surfaces after repeated cathodic pretreatments

s16-P-005

Ipek Becerik (Chemistry Department, Istanbul Technical University, Istanbul, Turkey)

Voltammetric Investigation of the Electroadsorption of Thiophene on Smooth Platinum Electrode in Acidic Media

s16-P-006

Christopher M. A. Brett (Departamento de Química, Universidade de Coimbra, Coimbra, Portugal), Sydney dos-Santos, Eder Cavalheiro

A carbon nanotube / silicone rubber composite electrode for the determination of propranolol

s16-P-007

Carolina Calixto (Instituto de Química de São Carlos, São Carlos, Brazil), Éder Cavalheiro

Determination of tetracycline at a graphite-polyurethane composite electrode in natural water sample

s16-P-008

Marco Carminati (Dipartimento di Elettronica e Informazione, Politecnico di Milano, Milano, Italy), Angelo Rottigni, Giorgio Ferrari, Marco Sampietro

Versatile USB Signal Generator for Portable High-Performance Electrochemistry

s16-P-009

Hyun Gil Cha (Department of Chemistry, Sogang University, Seoul, Korea), Soo Jin Kim, Hyun Sung Kim, Kyung Byung Yoon

Hematite (Fe_2O_3) Single Crystal Photocatalyst Film by Primary Growth Deposition

s16-P-010

Michael Darlington (University of Liverpool, Liverpool, United Kingdom), Christopher Lucas, Yvonne Gruender, Alexander Brownrigg, Paul Thompson, Naomi Wong, Fiona Mcbride

Combined In-situ X-ray and Electrochemical Measurements of the Oxidation of Metal Surfaces

s16-P-011

Alexey Davydov (A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Moscow, Russia), Tatyana Kabanova, Vladimir Volgin

Electrohydrodynamic Impedance of Rotating Disk Electrode in Multi-Ion Solution

s16-P-012

Alla Duhin (Tel-Aviv University, Ramat Aviv, Israel), Alexandra Inberg, Noam Eliaz, Eliezer Gileadi

Electroless deposition of rhenium alloys

s16-P-013

Igor Efimov (Department of Chemistry, University of Leicester, Leicester, United Kingdom)

The Effect of Potential Dependence in Enzymatic Catalysis: Kinetic Study of Human Indoleamine Dioxygenase

s16-P-014

Sohrab Ershad (Chemistry, Marand, Iran)

electrochemical behavior of new terpyridine - cadmium(II) complex in non-aqueous solvents at the surface of solid electrodes

s16-P-015

Orlando Fatibello-Filho (Departamento de Química/ Universidade Federal de São Carlos, São Carlos, Brazil), Roberta Antigo Medeiros, Bruna Claudia Lourenção, Romeu C. Rocha-Filho, Orlando Fatibello-Filho

Square-Wave Voltammetry vs. Multiple Pulse Amperometry in the Simultaneous Determination of Phenolic Antioxidants using a BDD Electrode

s16-P-016

Orlando Fatibello-Filho (Departamento de Química, Universidade Federal de São Carlos, São Carlos, Brazil), Humberto H. Takeda, Bruno C. Janegitz, Roberta A. Medeiros, Orlando Fatibello-Filho

Differential Pulse Voltammetric Determination of Ciprofibrate Using a Glassy Carbon Electrode Modified With Functionalized Carbon Nanotubes Within a Poly (Allylamine Hydrochloride) Film

s16-P-017

Fatemeh Ghorbani-Bidkorbeh (Department of Pharmaceutics, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran), Saeed Shahrokhian, Ali Mohammadi, Rasoul Dinarvand

Electrochemical Investigation of 6-Mercaptopurine on the Surface of Carbon Paste Electrode Modified with Cobalt Salophen Complex: Application to Determinations In Pharmaceutical and Clinical Preparati

s16-P-019

Ghasem Karim-Nezhad (Department of Chemistry, Khoy, Iran)

Electrocatalytic Oxidation of Cyclohexanol on Copper Chloride Modified Copper Electrode

s16-P-020

Sebojka Komorsky-Lovric (Institut Ruder Boskovic, Zagreb, Croatia), Ivana Novak, Bruno Novak

Determination of stevioside by square-wave voltammetry

s16-P-021

Peter Kramar (University of Ljubljana, Faculty of Electrical Engineering, Ljubljana, Slovenia), Izidor Sabotin, Damijan Miklavcic, Alenka Macek Lebar

Planar Lipid Bilayer Viscoelastic Properties Determination

s16-P-022

Stefan Kurek (Physical Chemistry Group, Cracow University of Technology, Krakow, Poland)

Electrocatalysis of neat higher alcohol oxidation by cobalt porphyrin

s16-P-023

Hae-Min Lee (Department of Chemical Engineering and Division of Energy Systems Research, Suwon, Korea), Seung Hye Seo

Characterization of Electrolessly Plated NiMoP Thin Films Using Alkali-Metal-Free Chemicals

s16-P-024

Massimiliano Liberatore (Dyepower, Rome, Italy), Aldo Di Carlo, Andrea Reale, Thomas M. Brown, Stefano Carli, Sandro Fracasso, Carlo Alberto Bignozzi

A novel class of electrolytes for Dye Solar Cell

s16-P-025

Milivoj Lovric (Institut Ruder Boskovic, Zagreb, Croatia), Sebojka Komorsky-Lovric

Inflence of the kinetics of reactant adsorption in the reverse scan square-wave voltammetry

s16-P-026

Lisa Mellander (Department of Analytical Chemistry, University of Gothenburg, Gothenburg, Sweden), Donna M. Omiatek, Andrew G. Ewing

Electrochemical Methods to Measure the Total Neurotransmitter Content in Vesicles

s16-P-027

Yoshiharu Mukouyama (College of Science and Engineering, Tokyo Denki University, Hatoyama, Saitama, Japan), Daisuke Shimizu, Hiroshi Okamoto

Potential Oscillations during Hydrogen Evolution Reaction

s16-P-028

Patrizia Romana Mussini (Dipartimento di Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), Lucrezia L. Dieni, Torquato Mussini, Manuela Rossi, Lucia Viglianti

The problem of pH Standardization and Measurement in Aqueous-Organic Solvents of Very Low Water Content: A Combined Potentiometric and Voltammetric Approach

s16-P-029

Eduardo Muñoz (Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile), Ricardo Schrebler, Rodrigo Henríquez, Cristopher Heyser

Photoelectrochemical Reduction of Nitrate Ions onto Modified Silicon (n, p)

s16-P-030

Paola Monica Quaino (Institute of Theoretical Chemistry, Ulm, Germany), Luca Siffert, Mónica Calatayud, Sebastián Collins, Adrián Bonivardi

On the Reactivity and Structure of CeGa Mixed Oxides for Fuel Cell Applications

s16-P-031

Jesús Daniel Robles Salas (Departamento de Química, Instituto Politécnico Nacional, Escuela Superior de Ingeniería Mecánica y Eléctrica "ESIME-ZACATENCO", México, Mexico), María de Lourdes Elizalde Aguilar, Guadalupe Silva Oliver

Evaluation of the wall shear stress (Tw) in turbulent flow during the transport of crude oil to predict corrosion speed

s16-P-032

Piotr Romanczyk (Physical Chemistry Group, Cracow University of Technology, Krakow, Poland), Andrzej Wlodarczyk, Stefan Kurek

Electrocatalysis of dehalogenation by Mo and W alkoxides

s16-P-033

Ahmet Ozgur Saf (Selcuk University Chemistry Deparment, Konya, Turkey), Sabri Alpaydin, Ahmet Burak Sariguney, Erdal Kocabas, Ahmet Coskun

Removal of Chromium(VI) from Aqueous Solutions across CTA Plasticized Membranes Containing 5-(4-phenoxyphenyl)-6H-1,3,4-thiadiazin-2-amine

s16-P-034

Giancarlo Salazar-Banda (Instituto de Tecnologia e Pesquisa, Universidade Tiradentes, Aracaju, Brazil), Adriana Carvalho, Leonardo Andrade, Orlando Fatibello-Filho, Romeu Rocha-Filho, Luis Avaca

The effect of anodic and cathodic electrochemical pretreatments on the electroanalytical performance of boron-doped diamond (BDD) electrodes

s16-P-035

Felipe Semaan (Department of Analytical Chemistry, Fluminense Federal University, Niterói, Brazil), Cristiano Fonseca, Glaucia Vaz, Aída Bittencourt Filha

Micelle Enhancement of the Detection of Pyridoxine Hydrochloride: Use of Sodium Dodecyl Sulphate onto a Graphite-Polyurethane Solid Composite

s16-P-036

Dalibor Stankovic (Faculty of Chemistry, University of Belgrade, Belgrade, Serbia)

New type of modified GC electrodes for potentiometric determination of copper

s16-P-037

Andrey Stepanov (INEOS RAS, Moscow, Russia), Alexander Golub, Nataly Lenenko, Juri Novikov

Electrochemical reduction of powdered metal dichalcogenides in suspensions. Direct synthesis of intercalation compounds

s16-P-038

Andrzej Swiatkowski (Military University of Technology, Warsaw, Poland), Maciej Pakula, Stanislaw Biniak, Stanislaw Popiel

Voltammetric Studies of Activated Carbon Surface Interaction with Trihalomethanes in Aqueous Solution

s16-P-039

Priscila Tamiasso-Martinhon (Centro de Desenvolvimento Tecnológico em Saúde-CDTS, FIOCRUZ, Rio de Janeiro, Brazil), Bernard Tribollet, Oswaldo Esteves Barcia, Oscar Rosa Mattos, Célia Sousa

Electrochemical Impedance Spectroscopy Applied in the Study of Ionic Diffusion in Solid-State Membranes: Effect of Time

s16-P-040

Hassiba Teghidet (LISE, UPR 15 du CNRS, UPMC, Paris, France), Marie Claude Bernard, Lila Chaal, Suzanne Joiret, Boualem Saidani

Exclusive nucleation of epitaxial calcite on Au <111>. Effect of magnesium ions on oriented growth of calcite

s16-P-041

Celia Regina Tomachuk (Instituto de Pesquisas Energéticas e Nucleares IPEN-CCTM, São Paulo , Brazil), Doris Maribel Escriba, Elki Cristina Souza, Isolda Costa

Electrochemical investigation of intermetallic compound Sn/Nb using cyclic voltammetry

s16-P-042

María Soledad Ureta-Zañartu (Dept. Ciencias del Ambiente, Facultad de Química y Biología, Universidad de Santiago de Chile, Santiago, Chile), Thaís González, Francisco Fernández

PolyNiTSPc|Au and $Ni(OH)_2$|Au Modified Electrodes: Effect of the Electrolyte Cation on the Ni(III)/Ni(II) Couple

s16-P-043

Vladimir Volgin (Tula State University, Tula, Russia), Alexey Davydov, Tatyаna Kabanova

Simulation of Ions Transfer in a Channel with Laminar Pulsatile or Oscillatory Flow

s16-P-044

Magdalena Warczak (Institute of Physical Chemistry of the Polish Academy of Sciences, Warsaw, Poland), Andrzej Sadkowski

Monitoring of the spontaneous activation of Ti electrodes with open circuit potential and electrochemical impedance

s16-P-045

Adam Whitehead (CEST GmbH, Wiener Neustadt, Austria), Helena Simunkova, Patricia Lammel, Daniel Gómez Verbel, Bernhard Gollas

The Hard Particle Erosion Resistance of Electrodeposited Nickel-Based Alloys on Copper Bimetallic Layers

s16-P-046

Claudia Yanez (Departamento de Quimica Organica y Fisicoquimica, Facultad de Ciencias Quimicas y Farmaceuticas. Universidad de Chile, Santiago, Chile)

Electrochemical study of pesticide-cyclodextrin inclusion complex

s16-P-047

Mustansara Yaqub (Dundalk Institute of Technology, Dundalk, Ireland), Timothy Mccormac, Camelia Ioana Onet, Wolfgang Schmidt

Redox Properties of Novel Metal Substituted Polyoxometallates

s16-P-048

Stefan Zietek (Military Institute of Chemistry and Radiometry, Warsaw, Poland)

Voltammetric Investigations of Mo(VI) Species Interactions with Modified Activated Carbon Surfaces

s16-P-049

Myriam Madani (ArcelorMittal (OCAS N.V.), Zelzate, Belgium)

Applications of electrochemical techniques in corrosion research in steel industry: EIS of organic coated systems and electrodeposition of ZnO rods

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The International Society of Electrochemistry

The International Society of Electrochemistry (ISE) was founded in 1949 by leading European and American electrochemists to serve the growing needs of electrochemistry. At that time only a handful of scientists were members of the society – known as CITCE (Comité International de Thermodynamique et Cinétique Electrochimiques). Since then ISE has evolved and comprises now more than 2600 individual members, from 70 countries, and is organized in 39 Regional Sections. Both industrialised and developing countries from all five continents are represented. ISE is, therefore, a truly world-wide organisation. ISE is a non-profit-making organisation with its seat in Lausanne, Switzerland.

The International Society of Electrochemistry (ISE) is devoted to the advancement of electrochemical science and technology through the promotion of international contacts and the dissemination of scientific knowledge. For this ISE organises Annual and Spring Meetings which are held in different countries each year and which cover a wide range of current topics in fundamental and applied electrochemistry. The activities of ISE include the sponsoring of regional meetings, and of special meetings of limited participation devoted to particular subjects. A scientific journal, Electrochimica Acta, is edited by ISE and supplied to its members at a special rate. Individuals, non-profit organisations, industrial companies and learned societies may become members of ISE. The administration of ISE is done by an Executive Committee, periodically elected by all members. The Regional Representatives together with the Division Officers form the ISE Council which advises the Executive Committee. The scientific activities of ISE are grouped into Scientific Divisions. They are organised and coordinated by the Committee of Division Officers headed by the President Elect. Upon joining ISE each member indicates his/her divisional interests.

The history of the International Society of Electrochemistry (ISE) is described in a series of articles published in Volume 45 of Electrochimica Acta and available on the web site of the Society (http://www.ise-online.org/geninfo/history.php).

Why you should become an ISE member

There are many reasons for joining the International Society of Electrochemistry. Individual ISE members can obtain:

- reduced subscription rates for the official journal of the Society (Electrochimica Acta) and several other important journals: Journal of Electroanalytical Chemistry, Electrochemistry Communications, Bioelectrochemistry, Corrosion Science, Journal of Power Sources, Journal of Applied Electrochemistry, Electroanalysis and Journal of Solid State Electrochemistry.
- reduced registration fees for ISE Meetings
- access to the "members restricted area" of the ISE website
- access to the full membership directory which contains the addresses of all the members of ISE
- support from the Millennium Fund and the Presidential Fund
- updated information on ISE activities
- young members can apply for the Electrochimica Acta Travel Awards for Young Electrochemists.

ISE members participate fully in the Society's activities which are aimed at advancing electrochemical science and technology, disseminating scientific and technological knowledge, promoting international cooperation in electrochemistry, and maintaining a high professional standard among its members.

How to become an ISE member

Becoming an ISE member is simple: you will find a Membership Application Form on the Society web site (at the address: http://members.ise-online.org/members/new_members.php), which you can fill in and submit online. In the application form you will have to select up to three Divisions and indicate two sponsoring ISE members. Should it be difficult for you finding these sponsors, please write to the Executive Secretary of the Society Dr. M. Musiani, e-mail: m.musiani@ieni.cnr.it. The membership fee for the calendar year 2011 is 40 Euro (10 Euro for age below 30). Once your application is accepted, the ISE Office will contact you for the payment of the membership dues.

Standing ISE Committees

Executive Committee

The Executive Committee is entrusted with the management of the Society

ISE Office

The ISE Office performs all administrative tasks related to the operation of the Society. It is located in Switzerland, and managed by an Executive Secretary.
The ISE Office serves as the primary contact for members and non-members

Division Officers

The scientific activities of ISE are grouped into eight Scientific Divisions. The Divisions are headed by a chairperson assisted by two co-chairpersons. Their main task is to implement the scientific programme of the meetings of the Society.

Regional Representatives

In each country or group of countries having ten members or more, a national or regional section of ISE may be formed. Each section has a Regional Representative.

Council

The ISE Council is an Advisory Body. The voting members of the Council consist of three Officers from each Division and all the Regional Representatives. All persons constituing the Council are elected by the members of the Society.

Scientific Meetings Committee

The Scientific Meetings Committee plans and oversees the organization and sponsorship of scientific meetings within the broad field of electrochemistry.

Fellows Nominating Committee

The Fellows Nominating Committee is a standing committee which proposes names to the Executive Committee for the title of ISE Fellow. It is also responsible for identifying candidates for honorary membership.

Publications Committee

The Publication Committee, a standing committee of ISE, acts as an advisory board to the Executive Committee on publication matters

ISE Executive Committee

President

A.R. Hillman, Leicester, UK (2009-2010)
Representation of ISE. Chairperson of Executive Committee, Council and General Assembly.

President Elect

M. Orazem, Gainesville, FL, USA (2009-2010)
Chairperson of Committee of Division Officers (CDO) and of Advisory Board for Annual Meeting: Coordination of scientific program of Annual Meeting, supervision of Division Officers' activities.

Immediate Past President

C. Brett, Coimbra, Portugal (2009-2010)
Chairperson of Executive Committee in the absence of the President, Co-ordinator of ISE Sponsored Meetings

Vice Presidents

E. J. Calvo, Buenos Aires, Argentina (2009-2011)
Responsible for Corporate and Corporate Sustaining Members

A. Hubin, Brussels, Belgium (2008-2010)
Responsible for relations with other Societies

R. McCreery, Edmonton, Canada (2009-2011)
Responsible for ISE educational activities

P. Novák, Villigen, Switzerland (2008-2010)
Responsible for Regional Sections

Secretary General

S. Roscoe, Wolfville, Canada (2008-2010)
General tasks
Ensuring continuity and efficiency of scientific policy. Coordination of tasks of Vice Presidents. Identification of new developments in electrochemistry and possible new scientific and nonscientific activities. Scientific matters not handled by the President or President Elect.
Tasks in collaboration with ISE Office
Ensuring that constitution, bylaws, guidelines, schedules etc are observed. Preparation of Annual Reports. Collection of information for newsletters and coordination of actions.
ISE Meetings
Coordination of Meetings (location, time, topics). Representative of Executive Committee and advisor to Local Organising Committees for nonscientific matters (location, facilities, control of financial planning, schedule, publicity).

Treasurer

E. Ahlberg, Göteborg, Sweden (2008-2010)
Responsible for the administration and the management of the assets and property of the Society, preparation of budgets and financial reports, financial planning, investment policy, supervision of financial matters of Annual ISE Meetings.

Executive Secretary

M. Musiani, Padova, Italy (2009-2013)
Responsible for maintaining the ISE calendar, assisting with organizing the business and financial arrangements for Annual and Spring Meetings, organising committee appointments, assisting the Secretary General with Society elections, recruiting new members, and co-ordinating Executive Committee meetings. Drafts ISE documents, acts as web page editor, maintains ISE archives and records, and serves as the contact person for members (particularly at ISE meetings).

Scientific Divisions of ISE

Division 1 – ANALYTICAL ELECTROCHEMISTRY

Experimental and theoretical aspects of the analytical process in which electrochemistry has a role, including sample collection / processing, separation, and species identification and quantitation.
Chair: S. Daniele, Past Chair: G. Inzelt, Chair Elect: A. Bond, Vice-Chairs: D. Mandler, C.S. Toh

Division 2 – BIOELECTROCHEMISTRY

Aspects of electrochemistry and electroanalysis characterizing biological processes at the molecular level and relevant to the mechanisms of biological regulation of cells.
Chair: L. Gorton, Past Chair: W. Schuhmann, Chair Elect: A. Kuhn, Vice-Chairs: E. Katz, W. Shin

Division 3 – ELECTROCHEMICAL ENERGY CONVERSION AND STORAGE

Experimental and theoretical aspects of electrochemistry in which the goal is the interconversion of energy between different forms or the storage of energy, including the processes themselves and materials used for these purposes.
Chair: M. Winter, Past Chair: M. Mastragostino, Chair Elect: E. Frackowiak, Vice-Chairs: K.B. Kim, R. Kostecki

Division 4 – ELECTROCHEMICAL MATERIALS SCIENCE

Aspects of materials science in which electrochemistry is part of the synthesis, processing, surface treatment, corrosion, characterization or modeling of new or existing materials, or in which electrochemistry is the user of such materials.
Chair: T. Moffat, Past Chair: W. Kautek, Chair Elect: P. Schmuki, Vice-Chairs: Y. Fukunaka, M. Ryan

Division 5 – ELECTROCHEMICAL PROCESS ENGINEERING AND TECHNOLOGY

Experimental and theoretical aspects and applications of electrochemistry in which engineering issues play a significant role, including scale-up and reactor design.
Chair: F. Walsh, Past Chair: C. Vayenas, Chair Elect: T. Homma, Vice-Chairs: K. Bouzek and A. Cornell

Division 6 – MOLECULAR ELECTROCHEMISTRY

Aspects of organic and inorganic electrochemistry, in which the emphasis is on molecular processes, including the understanding of mechanism and the role of structure.
Chair: C. Amatore, Past Chair: M. Opallo, Chair Elect:, J. Ludvik, Vice-Chairs: P. Mussini, M. Watanabe

Division 7 – PHYSICAL ELECTROCHEMISTRY

Experimental, theoretical and computational aspects of electrochemistry, alone or in conjunction with other methods, relevant to interfaces and conductive media; this shall include physicochemical nature, structure and dynamics from the molecular to the macroscopic level.
Chair: M. Koper, Past Chair: E. Leiva , Chair Elect: E. Savonova, Vice-Chairs: K. Murakoshi, Y. Tong

New Topics Committee

The New Topics Committee identifies interesting and relevant scientific and technological subjects not covered by the ISE Divisions. It has tasks similar to those of a Division, except that it may have several and changing focuses.
Chair: T. Matsue, Past Chair: D. Scherson; Chair Elect: H. Abruña

Regional Representatives

Argentina:	M.E. Martins	2009-2011	2nd term
Austria:	W. Kautek	2010-2012	1st term
Belgium:	C. Buess-Herman	2010-2012	1st term
Brazil:	R. Rocha Filho	2009-2011	2nd term
Canada:	A. Chen	2010-2012	1st term
Chile:	M.S. Ureta	2010-2012	2nd term
China:	Z. Liu	2010-2012	1st term
Croatia:	S. Komorsky-Lovric	2009-2011	1st term
Czech Republic	M. Hromadova	2010-2012	1st term
Denmark:	Q. Chi	2009-2011	2nd term
Estonia:	A. Jänes	2008-2010	1st term
Finland:	B. Wilson	2010-2012	1st term
France:	B. Tribollet	2009-2011	2nd term
Germany:	G. Wittstock	2009-2011	2nd term
Greece:	S. Bebelis	2010-2012	1st term
Hungary:	G. Lang	2008-2010	2nd term
Iran:	M.F. Mousavi	2010-2012	2nd term
Ireland:	E. Marsili	2010-2012	1st term
Israel:	O. Lev	2008-2010	1st term
Italy:	R. Seeber	2010-2012	2nd term
Japan:	H. Nishihara	2009-2011	1st term
Korea:	I.-H. Yeo	2010-2012	1st term
Lithuania:	R. Ramanauskas	2008-2010	1st term
Mexico:	M.M. Davila Jimenez	2009-2011	2nd term
Netherlands:	M. van Brussel	2010-2012	1st term
Norway:	S. Sunde	2010-2012	1st term
Poland:	P. Kulesza	2010-2012	2nd term
Portugal:	L.M. Abrantes	2009-2011	2nd term
Romania:	L. Muresan	2009-2011	1st term
Russia:	A. Nekrasov	2010-2012	2nd term
Serbia:	V. Jovic	2008-2010	2nd term
South Africa:	K. Ozoemena	2010-2012	1st term
Spain:	C. Müller	2008-2010	1st term
Sweden:	F. Björefors	2010-2012	1st term
Switzerland:	C. Comninellis	2010-2012	1st term
Ukraine:	O. Linyucheva	2010-2012	1st term
United Kingdom:	R. Dryfe	2008-2010	1st term
USA:	P. Vanysek	2009-2011	2nd term
Venezuela:	J. Mostany	2010-2012	1st term

Corporate and Corporate Sustaining Members of ISE

ALUAR - Aluminio Argentino
Amararaja Batteries LTD
Ametek - Advanced Measurement Technology
Apple Inc.
Asahi Glass Co. Ltd
Ashai Kasei Chemicals Co. Ltd.
BASF AG, Abt. GCI/E
Bio-Logic SAS
Centre for Electrochemical Technologies
Gamry Instruments
Johnson Controls Hybrid and Recycling GmbH
Metrohm Autolab BV
Nissan Motor Co Ltd
Permascand AB
Sensolytics GmbH
Tanaka Kikinzoku Kogyo K.K.
Toshiba Corporation
Toyota Central R&D Labs., Inc.
Valence Technology Inc.
Zahner-Elektrik GmbH & Co KG

Central Electrochemical Research Institute, India
CNR - Istituto per l'Energetica e le Interfasi, Padova, Italy
DECHEMA e.V., Germany
Laboratory of Physical Chemistry and Electrochemistry, Finland
Paul Scherrer Institut, Switzerland
Technical Faculty Bor, Serbia

Co-operation with other Societies

ISE is an associated organisation of IUPAC and has co-operation agreements with:

Bioelectrochemical Society
Chinese Society of Electrochemistry
Deutsche Gesellschaft für Galvano- und Oberflächentechnik (DGO)
Electrochemical Division of the Italian Chemical Society
Electrochemical Society of Japan
Electrochemistry and Electroanalytical Group of the Brazilian Chemical Society
Electrochemistry Group of the French Society of Chemistry
European Federation of Corrosion
Fachgruppe Angewandte Elektrochemie der Gesellschaft Deutscher Chemiker (Section of Applied Electrochemistry of the Society of German Chemists)
Korean Electrochemical Society
Sociedad Iberoamericana de Electroquimica
Sociedad Mexicana de Electroquimica
The Electrochemical Society

ISE Honorary Members

Honorary Members are appointed by the Executive Committee, after consultation with the Council, primarily in recognition of their contribution to ISE. The total number at any time is limited to ten.

The first Honorary Member of ISE, appointed in the year 2003, was **Otmar Dossenbach**, Treasurer of the Society for 21 years (1980-2000) and Executive Secretary for 2 years (2001-2002).
Two new Honorary Members were appointed in the year 2004: **Roger Parsons** and **Sergio Trasatti**, former Presidents of the Society.
Three Honorary Members were appointed in the year 2005: **Ron Armstrong**, former Editor-in-Chief of Electrochimica Acta for 18 years, **Elton Cairns** and **Dieter Landolt**, former Presidents of the Society .

ISE Fellows

In recognition primarily of their scientific or technical contributions to electrochemistry, the Society may confer on individuals the honour of Fellowship. Such ISE fellows are appointed by the Executive Committee after consultation with the Council. They may or may not be members at the time of their appointment. The appointment does not carry with it automatic membership of ISE.

The present Fellows of ISE are:

H. Abruña
A. Aldaz
R. Alkire
C. Amatore
P. Bartlett
J. O'M. Bockris
C. Comninellis
P. Delahay
C. Gabrielli
E. Gileadi
H. Girault
R. Guidelli
J. Heinze
R. Hillman
G. Inzelt
H. Kim
D. Kolb
A. Kornyshev
O. Lev
J. Lipkowski
D. Macdonald
P. Marcus
R.A. Marcus
J. McBreen
R. Nichols
T. Osaka
D. Schiffrin
W. Schmickler
B. Scrosati
S. Sun
J. Ulstrup
K. Uosaki
C. Vayenas
M. Watanabe
A. Wieckowski

Society Awards

Electrochimica Acta Gold Medal

The Electrochimica Acta Gold Medal may be awarded every two years to the person judged to have made the most significant contribution to electrochemistry in recent years.

Frumkin Memorial Medal

The Frumkin Memorial Medal may be given once every two years. It recognises the outstanding contribution of a living individual over his/her life in the field of fundamental electrochemistry.

Prix Jacques Tacussel

The Prix Jacques Tacussel may be awarded every two years to a person who has made important contributions to an electrochemical technique.

Katsumi Niki Prize for Bioelectrochemistry

The Katsumi Niki Prize for Bioelectrochemistry may be awarded every two years to a scientist who has made an important contribution to the field of bioelectrochemistry.

Bioelectrochemistry Prize of ISE Division 2

The Bioelectrochemistry Prize of ISE Division 2 may be awarded every two years to a scientist who has made an important contribution to the field of bioelectrochemistry.

Brian Conway Prize for Physical Electrochemistry

The Brian Conway Prize for Physical Electrochemistry may be awarded every two years, in recognition of the most successful achievements in Physical Electrochemistry in recent years.

Alexander Kuznetsov Prize for Theoretical Electrochemistry

The Kuznetsov Prize is awarded every two years to a living individual who has made groundbreaking contribution to the theory of electrochemical phenomena, including theory of charge transfer at interfaces and conductive media, structure and dynamics of electrified interfaces at molecular level, and related phenomena.

Tajima Prize

The Tajima Prize recognises the contributions made by younger electrochemists. Candidates must be less than 40 years old. An award may be made every year. The decision of the Award Committee will be based on published work.

Hans-Jürgen Engell Prize

The Hans-Jürgen Engell Prize may be awarded annually to a young electrochemist on the basis of published work in the field of corrosion, electrodeposition or surface treatment.

Oronzio and Niccolò De Nora Foundation Young Author Prize

The Oronzio and Niccolò De Nora Foundation Young Author Prize may be awarded annually to a scientist of less than 30 years for the best paper published in the ISE society journal in the calendar year preceding the award.

Oronzio and Niccolò De Nora Foundation Prize of ISE on Environmental Electrochemistry

The Oronzio and Niccolò De Nora Foundation Prize of ISE on Environmental Electrochemistry may be awarded annually to a scientist of less than 35 years of age on January 1 of the year of the award, for recent application-oriented achievements in the field of environmental electrochemistry.

Oronzio and Niccolò De Nora Foundation Prize of ISE on Applied Electrochemistry

The Oronzio and Niccolò De Nora Foundation Prize of ISE on Applied Electrochemistry may be awarded annually to a scientist of less than 35 years of age on January 1 of the year of the award, for recent achievements in the field of applied electrochemistry.

Electrochimica Acta Travel Award for Young Electrochemists

The Electrochimica Acta Travel Awards for Young Electrochemists are aimed at favouring the participation of young electrochemists in the ISE ANNUAL MEETINGS. The applicants must be ISE members. They must have obtained their Ph.D. not earlier than 6 years before the deadline for applications.

ISE Meeting Sponsorship

What is an ISE sponsored meeting?

You may have noticed that scientific meetings in the field of electrochemistry are often labelled "ISE sponsored Meeting". What does this mean? In addition to organizing its own meetings, such as the Annual ISE Meeting, Divisional Meetings (organized by one or several ISE Divisions) and National or Regional meetings (organized by one or several National ISE Sections), ISE may sponsor other international scientific meetings in the area of electrochemistry. ISE sponsorship is intended to be a sign of quality for the meeting.

What are the requirements for ISE sponsorship?

ISE requires that the scientific quality of the meeting reaches the standard of its own meetings. It is desirable that the advisory board consists of ISE members, as far as possible.

What are the obligations of the organizers?

The organizers have to publicise the ISE sponsorship in all the official documents related to the meeting (announcements, program, website etc.). At the meeting, a representative of ISE must be allowed to say a few words on behalf of the Society, and ISE must have the opportunity to advertise. After the meeting, the organizers should submit a short report to ISE to be published in Electrochimica Acta and on the ISE website.

What do the organizers receive from ISE?

ISE publishes announcements and reports of ISE sponsored meetings in Electrochimica Acta and on the ISE website. The ISE Office can organize, free of charge, mailings to all, or a group of, ISE members. In appropriate cases, there may be a special issue of Electrochimica Acta associated with these meetings. Decisions about special issues are made by the Editor-in-Chief.

What about money?

ISE sponsorship of a meeting does not usually include a financial contribution from ISE. However, the sponsoring Division(s) may use its funds to support such a meeting. The level of financial contribution will be determined by the Division(s), but a typical sum may be 500 Euros.

How to apply for ISE sponsorship?

If you would like to have the scientific meeting you are organizing sponsored by ISE, please send an e-mail with the filled in application form which can be found on the ISE website at: http://www.ise-online.org/sponsmeet/info.php. The application should list the main theme of the meeting, the membership of the advisory and the organising committees, the ISE Division Officers involved in the organisation of the meeting (if appropriate), a preliminary program, the date and location, and any other useful information. The decision will be taken by the Officers of the sponsoring Division(s), or by the Executive Committee, and the ISE Office will inform the organisers.

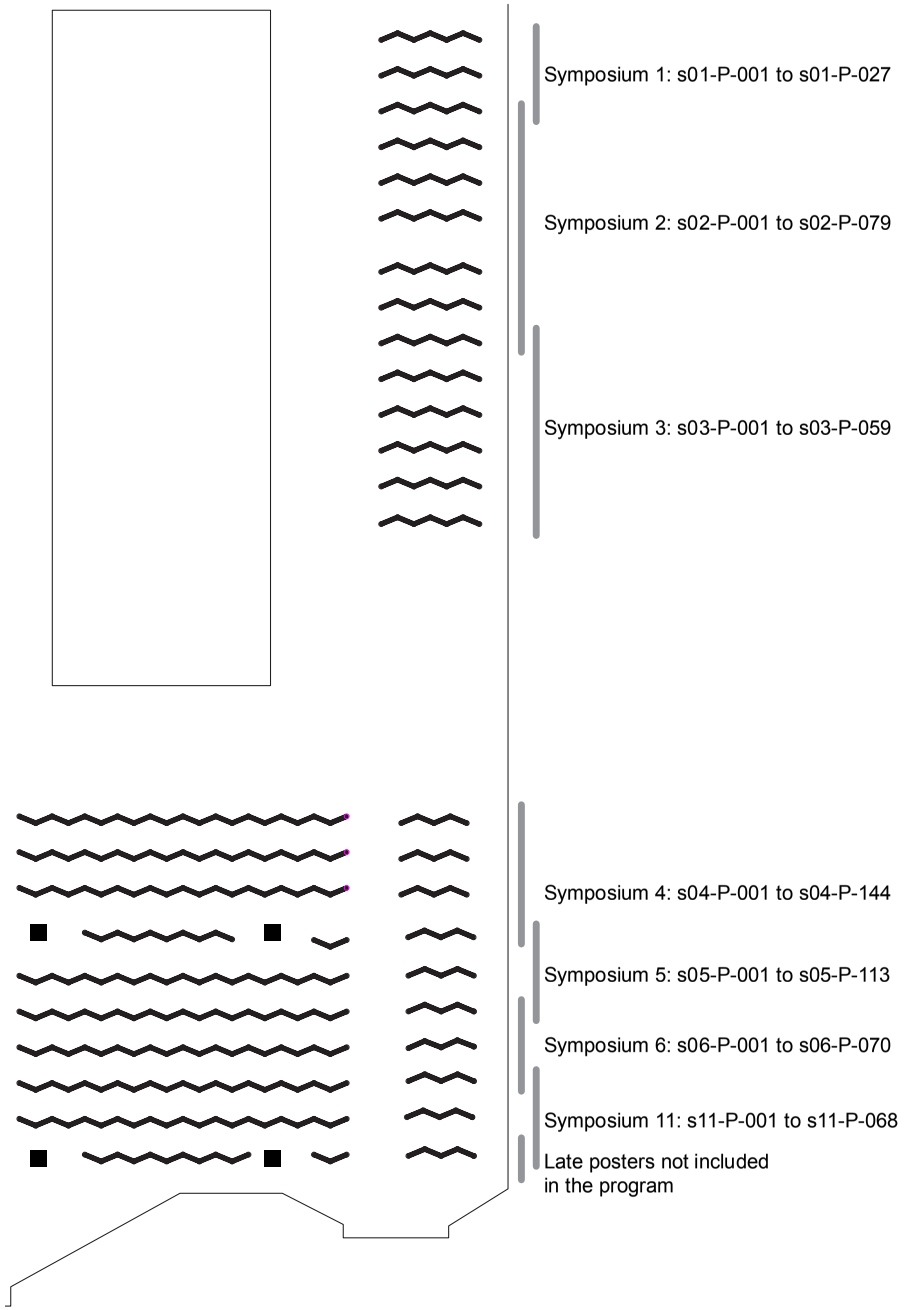
ISE Regional Student Meetings

Graduate Students who are members of ISE and intend to organize a Regional Student Meeting can apply for ISE financial support. Applications submitted by Graduate Students jointly with their supervisors or with other senior members of the staff of their university are also acceptable, but it is expected that the students will be engaged in the organizational aspects of the meeting as much as possible. Regional Student Meetings are typically one-day meetings involving graduate students active in the geographic area where the meeting takes place. The format of the meeting (oral presentations, posters, discussion sessions, other) is autonomously decided by the organizers who will be responsible for securing a venue and collecting registrations. No registration fee should be requested, if financially possible. When the Regional Student Meeting is associated to a larger ISE-sponsored meeting taking place in the same venue, the application must provide clear indication on the connections between the two events and must clearly describe the independent activities reserved to student participants. No later than one month after the meeting, the organizer(s) will send to the ISE Office a report on the event, including the names and the e-mail addresses of the participants. The student participants will be invited to apply for ISE membership. A report giving an overview of the meeting, accompanied by suitable pictures if available, will be posted on the ISE website under Student Activities.

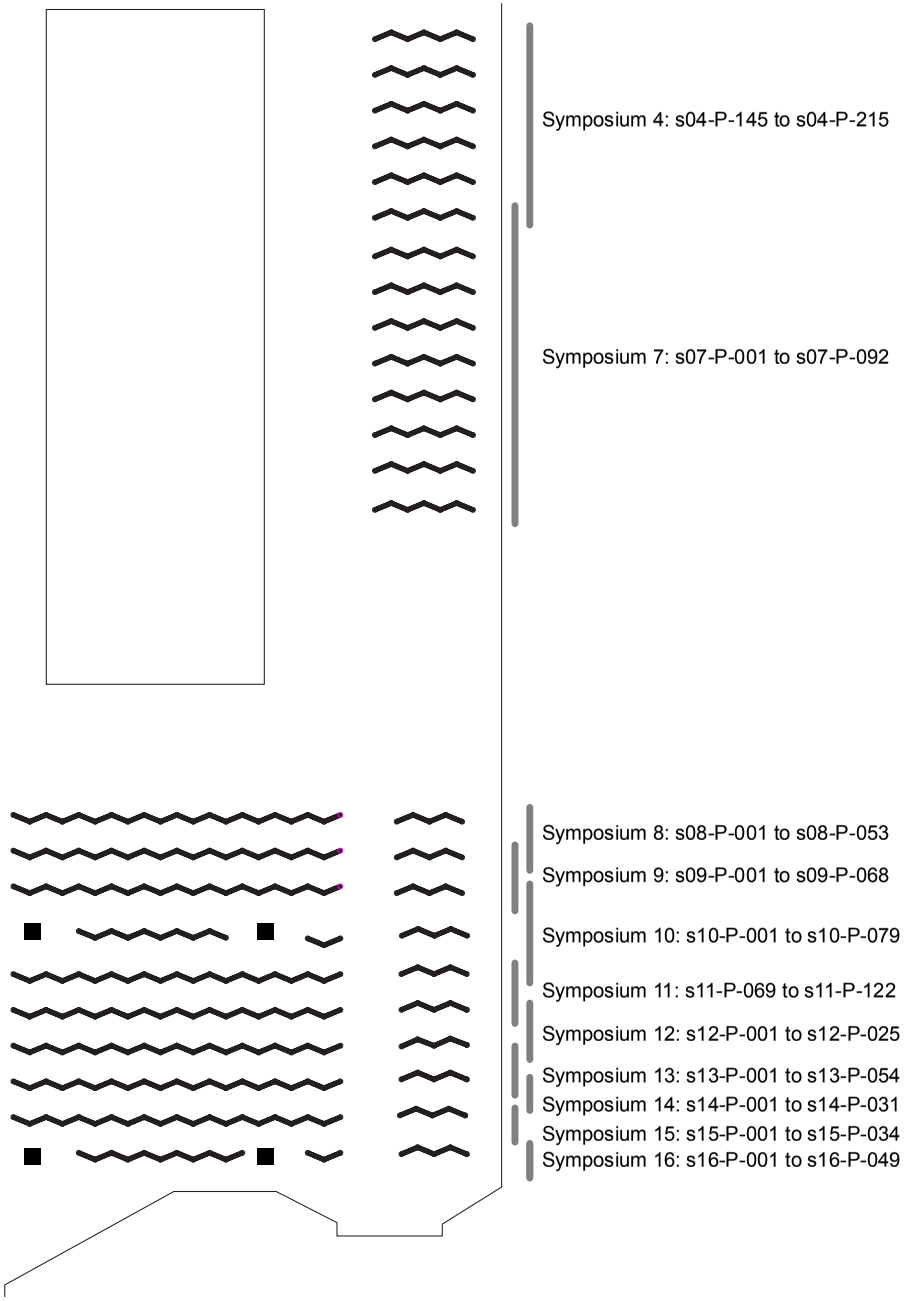
Applications for ISE support must be sent by e-mail to the ISE Office, with a copy to the Regional Representative of the country where the meeting is organized, 3-12 months before the meeting date, using the application form. The local ISE Regional Representative, if requested, will assist the potential meeting organizer in the preparation of the application. Applications will be analyzed by a committee consisting of (i) ISE Immediate Past President (ii) ISE Secretary General, (iii) ISE Treasurer, (iv) ISE Vice President responsible for Educational Activity and (v) ISE Vice President responsible for Regional Sections. The response will be communicated to the applicant and to the relevant Regional Representative no later than 1 month after the application submission.

The maximum financial support will be 600 €; the expected use of the funds must be specified in the application. Co-sponsoring by other Societies and/or institutions is possible.

Poster Session 1: Monday, 27 September



Poster Session 2: Tuesday, 28 September



	Monday, 27.09		Tuesday, 28.09		Wednesday, 29.09	Thursday, 30.09		Friday, 01.10
Rooms	AM	PM	AM	PM	AM	AM	PM	AM
Apollon	S 04 - Electrochemical Energy Conversion and Storage Supercapacitor		Battery research		S 04 Supercapacitor	S 04 Supercapacitor		S 04 Fuel cells
Rhodes								
Rhodes 9-1	S 05 - Electroactive Polymers, Inorganic Electroactive Solids, Nanocomposite Materials					S 05		
Hermes	S 11 - Sensors and Biosensors					S 11 - Sensors and Biosensors		
Rhodes 9-2	S 13 - Surface Functionalization				S 12	Electrochemistry on a Local Scale		
Rhodes 10	S 15 - Physical Modeling and Simulation of Electrochemical Processes in Fuel Cells				S 14	Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial cells		
Euterpe	S 04 - Electrochemical Energy Conversion and Storage Battery research	Battery research	Supercapacitor	Supercapacitor	S 04 Battery research	S 04 Battery research	Battery research	S 04 Battery research
Calliope	S 04 - Electrochemical Energy Conversion and Storage Fuel cells	Fuel cells	Fuel cells	Fuel cells	S 04 Fuel cells	S 04 Fuel cells	Fuel cells	S 04 Fuel cells
Muses								
Risso 8	S 01 - New Insights and Applications in Ionic Liquid Electrochemistry				S 02	S 02 - Environment, Water and Analytical Electrochemistry		
Risso 6	S 03 - Bioelectrochemistry. From fundamentals to Applications with a Special Focus on Nanostructured Materials					S 03		
Clio	S 06 - Corrosion Science: Mechanisms and Methods					S 06		
Thalie	S 07 - Electrodeposition for Material Synthesis and Nanostructure Fabrication					S 07		
Risso 7	S 08 - Electrochemical Process Engineering and Technology					S 16 - General Session		
Erato	S 09 - Molecular Electrochemistry - Methods, Models, Molecules, Materials					S 09		
Uranie	S 10 - Interfacial Electrochemistry: Recent Advances from Experiment and Theory					S 10		