The 58th Annual Meeting of the International Society of Electrochemistry

Exploring Frontiers of Electrochemistry

September 9 to 14, 2007
The Banff Centre, Banff, Canada

PROGRAM

International Society of Electrochemistry
Avenue Vinet 19
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 your participation in "Exploring Frontiers of Electrochemistry", the 58th Annual Meeting of the ISE, September 9 to 14, 2007. We have chosen a beautiful location for this meeting which is being held at the Banff Centre located in Banff National Park, a UNESCO World Heritage site. We are sure you will enjoy the Banff National Park which is a year-round protected wilderness area offering rugged alpine beauty and abundant wildlife. The Banff Centre is located on the side of Tunnel Mountain, surrounded by the spectacular beauty of the Canadian Rockies. A ten minute stroll brings you to the bustling town of Banff located 128 kilometres (80 miles) west of the city of Calgary, Alberta.

The theme of the meeting conveys and reflects the pioneering spirit of those who opened up the west. In a similar manner, electrochemists continue to explore new research frontiers in a pioneering role while at the same time extending and pushing ahead the boundaries of the traditional areas. This conference covers the traditional and the new areas of electrochemistry as described within the seven Divisions of the Society: from molecular and interfacial, to sensors and environmental, to industrial processes such as power sources and energy conversion, and to the development of new materials and nanotechnology. Here electrochemists are making substantial contributions to the science that affects our everyday lives.

This is the first time the ISE Annual Meeting has been held in Canada. For many years Canada has contributed significantly to electrochemical science. In this Meeting we hold a special symposium to honour our most eminent electrochemist, the late Professor Brian E. Conway who secured a significant place among the most notable electrochemists of the 20th century. Among many other prestigious awards, Professor Conway was awarded the Pergamon Gold Medal of the ISE for his significant contributions over his 60 year career in the area of surface electrochemistry. His contributions to electrochemistry in Canada continue through the research of his many students and colleagues who join us to pay tribute to him with this symposium.

The Divisions of ISE have developed ten interdisciplinary symposia for the conference, to encourage dialogue between researchers in diverse fields to further advance the frontier boundaries of electrochemistry. We are pleased to have you join us to share your newest ideas and results and to participate in an exciting adventure in the Canadian Rockies at Banff in 2007. We hope you will enjoy your 58th ISE Meeting.

Christopher Brett
President of ISE

Sharon Roscoe and Jacek Lipkowski
Co-chairs, Organizing Committee, ISE Annual Meeting 2007

Organizing Committee

Co-Chairs

Jacek Lipkowski, University of Guelph, Canada
Sharon Roscoe, Acadia University, Canada

Members

Daniel Bélanger, Université du Québec à Montréal, Canada
Viola Birss, University of Calgary, Canada
Christopher Brett, ISE President, Universidade de Coimbra, Portugal
Juan Feliu, ISE Immediate Past President, University of Alicante, Spain
Barry MacDougall, National Research Council, Canada
Petr Novak, Paul Scherrer Institut, Switzerland
Tetsuya Osaka, Waseda University, Japan
Peter Pickup, Memorial University of Newfoundland, Canada

Local Organizing Committee Members

Dan Bizzotto, University of British Columbia, Canada
Ian Burgess, University of Saskatchewan, Canada
Aicheng Chen, Lakehead University, Canada

Symposia Organizers

Symposium 1: Bioelectrochemistry

Ana Maria Oliveira Brett, Universidade de Coimbra, Portugal
Dan Bizzotto, University of British Columbia, Canada
Wolfgang Schuhmann, Ruhr-Universitat Bochum, Germany
George Wilson, Kansas University, USA

Symposium 2: Energy Storage and Energy Conversion Systems

Dan Scherson, Case Western Reserve University, USA
Ruediger Koetz, Paul Scherrer Institute, Switzerland
Minoru Inaba, Doshisha University, Japan
Marina Mastragostino, University of Bologna, Italy
David P. Wilkinson, University of British Columbia, Canada

Symposium 3: Proton Conduction and Transfer

Joachim Maier, Max-Planck-Institut, Stuttgart, Germany
Michael Eikerling, Simon Fraser University, Canada
Klaus-Dieter Kreuer, Max-Planck-Institut, Stuttgart, Germany
Thomas Zawodzinski, Case Western Reserve University, USA

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Ezequiel Leiva, Universidad Nacional de Cordobar, Argentina
Kim Daasbjerg, University of Aarhus, Denmark
Andrew Gewirth, University of Illinois at Urbana-Champaign, USA
Flavio Maran, University of Padova, Italy
Roberto Salvarezza, INIFTA, Argentina
Mark Workentin, University of Western Ontario, Canada

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Achille De Battisti, University of Ferrara, Italy
Christina Bock, National Research Council, Canada
Christos Comninellis, EPFL, Switzerland
Constantinos Vayenas, University of Patras, Greece
Andrzej Wieckowski, University of Illinois at Urbana-Champaign, USA

Symposium 6: Electroanalysis and Electrochemical Sensors

Johna Leddy, University of Iowa, USA
Lo Gorton, Lund University, Sweden
Ovadia Lev, Hebrew University of Jerusalem, Isreal
Hasuck Kim, Seoul National University, Korea

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Gregory Jerkiewicz, Queen's University, Canada
Viola Birss, University of Calgary, Canada
David Harrington, University of Victoria, Canada
Barry MacDougall, National Research Council, Canada

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Bernd Speiser, Universität Tübingen, Germany
Daniel Guay, INRS Énergie, Matériaux et Télécommunications, Canada
Ole Hammerich, University of Copenhagen, Denmark
Philippe Marcus, CNRS, France
David Shoesmith, University of Western Ontario, Canada

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Tom Moffat, NIST, USA
Ian Burgess, University of Saskatchewan, Canada
Waldfried Plieth, Technische Universität Dresden, Germany
Younan Xia, University of Washington, USA

Symposium 10: General Session

Jean Lessard, Université de Sherbrooke, Canada
John L Stickney, University of Georgia, USA
Shi-Gang Sun, Xiamen University, China

PROGRAM OVERVIEW

9 Sept.		10 Sept.		11 Sept.		12 Sept.		13 Sept.		14 Sept.	
Time	Sunday	Time	Monday **Session 1**	Time	Tuesday **Session 3**	Time	Wednesday **Session 5**	Time	Thursday **Session 6**	Time	Friday **Session 8**
		0900	**Opening Ceremony** Award Pres.	0900	Plenary 2 K. Itaya	0900	Plenary 3 W. Knoll	0900	Plenary 4 H. Abruna	0900	Plenary 5 J. Dahn
		1000	Break/Coffee	1000	Break/Coffee	1000	Break/Coffee	1000	Break/Coffee	1000	Break/Coffee
		1020	L1	1020	L1	1020	L1	1020	L1	1020	L1
		1040	L2	1040	L2	1040	L2	1040	L2	1040	L2
		1100	L3	1100	L3	1100	L3	1100	L3	1100	L3
		1120	L4	1120	L4	1120	L4	1120	L4	1120	L4
		1140	L5	1140	L5	1140	L5	1140	L5	1140	L5
		1200	L6	1200	L6	1200	L6	1200	General	1200	L6
		1220	L7	1220	L7	1220	L7	1220	Assembly	1220	L7
		1240	L8	1240	L8	1240	L8	1240	cont.	1240	**Closing Ceremony**
1300	Registration Begins	1300	lunch and	1300	lunch and	1300	break	1300	lunch and	1300	
						1330	Excursion (Bag lunch)				
1400	**Tutorial Courses Lecture I**	1400	**Posters 1A** Coffee	1400	**Posters 1C** Coffee			1400	**Posters 2B** Coffee		
			Session 2		**Session 4**				**Session 7**		
		1500	Plenary 1 Gold Medal award	1500	L9			1500	L6		
1530	Break/Coffee			1520	L10			1520	L7		
				1540	L11			1540	L8		
1600	**Tutorial Courses Lecture 2**	1600	Break/Coffee	1600	L12			1600	L9		
		1620	L9	1620	Break/Coffee			1620	Break/Coffee		
		1640	L10	1640	L13			1640	L10		
		1700	L11	1700	L14			1700	L11		
1730		1720	L12	1720	L15			1720	L12		
		1740	L13	1740	L16			1740	L13		
1800	Welcome Reception (light)	1800	**Posters 1B** Exhibitors Reception	1800	**Posters 2A** Cash Bar Exhibition	1800	BBQ	1800	**Posters 2C** Cash Bar		
								1930	Banquet		
2000			Cash Bar								
						2130		2130	Posters Cash Bar		
		2300		2300				2300			

Contents list

Tutorial Lectures

Sunday 9 September, 2007, 14:00 to 17:30

Session I: Nanotechnology

Max Bell Auditorium

Nanotechnology

Jillian Buriak, National Institute for Nanotechnology, Canada

Electrochemistry in Nanoelectronics and Nanosensors

Nongjian Tao, Arizona State University, USA

Session II: Corrosion in the Oil and Gas Industry

TransCanada Pipeline Pavillon 201

Electrochemistry applied to Oil and Gas Internal Corrosion

Jose R. Vera, BP America Inc., Houston, USA

Cathodic Protection of Pipelines and Aboveground Storage Tanks

Mark E. Orazem, University of Florida, USA

2006 ISE Prize Winners and Award Lecturers

Electrochimica Acta Gold Medal

Monday 10 September, 15:00 to 16:00, Eric Harvie Theatre

Prof. Andrzej Wieckowski, University of Illinois at Urbana-Champaign, USA
Surface Diffusion by EC-NMR and Phase Transitions by BB-SFG

Tajima Prize

Monday 10 September, 16:20 to 17:00, Donald Cameron Hall South Wing, DCH 30

Dr. Alain Walcarius, CNRS-Universite Henri Poincare, France
Analytical electrochemistry for material sciences and feedback from chemistry of materials to electroanalysis: the example of mesoporous organosilicas

Hans-Jürgen Engell Prize

Wednesday 12 September, 10:20 to 11:00, Laszlo Funtek Teaching Wing, LF 122/124

Dr. Monica Santamaria, Palermo University, Italy
Characterization of Passive Film/Electrolyte Junctions by Photocurrent Spectroscopy and Impedance Measurements

Oronzio De Nora Foundation Young Author Prize

Monday 10 September, 17:00 to 17:20, Trans Canada Pipelines Pavilion, TCPL 201

Dr. Vijayasekaran Boovaragavan, Central Electrochemical Research Institute, India
Dynamic optimization of batch electrochemical reactors

Oronzio De Nora Foundation Prize of ISE on Electrochemical Energy Conversion

Thursday 13 September, 10:20 to 11:00, Max Bell Building, MB Auditorium

Prof. Kyung-Won Park, Soongsil University, Republic of Korea
Nanostructure Materials for Methanol Fuel Cells

Plenary Lecturers

Monday 10 September, 09:00 to 10:00, Eric Harvie Theatre

Opening Ceremony

Monday 10 September, 15:00 to 16:00, Eric Harvie Theatre

Prof. Andrzej Wieckowski, University of Illinois at Urbana-Champaign, USA
Surface Diffusion by EC-NMR and Phase Transitions by BB-SFG

Tuesday 11 September, 09:00 to 10:00, Eric Harvie Theatre

Professor Kingo Itaya, Tohoku University, Japan
A New Avenue of Electrochemical Surface Science~From Monolayer to 3D-Crystals

Wednesday 12 September, 09:00 to 10:00, Eric Harvie Theatre

Professor Wolfgang Knoll, Max Planck Institute for Polymer Research, Germany
Tethered Bimolecular Lipid Membranes- a Novel Model Membrane Platform

Thursday 13 September, 09:00 to 10:00, Eric Harvie Theatre

Professor Hector D. Abruna, Cornell University, USA
Redox and Photoactive Nanometric Building Blocks and Devices

Friday 14 September, 09:00 to 10:00, Eric Harvie Theatre

Professor Jeff R. Dahn, Dalhousie University, Canada
Combinatorial studies of Li-ion battery electrode materials and PEM fuel cell catalysts

Exhibition and Poster Sessions

Exhibition

Sally Borden Building (Lower Level)

Open Times

Monday: 13:00-23:00
Tuesday: 10:00-23:00
Wednesday:..... 10:00-13:00
Thursday..... 10:00-23:00

Exhibition Reception Monday 18:00-19:30
Exhibition/Poster coffee Monday, Tuesday and Thursday 14:00-15:00

Posters

Sally Borden Building (Lower Level) and
Professional Development Centre (Poster Display wing)

Session 1: Poster setup Monday 10:00-13:00

Open Times for viewing

Monday: 13:00-23:00
Tuesday: 10:00-15:00

Poster Presentation times

Session 1A Monday: 14:00-15:00
Session 1B Monday: 18:00-19:00
Session 1C Tuesday: 14:00-15:00
Poster take down Tuesday 15:00-16:00

Session 2: Poster setup Tuesday 16:00-18:00

Open Times for viewing

Tuesday: 18:00-23:00
Wednesday: 10:00-13:00
Thursday: 10:00-23:00

Poster Presentation times

Session 2A Tuesday: 18:00-19:00
Session 2B Thursday: 14:00-15:00
Session 2C Thursday: 18:00-19:00
Poster take down Thursday 21:00-23:00

Oral presentation program

Monday 10 September - AM

Opening ceremony

09:00 to 10:00

Location: Eric Harvie Theatre
Chair: S. Roscoe

10:00 to 10:20

Coffee break

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: A. Brett, I. Taniguchi

10:20 to 11:00 Keynote

Nabil El Murr (France)
Doped carbon paste as material to improve electron transfer reactions of amperometric biosensors

11:00 to 11:20 Invited

Tebello Nyokong (South Africa)
Electrode modification with metallophthalocyanine for detection of biological molecules

11:20 to 11:40

Libuse Trnkova (Czech Republic)
Elimination Voltammetry as a Mathematical Model of the Voltammetric Curve Transformation

11:40 to 12:00 Invited

Baohong Liu (China), Yun Liu, Chunping You
Bioanalysis based on functional matrices

12:00 to 12:20

Izabella Zawisza (Germany), Jacek Lipkowski
Structural changes in biological molecules assembled on the electrode surface studied by PM IRRAS

12:20 to 12:40

Gary Blanchard (USA), Liping Ding, Monika Dominska
Understanding the Role of Cholesterol and Pyrene in Surface-Bound Biomimetic Lipid Bilayer Structures

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: D. Scherson, A. Manthiram

10:20 to 11:00 Keynote

M. M. Thackeray (USA)
The Structural Design of Anode and Cathode Materials for Lithium Batteries

11:00 to 11:20 Invited

Robert Kostecki (USA), Marek Marcinek
An in situ Raman Study of Electrochemical PF6- Intercalation into Carbon Black

11:20 to 11:40

Petr Novak (Switzerland), Fabio La Mantia
Impedance Spectroscopy on Graphite Electrodes for Lithium-Ion Batteries

11:40 to 12:00

Masashi Ishikawa (Japan), Eriko Ishiko, Manabu Kikuta, Michiyuki Kono, Toshinori Sugimoto
FSI-Containing Ionic Liquid Electrolytes Compatible with Anodes for Li-Ion Batteries

12:00 to 12:20 Invited
Bruno Scrosati (Italy)
New Sn-based electrode configurations for long-life, high-rate, stable lithium ion batteries

12:20 to 12:40
Nelly Giroud (France), Eric Chainet, Jean-Claude Poignet, Helene Rouault
Study of 1-butyl-3-methylimidazolium tetrafluoroborate for lithium battery electrolyte

12:40 to 13:00 Invited
George Blomgren (USA)
High Power Lithium Ion Batteries an Emerging Market

Symposium 3: Proton Conduction and Transfer

Location: Max Bell Building, MB 253
Chair: J. Maier, J. T. Hynes

10:20 to 11:00 Keynote
Noam Agmon (Israel)
From Hydrogen-Bonds to Proton Mobility

11:00 to 11:40 Keynote
Hans-Heinrich Limbach (Germany)
NMR Studies of Proton Transfer in Ordered and Disordered Solids

11:40 to 12:00
Ehud Pines (Israel)
Unveiling the stoichiometry of the aqueous proton in partially aqueous environments

12:00 to 12:20
Erik Nibbering (Germany), Omar Mohammed, Ehud Pines, Dina Pines
Base-Induced Solvent Switches in Acid-Base Reactions

12:20 to 12:40
Reginald Paul (Canada)
Quantum Mechanics in Proton Transport Phenomena

12:40 to 13:00
Klaus Dieter Kreuer (Germany)
On Polymers with Liquid-like Properties and the Challenge to Develop New Proton Conducting Separator Materials for Intermediate-temperature Fuel Cells

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: E. Leiva, W. Schmickler

10:20 to 10:40
Thomas Doneux (United Kingdom), Donald Bethell, Laurent Bouffier, Wolfgang Haiss, Simon Higgins, Santiago Martin, Richard Nichols, Lisa Scullion, Harm Van Zalinge
Electron Transport Across Peptide Molecular Wires. An Electrochemical and in situ STM Study

10:40 to 11:00
Renat Nazmutdinov (Russian Federation), Michael Bronshtein, Wolfgang Schmickler
Outer-sphere electron transfer across a metal nanowire/electrolyte solution interface: towards a new class of electrode reactions

11:00 to 11:20 Invited
Elizabeth Santos (Argentina)
Experimental and theoretical studies of L-cysteine adsorbed at Ag(111) electrodes

11:20 to 11:40
Ezequiel Pedro Leiva (Argentina), Sergio Alberto Dassie, Marcelo Mariscal, Jimena Olmos, Patricio Velez
Theoretical calculation of properties of pure metallic and modified nanocontacs

11:40 to 12:00

Chih-Wei Wang (Canada), John Bechhoefer, Shun Lu, Dipankar Sen, Hua-Zhong Yu

Electrical switching of the molecular orientations in DNA monolayers investigated by conductive atomic force microscopy

12:00 to 12:20 Invited

Wolfgang Schmickler (Germany), Stefan Frank

Interaction of a monoatomic nanowire with an electrolyte solution

12:20 to 13:00 Keynote

Nongjian Tao (USA)

Electrochemical Control of Electron Transport in Single Molecules

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Donald Cameron Hall, N Wing, DCH 300
Chair: R. Bilewicz, R. Rocha-Filho

10:20 to 10:40

Hoydoo You (USA), N. Alonso-Vante, D. Cao, K.-C. Chang, H.T. Duong, J. Inukai, A. Lewera, A. Wieckowski, W.P. Zhou

Chalcogenide oxygen reduction reaction electrocatalysts: X-ray Photoelectron, Fluorescence, and Diffraction Studies

10:40 to 11:00

Morihiro Saito (Japan), Koji Amezawa, Jun Kuwano, Yoshinobu Saito, Hidenobu Shiroishi, Yoshiharu Uchimoto, Kenji Yoshihara

Development of New Oxygen Reduction Electrocatalysts Based on Pyrochlore-type Oxides

11:00 to 11:20

Peter Bogdanoff (Germany), Iris Dorbandt, Sebastian Fiechter, Armin Hoell, Gerald Zehl

Structural investigation of selenium modified ruthenium nano particles as an alternative catalyst for the electroreduction of oxygen

11:20 to 11:40

Annika Johansson (Sweden), Elisabet Ahlberg, Tobias Johnson Wass

The Mechanism of Oxygen Reduction on Nanostructured Nickel

11:40 to 12:20 Keynote

Yoshio Takasu (Japan), Takahiro Saida, Wataru Sugimoto, Norihiro Yoshinaga

New Oxide Electrocatalysts for Oxygen Reduction in An Acidic Solution

12:20 to 12:40

Lin Zhuang (China)

Combined experimental and DFT study on Pd-alloy catalysts for oxygen reduction

12:40 to 13:00 Invited

Enric Brillas (Spain)

Electro-Fenton and Photoelectro-Fenton Treatments of Organic Pollutants using a Boron-Doped Diamond Anode

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: H. Kim, G. Herzog

10:20 to 10:40

Munetaka Oyama (Japan), Toshihiro Horibe

Effects of capping reagents on the electron transfer reactions on gold nanoparticles attached on the surfaces of indium tin oxides

10:40 to 11:00

Hasuck Kim (Korea, Republic of), Yang Rae Kim, Hyunchang Lim
Fabrication of Interdigitated Electrode Arrays for Electrochemical Immunoassay System

11:00 to 11:20

Alexander Oleinick (France)
Construction of Optimal Quasi-Conformal Mappings for the 2D Numerical Simulation of Diffusion at Microelectrodes. Application to Recessed Disks and Bands and their Arrays

11:20 to 11:40

Daan De Wilde (Belgium), Gert Nelissen
Theoretical Comparison of Pillar Shape Influence on Band Broadening in Electrically and Pressure Driven Flows through Ordered 2-D Porous Chromatographic Media

11:40 to 12:00 Invited

Takashi Kakiuchi (Japan), Takahiro Yoshimatsu
Can salt bridges made of room-temperature ionic liquid change electroanalytical chemistry?

12:00 to 12:20

Mikhail Vagin (Russian Federation)
Electrodes Modified with Thin Liquid Films for Protein and DNA Analysis

12:20 to 12:40

Grégoire Herzog (Ireland), Damien Arrigan, Myriam Lefoix, Brian McMahon, Humphrey Moynihan, Sheena O'Driscoll, Micheàl Scanlon
Detection of oligopeptides at the polarised liquid liquid interface

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: G. Jerkiewicz, D. Caruana

10:20 to 11:00 Keynote

Sergio Trasatti (Italy), Edoardo Guerrini
Advances in Surface Electrochemistry of Conducting Oxide Electrodes

11:00 to 11:20 Invited

Constantinos Vayenas (Greece)
O2 tracer investigation of the origin of Metal-Support Interactions and Electrochemical Promotion using metal supported catalysts

11:20 to 11:40

Benoît Marsan (Canada), Mathieu De Koninck, Simon-Claude Poirier
MnxCu1-xCo2O4 Studied As Oxygen Bifunctional Electrocatalyst

11:40 to 12:00 Invited

Ernesto Calvo (Argentina), Igal Szleifer, Mario Tagliazucchi
A Molecular Theory of Chemically Modified Electrodes by Redox Polyelectrolytes under Reversible Conditions: Comparison with Experiment

12:00 to 12:20

Daren Caruana (United Kingdom), Steven Firth, Emina Hadzifejzovic, Paul McMillan, Johan Stankovic
Dynamic electrochemistry at the solid/gas interface.

12:20 to 12:40

W. Ronald Fawcett (USA)
Charge Distribution Effects in Polyatomic Reactants Involved in Simple Electron Transfer Reactions

12:40 to 13:00

Gyozo G. Lang (Hungary)
On the Reliability of Experimental Data Related to the Interfacial Tension of Solid Electrodes

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: W. Schuhmann, B. Speiser

10:20 to 11:00 Keynote
Wolfgang Schuhmann (Germany), Sabine Borgmann, Thomas Erichsen, Dmitrii Guschin, Sandra Janiak, Christian Leson, Dirk Ruhlig, Halyna Shkil
Electrochemical robotics in microtiter plates for analytical applications

11:00 to 11:20 Invited
Matthew Roberts (United Kingdom), John Owen
High-throughput fabrication and characterization of lithium battery electrodes

11:20 to 11:40 Invited
Jean Paul Lellouche (Israel)
Electro- and Chemical Oxidation Features of Novel Functional Pyrrole/Carbazole-Based Oxidizable Monomers. Unprecedented Data on their Combinatorial Engineering

11:40 to 12:00 Invited
Lorenz Walder (Germany), Burghard Lutter, Martin Möller
Combinatorial Electrochemistry:Electrochromic Displays and Amperometric Sensors.

12:00 to 12:20 Invited
Kevin Moeller (USA)
Solving Synthetic Problems of Location: Building Molecular Libraries on Addressable Microelectrode Arrays

12:20 to 12:40
Bernd Speiser (Germany), Markus Schwarz
Combinatorial Electrosynthesis in Microtiter Plate Wells with Ionic Liquid Electrolytes

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: T. Moffat, W. Plieth

10:20 to 10:40 Invited
Jeff Kelber (USA), Cameron Bjelkevig
Cu Electrodeposition on I-Modified Ru: I Effects on Ru Oxide Formation and Cu Nucleation

10:40 to 11:00
Daniel Kaminski (Germany), Klaus Krug, Olaf Magnussen, Jochim Stettner
In-situ diffraction studies of adsorbates influencing electrochemical interface during epitaxial growth

11:00 to 11:40 Keynote
Klaus Wandelt (Germany)
Growth, Stability and decay of nanoscale structures at copper single crystal electrodes

11:40 to 12:00 Invited
Natasa Vasljevic (USA), Robert G. Copeland, Nancy A. Missert
Copper Surface Structuring Induced by Competitive Adsorption of Pb and Halide Anions

12:00 to 12:20 Invited
Shuehlin Yau (Taiwan)
In situ Scanning Tunneling Microscopy Imaging of Electrodeposition of Cadmium and Copper onto Mercury Film Electrode Supported by Pt(111)

12:20 to 12:40 Invited
Alexander Vaskevich (Israel), Tatyana A. Bendikov, Tanya Karakouz, Israel Rubinstein, Tali Sehayek
Reshaping of Noble Metal Nanostructures on Solid Substrates

Symposium 10: General Session

Location: Trans Canada Pipelines Pavilion, TCPL 201 Aud
Chair: J. Lessard, A. Kazuhisa

10:20 to 10:40

Johan Deconinck (Belgium), Gert Nelissen
Multi Ion Simulation of copper deposition on wires in laminar and turbulent electrolyte flow

10:40 to 11:00

Peter Raffelstetter (Austria), Johan Deconinck, Günter Fafilek, Hermann Kronberger, Bernhard Mollay, Gerhard Nauer, Gert Nelissen, Marius Purcar, Bart Van Den Bossche
Modelling of Electrochemical Pattern Etching Processes: Influence of the Design

11:00 to 11:20

Azumi Kazuhisa (Japan), Shinnosuke Egoshi, Hiroaki Fujieda, Hidetaka Konno
Direct electroless Ni-P plating on ADC12 dicasting alloy

11:20 to 11:40

Bernhard Mollay (Austria), Gerhard Nauer, Gunther Schöllhammer
On the Optimization of High Precision Electrochemical Machining Processes: Localization of the Dissolution Rate Distribution

11:40 to 12:00

Sangchul Kim (Korea, Republic of), Jaewon Han, Jiho Hong, Sungjoong Joo, Keeho Kim, Youngmin Kim, Hanchoon Lee, Minhyung Lee
Effect of Direct Contact Via Process on Device Performance in Dual Damascene Cu Interconnects

12:00 to 12:20

Jomar Thonstad (Norway)
Are Inert Anodes for Aluminium Electrolysis Close to a Technological Breakthrough?

12:20 to 12:40

Sudesh Lakshitha Wijesinghe (Singapore), Daniel John Blackwood, Mark Breese, Ee Jin Teo
Influence of microstructure on the electronic and optical properties of porous silicon grown on highly conducting wafers.

12:40 to 13:00

Nobuhito Imanaka (Japan)
Electrochemical Single Crystal Growth by Electrolyzing Ion Conducting Solids

Monday 10 September - PM

Plenary Lecture

Location: Eric Harvie Theatre
Chair: C. Brett

15:00 to 16:00
Andrzej Wieckowski (USA)
Surface Diffusion by EC-NMR and Phase Transitions by BB-SFG

16:00 to 16:20
Coffee break

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: N. Mano, M. Thompson

16:20 to 16:40 Invited
Manuela Rueda (Spain), Consuelo Cerrillos, Inmaculada Navarro, Francisco Prieto
Supported Phospholipid-Gramicidin Monolayers as Biomimetic Films: Electrochemical and AFM Studies

16:40 to 17:00
Renata Bilewicz (Poland)
Influence of Perfluorinated Compounds on Model Lipid Membranes

17:00 to 17:20 Invited
Alexander Kuhn (France), Rolf Hempelmann, Serge Ravaine, Neso Sojic, Rafael Szamocki
Porous microelectrodes for improved bioelectroanalytical measurements

17:20 to 17:40
David Mendez Soares (Brazil), Wyllerson Evaristo Gomes, Mario Alberto Tenan
Multiple SDS Layers Film on Gold Electrode Surfaces

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: E. Takeuchi, B. Scrosati

16:20 to 17:00 Keynote
M. Stanley Whittingham (USA), Jiajun Chen, Natalya Chernova, Michael J. Vachio, Shijun Wang
The Synthesis and Characterization of Olivines and Related Compounds for Electrochemical Applications

17:00 to 17:20 Invited
A. Manthiram (USA), T. A. Arunkumar, Y. Wu,
High Capacity Layered Li[Li1/3Mn2/3]O2 - Li[Mn1-y-zNiyCoz]O2 Cathodes for Lithium Ion Batteries

17:20 to 17:40
Naoaki Yabuuchi (USA), Yong-Tae Kim, Sundeep Kumar, Halyley Li, Yang Shao-Horn
Changes in the Crystal Structure and Electrochemical Properties of LixNi0.5Mn0.5O2 during Electrochemical Cycling to High Voltages

17:40 to 18:00
Minoru Inaba (Japan), Ken Hirota, Fumiharu Niina, Yoshiyuki Oba, Yasuyuki Ogino, Akimasa Tasaka
TiO2(B) as a High Potential Negative Electrode for Lithium Ion Batteries

Symposium 3: Proton Conduction and Transfer

Location: Max Bell Building, MB 253
Chair: K.-D. Kreuer

16:20 to 17:00 Keynote
Sossina Haile (USA)
Solid Acid Electrolytes: Materials for Fuel Cells

17:00 to 17:20 Invited
Lutgard De Jonghe (USA)
Proton Transport in Rare Earth Phosphates

17:20 to 17:40 Invited
Gillian Goward (Canada), Ye Gang, Vijayakumar Murugesan, Kristen Soo, Jason Traer
Solid-State NMR Studies of Hydrogen-Bonding and Ion Dynamics in Proton Conductors

17:40 to 18:00
Seniz Beyazyildirim (Germany), Aninda Jiban Bhattacharyya, Klaus Dieter Kreuer, Joachim Maier, Michael Schuster
Heterogeneous Doping of a Weak Covalent Electrolyte: Conductivity Enhancement of Imidazole by Admixture of Oxide Particles

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: R. Nazmutdinov, E. Santos

16:20 to 16:40 Invited
Guillermo Beltramo (Germany), Margret Giesen, Harald Ibach
Measuring the Step Line Tension and the Step Dipole Moment on Vicinal Surfaces

16:40 to 17:00 Invited
Bing-Wei Mao (China), Jin Tang, Jing-Gang Wang, Yi-Min Wei, Jia-Wei Yan
STM Tip-induced Nanostructuring in an Ionic Liquid

17:00 to 17:20 Invited
Robert Dryfe (United Kingdom)
Nanoparticle Deposition at the Liquid/Liquid Interface

17:20 to 17:40 Invited
Mario Del Popolo (United Kingdom), Jorge Kohanoff, Ruth M. Lynden-Bell, Carlos Pinilla
The behavior of ionic liquids at the nanoscale. From bulk properties to confined geometries

17:40 to 18:00 Invited
Rolf Schuster (Germany)
Electrochemical Microstructuring with Ultrashort Voltage Pulses: Limitations and Prospects

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Donald Cameron Hall, N Wing, DCH 300
Chair: Z. Samec, A. Lasia

16:20 to 16:40
Yoshiya Fujiwara (USA), Ting He, Ju Li, Liang Qi
Theoretical design of new electrocatalysts by considering both activity and stability

16:40 to 17:00
Yung-Eun Sung (Korea, Republic of), In-Su Park
Electrocatalytic activities of surface-modified Au nanoparticles

17:00 to 17:20
Figen Kadirgan (Turkey), Nurten Sayar
Non-platinum metal nano-composite cathode catalyst for PEM fuel cells

17:20 to 17:40
Norbert Wagner (Germany), Carl Albrecht Schiller
Impedance Measurements of Silver Gas Diffusion Electrodes during Oxygen Reduction in Alkaline Solution

17:40 to 18:00
Marcelo Carmo (Brazil), Marcelo Linardi, Joao Guilherme Rocha Poco
Physical and Electrochemical Characterization Of H202 Activated Carbons as Electrocatalysts Support for PEMFC and DMFC Applications

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: R. Bilewicz, C. Brett

16:20 to 17:00 Keynote
Alain Walcarius (France)
Analytical electrochemistry for material sciences and feedback from chemistry of materials to electroanalysis: the example of mesoporous organosilicas

17:00 to 17:20
Andrew Nelson (United Kingdom), Sanja Frka, Blazenka Gasparovic, Zlata Kozarac, Dubravco Risovic
Correlating fractal structure and impedance measurements in both natural and model insoluble monolayers

17:20 to 17:40
Zachary Coldrick (United Kingdom), Matthew Davis, Andrew Nelson, Paul Steenson
Online toxicity sensing systems based on membrane organisation

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: B. Marsan, C. P. Wilde

16:20 to 16:40 Invited
Paul Wilde (United Kingdom), Shah Baten, Alan Taylor
Second Harmonic Generation Studies of Surface Oxidation at Electrodes.

16:40 to 17:00
David Harrington (Canada), Tao Wang
Initial Stages of Pt Oxide Growth

17:00 to 17:20
Mohammad Alsabet (Canada), Michal Grden, Gregory Jerkiewicz
Growth of Monolayer Oxides on Ni Electrodes in Aqueous KOH at Well-Defined Potential, Time and Temperature Conditions

17:20 to 17:40
Hanna Elzanowska (Poland), Viola Birss
Hydrogen Peroxide and Oxygen Reduction on Iridium and Iridium Oxide Nanoparticles

17:40 to 18:00
Jorge Omar Zerbino (Argentina), Rosa Torres Sanchez
Cuprous oxide films grown on copper in aqueous solutions containing oxalate and ethylene glycol.

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: D. Evans, K. Moeller

16:20 to 17:00 Keynote
Juergen Heinze (Germany), Hermann John, Armin Rasche, Daniel Weis
Electrochemistry of Conducting Polymers - Persistent Models, New Concepts

17:00 to 17:20
Ole Hammerich (Denmark), Jørn B. Christensen, Thomas Hansen, Asbjørn Thorvildsen
The electrochemistry of 1,4-phenylenediamines and PAMAM dendrimers with a 1,4-phenylenediamine core

17:20 to 17:40
Nicole Fink (Germany), Guido Grundmeier, Galina Klimow, Ralf Posner
Investigation of driving forces leading to a better understanding of ion transport reactions at metal/oxide/polymer interfaces

17:40 to 18:00
Tatiana Magdesieva (Russian Federation), Aleksander Dolganov, Mikhail Goikhman, Vladislav Kudryavtsev, Irina Podeshvo, Aleksander Yakimansky
New Cu(I) complexes with biquinolyl-containing polymer ligands as electrocatalysts for O2 activation in various oxidative processes

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: W. Plieth, R. Salvarezza

16:40 to 17:00 Invited
Christine Orme (USA), Kyoung-Shin Choi, Danxu Du, Jeremy Gray, Matthew Siegfried, David Srolovitz
Inflluence of organic surfactants on shape control in nanoparticle synthesis

17:00 to 17:20 Invited
Nikolay Dimitrov (USA), Natasa Vasiljevic, Lasantha Viyannalage
Growth of Metal Multilayer Structures by Surface Limited Redox Replacement

17:20 to 17:40 Invited
Massimo Innocenti (Italy), Francesco Carlà, Roberto Felici, Maria Luisa Foresti, Francesca Loglio, Giovanni Pezzatini, Laura Pigani, Emanuele Salvietti, Renato Seeber
In situ study about the growth of thin films

17:40 to 18:00 Invited
R.C. Salvarezza (Argentina)
The Effect of Thiol Adsorption on the Surface Roughness Evolution of Metallic Substrates

Symposium 10: General Session

Location: Trans Canada Pipelines Pavilion, TCPL 201 Aud
Chair: V. Boovaragan, A. Glide

16:20 to 16:40
Ole Edvard Kongstein (Norway), Geir Martin Haarberg, Boyan Yuan
Electrowinning of Iron in Aqueous Sodium Hydroxide

16:40 to 17:00

Chih-Wei Hu (Taiwan), Kuo-Chuan Ho, Guey-Sheng Liou

Bi-layer electrochromic polymer thin films comprising polyaniline/pendent phenothiazine redox unit

17:00 to 17:20

Vijayasekaran Boovaragavan (India)

Dynamic optimization of batch electrochemical reactors

17:20 to 17:40

Alexander Nekrasov (Russian Federation), Tat'Yana Eremina, Oxana Gribkova, Alexandra Isakova, Viktor Ivanov, Vladimir Tverskoj, Anatoly Vannikov

Electrochemical Polymerization Of Aniline In The Presence Of Polyamidosulfonic Acids: The Role Of Rigidity Of The Polyacid Matrix Backbone

17:40 to 18:00

Andrew Glidle (United Kingdom), Jon Cooper, Robert Cubitt, Robert Hillman, Karl Ryder, John Webster

Time-resolved in situ FTIR/neutron reflectivity determination of spatially resolved reaction kinetics during functionalization of conducting polymer films

Tuesday 11 September - AM

Plenary Lecture

Location: Eric Harvie Theatre
Chair: D. Scherson

09:00 to 10:00
Kingo Itaya (Japan)
A New Avenue of Electrochemical Surface Science~From Monolayer to 3D-Crystals

10:00 to 10:20
Coffee break

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: N. EL Murr, R. Bilewicz

10:20 to 10:40 Invited
Stephen Weber (USA), Rong Meng
Electrochemistry of the Complex of Cu(II) with the Octarepeat Peptide of the Prion Protein

10:40 to 11:00
Christa Brosseau (Canada), Jacek Lipkowski, Sharon Roscoe
Electrochemical and PMIRRAS Studies of Cholera Toxin Binding at a Model Biomembrane Surface

11:00 to 11:20 Invited
Ulla Wollenberger (Germany)
Metalloenzymes and redoxproteins at modified electrodes

11:20 to 11:40
Christelle Gautier (Canada), Daniel Bélanger
Limitation of protein adsorption at glassy carbon electrodes modified by reduction of diazonium salts

11:40 to 12:20 Keynote
Mike Thompson (Canada), Larisa-Emilia Cheran, Shilin Cheung
Detection of neuron-neuron interactions and effect of drugs using vibrational acoustic and Kelvin fields

12:20 to 12:40 Invited
Evgeny Katz (USA), Marcos Pita
Bioelectronic logic gates based on electrically contacted enzyme systems

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: R. Brodd, Z. Ogumi

10:20 to 11:00 Keynote
Martin Winter (Austria), Andrea Balducci, Harald Damej, Nikolaus Stefan Hochgatterer, Stefan Koller, Peter Rudolf Raimann, Martin Schmuck, Mario Rene Schweiger, Michael Oliver Sternad
Lithium Ion Battery's The Meaning of Life:The Solid Electrolyte Interphase (SEI)

11:00 to 11:20 Invited
Zempachi Ogumi (Japan), Takeshi Abe, Yasutoshi Iriyama, Yuki Yamada
Li+ Transfer through La0.55Li0.35TiO3 / Organic Electrolyte Interface

11:20 to 11:40
John Owen (United Kingdom), Johns Phillip
Rate Limitations in Nanostructured Electrodes

11:40 to 12:00 Invited
Ralph Brodd (USA)
Safety of Lithium-Ion Batteries

12:00 to 12:20
Alexander Skundin (Russian Federation), Mark Bruk, Vladimir Kal'Nov, Tatiana Kulova, Yuliana Roginskaya, Eugenii Zhikharev
Silicon-graphite composites for negative electrodes of lithium-ion batteries

12:20 to 12:40 Invited
Esther Takeuchi (USA), Randolph Leising, Amy Marschilok, Kenneth Takeuchi
Sol gel synthesis and controlled sintering of silver vanadium oxide

12:40 to 13:00 Invited
Rachid Yazami (USA), Qingfang Shi
Sub-fluorinated Coke-based CFx Cathode Materials for High Power Density Lithium Batteries

Symposium 3: Proton Conduction and Transfer

Location: Max Bell Building, MB 253
Chair: L. C. de Jonghe, S. Yamaguchi

10:20 to 10:40 Invited
Shu Yamaguchi (Japan), Rinlee Butch Cervera, Kiyoshi Kobayashi, Yukiko Oyama, Takehiko Yagi, Hikaru Yoshida
A new approach for oxide protonics materials with chemical stability at intermediate temperatures

10:40 to 11:00 Invited
Hiroo Yugami (Japan), Fumitada Iguchi
Interface Effect on Electrical Properties of Y-Doped BaZrO3 Ceramics and Thin Films

11:00 to 11:20
Maths Karlsson (Sweden), Lars Börjesson, Aleksandar Matic
Short-range structure and proton dynamics in hydrated perovskites

11:20 to 11:40
Elisabet Ahlberg (Sweden), Istaq Ahmed
The influence of grain boundaries on proton conductivity in BaZr0.5Yb0.5O3-ä.

11:40 to 12:00
Imashuku Susumu (Japan), Uda Tetsuya, Awakura Yasuhiro
Improvement of grain-boundary conductivity of trivalent cation doped barium zirconate by doping scandium

12:00 to 12:20
Yu-Ki Taninouchi (Japan), Yasuhiro Awakura, Sossina M. Haile, Ayako Ikeda, Tetsuya Uda
Thermochemical Stability of Cesium Dihydrogen Phosphate

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: M. Del Pópolo, Bing-Wei Mao

10:20 to 10:40 Invited
David Schiffrin (United Kingdom), J.Ose Abad Pastor, Maryam Bayati, Iuliana Sendroiu
Optical and electrochemical properties of nanoparticles and nanostructures

10:40 to 11:00
Derck Schlettwein (Germany), Daisuke Komatsu, Hideki Minoura, Kazuteru Nonomura, Tsukasa Yoshida
Influence of the Crystalline Orientation in Nanostructured Electrodeposited ZnO Thin Films on Their Photoelectrochemical Performance

11:00 to 11:20 Invited

Alison Downard (New Zealand), Paula Brooksby, Daniel Packwood, Matthew Paulik, Samuel Yu
Control of interfacial properties of nanoscale loosely packed organic films electrochemically grafted to conducting surfaces

11:20 to 11:40 Invited

Shi-Gang Sun (China), Yan-Xin Chen, Qing-Song Chen, Sheng-Pei Chen, Yan-Xia Jiang, Jun-Tao Li, Na Tian, Zhi-You Zhou
Nanostructuring and Shape Controlling Synthesis through Electrochemical Methods

11:40 to 12:00

Kei Murakoshi (Japan)
Observation and Control of A Small Number of Molecules at Metal Nano-Gap Array Immersed in Solution

12:00 to 12:20 Invited

Enrique Herrero (Spain), Antonio Aldaz, Juan M. Feliu, Paramaconi Rodríguez, José Solla-Gullón
Surface characterization of platinum nanoparticles using electrochemical tools

12:20 to 13:00 Keynote

Klaus Kern (Germany)
Design and Assembly of Nanoscale Molecular Architectures

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Donald Cameron Hall, N Wing, DCH 300
Chair: Y. Takasu, F. Kadirgan

10:20 to 10:40

Lei Zhang (Canada), Kunchan Lee, Jiujun Zhang
The effect of synthetic reducing agents on morphology and ORR activity of carbon-supported Pd-Co alloy Electrocatalysts

10:40 to 11:00

Vera Bogdanovskaya (Russian Federation), Lyudmila Kuznetsova, Zakhar Rotenberg, Mikhail Tarasevich
Electrochemical Impedance of Laccase/Carbon Support System and Oxygen Reduction Mechanism under Direct Bioelectrocatalysis Conditions

11:00 to 11:20

Ulrike Koslowski (Germany), Irmgard Abs-Wurmbach, Peter Bogdanoff, Sebastian Fiechter, Iris Herrmann, Klaus Lips, Gerrit Schmithals
New preparation strategy and magnetic properties of pyrolysed porphyrin-based electrocatalysts for the ORR

11:20 to 12:00 Keynote

J.K. Nørskov (Denmark)
Theoretical description of simple electrode processes

12:00 to 12:20

Mario Morin (Canada), Janine Mauzeroll, Amine Mezour, Christelle Médard
Electrocatalysis of porphyrins coated gold particles on glassy carbon

12:20 to 12:40

Stamatis Souentie (Greece), Ahmad Hammad, Constantinos Vayenas
Electrochemical promotion of NO reduction by C2H4 in presence of excess of O2 using a monolithic electrochemically promoted catalytic reactor

12:40 to 13:00

Tanja Vidakovic (Germany), Ivan Ivanov, Kai Sundmacher, Tanja Vidakovic
Glucose Oxidation: Electrocatalysis vs. Bioelectrocatalysis

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: G. Inzelt, O. Lev

10:20 to 10:40 Invited
György Inzelt (Hungary), Katalin Németh, András Róka
Electrochemical quartz crystal microbalance study of redox transformations of TCNQ microcrystals in concentrated LiCl solutions

10:40 to 11:00
Janice Limson (South Africa), Ronen Fogel
Evaluating sensor immobilisation platforms through QCMD

11:00 to 11:20
Xing-Hua Xia (China), Wen-Zhi Jia, Kang Wang
Novel Concept for Construction of Highly Selective Amperometric biosensors based on Diffusion Layer Gap Electrode

11:20 to 11:40
Bernard Tribollet (France), Dalila Boughrara, Elias Remita, Eliane Sutter, Vincent Vivier
Diffusion Impedance in a very Thin Layer Cell

11:40 to 12:00
Kiyoko Takamura (Japan), Mototaka Kohama, Akira Kotani, Fumiyo Kusu
Determination of Ammonia by Flow Injection Analysis with Electrochemical Detection

12:00 to 12:20
Ovadia Lev (Israel), Modestov Alexander, Jenny Gun, Petr Prikhdchenko
On-Line coupling of Electrochemical Flow Cell and Electrospray Mass Spectrometry (EC/ESI-MS)

12:20 to 12:40
Abhishek Deshpande (United Kingdom), Adrian Fisher, Sinead Mattews, Nigel Slater, Kamran Yunus
Hydrodynamic Focusing Studies In A Microreactor By Electrochemical Techniques

12:40 to 13:00
Elicia Wong (United Kingdom), Richard Compton, Abiman Poobalasingam
Functionalisation of Carbon Wall Nanotubes for Electrochemical Sensing Applications

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: D. Harrington, D. Guay

10:20 to 10:40 Invited
Jean Lessard (Canada), Michal Grden, Gregory Jerkiewicz, Maja Obradovic
Under-Potential Deposition of Hydrogen on C6H6ads-Modified Pt(111) in Aqueous HClO4

10:40 to 11:00
Masatoki Ito (Japan)
Microscopic Understanding of Electrode Potential in Electric Double Layers at Electrode Interfaces

11:00 to 11:40 Keynote
Juan M. Feliu (Spain), Victor Climent, Nuria Garcia-Araez
Progress in the understanding of platinum electrochemistry

11:40 to 12:00
Khaled Soliman (Germany), Ludwig Kibler, Dieter Kolb, Felice Simeone
Electrochemical behaviour of Ir(210)

12:00 to 12:20
Ikutaro Hamada (Japan), Tamio Ikeshoji, Yoshitada Morikawa, Yasuharu Okamoto, Minoru Otani, Osamu Sugino
First principles simulations of electrochemical reactions at the water/Pt(111) interface

12:20 to 12:40
Otani Minoru (Japan), Hamada Ikutaro, Sugino Osamu, Ikeshoji Tamio, Okamoto Yasuharu, Morikawa Yoshitada
First-principles Simulation of Baised Metal/water Interface with a Hydrated Proton

12:40 to 13:00
Enn Lust (Estonia), Vitali Grozovski, Eneli Härk, Rutha Jäger, Silvar Kallip, Heili Kasuk, Karmen Lust, Jaak Nerut, Tavo Romann, Thomas Thomberg, Mart Väärtnõu
Kinetics of ionic and molecular adsorption and electroreduction mechanism of complex ions in relation to the surface structure of the Bi, Sb and Cd electrodes

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: L. Walder, J. Ludvik

10:20 to 10:40 Invited
Philippe Hapiot (France), Corinne Lagrost
Electron transfer in Ionic Liquids

10:40 to 11:00 Invited
Catherine Combellas (France), Frédéric Kanoufi, Fetah Podvorica
Direct and Indirect Electrografting of Surfaces

11:00 to 11:20
Alessandro Benedetto (France), Mirela Balog, Franck Le Derf, Sophie Noël, Serge Palacin, Marc Sallé, Pascal Viel
Study of the formation of hydrophobic surfaces obtained by Electrochemical grafting of Diazonium Salts on gold

11:20 to 11:40
Laurent Demarconnay (Canada)
Modification of glassy carbon and gold electrodes with halogenated phenyl groups by electrochemical reduction of in situ generated diazonium cations

11:40 to 12:00
Gloria Quintanilla (Spain), Lena Arnold, Fructuoso Barba, Carina Bengtsson, Miriam Liebeck
Organic Reactions at the Electrode: Cathodic Reduction of Benzil in Acetone and in Dichloromethane

12:00 to 12:20
Jan Fiedler (Czech Republic), Wolfgang Kaim, Goutam Kumar Lahiri, Biprajit Sarkar
Binuclear Complexes with [Ru(acac)2] Fragments - Spectroelectrochemical Investigation of Metal Centers Interaction

12:20 to 12:40
James Y. Becker (Israel)
Oxygen Insertion into Si-Si Bonds by Anodic Oxidation of Cyclic Polysilicon Derivatives

12:40 to 13:00 Invited
Dennis Evans (USA)
Studies of the Mechanism of Electrochemical Dihydrogen Production Using a Diiron Hydrogenase Mimic, [[mu]-[1,2-Benzenedithiolato(2-)-S,S':S,S']]hexacarbonyldiiron

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: T. Moffat, T. Homma

10:20 to 11:00 Keynote
Jay Switzer (USA)
Chiral Electrodeposition

11:00 to 11:20 Invited
Daniel Schwartz (USA)
An electrochemical approach for combining biology and computer aided manufacturing (BioCAM)

11:20 to 11:40 Invited
Alexander Bittner (Germany), Sinan Balci, Gabriel Baralia, Holger Jeske, Anan Kadri, Klaus Kern, Carl Krill, Anna Müller, Christina Wege, Zhenyu Wu
Electroless deposition on the molecular scale

11:40 to 12:00 Invited
Takayuki Homma (Japan), Kazuaki Endo, Masahiro Kunimoto, Hiromi Nakai, Takuya Shimada
Density Functional Theory Study on Electroless Deposition Processes - Reaction Mechanism and Effect of Additives

12:00 to 12:20
Waldfried Plieth (Germany), Holger H. Kuehnlein
Analyses of Electrodeposition of Complex Alloys; Influence of Additives

12:20 to 12:40
Marcela Vazquez (Argentina), María Alejandra Frontini
The influence of citrate ions on the electrodeposition of CuInSe2

Symposium 10: General Session

Location: Trans Canada Pipelines Pavilion, TCPL 201 Aud
Chair: J. Stickney, V. Thangadurai

10:20 to 10:40
Jen-Hsien Huang (Taiwan), Kuo-Chuan Ho, Guey-Sheng Liou
A complementary electrochromic device based on 4-phenothiazin-10-yl-anisole solution and PEDOT thin film

10:40 to 11:00
Venkataraman Thangadurai (Canada), Eric Atamanik, Sneha Bajpe
Fundamental Materials Aspects of Fuel Cells

11:00 to 11:20
Kun-Mu Lee (Taiwan), Kuo-Chuan Ho, Vembu Suryanarayanan
A photo-physical and EIS study on the quasi-solid state dye-sensitized solar cells based on PVDF-HFP

11:20 to 11:40
Hongxia Wang (Australia), John Bell, Michael Betoz, Johann Desvilvestro, Graeme Evans, Sylvai Tulloch, Gavin Tulloch
Effect of Cations in Low Volatile Electrolyte on Performance of Dye-Sensitized Solar Cells

11:40 to 12:00
Y.P. Wu (China), L.J. Fu, G.J. Wang, B. Wang, L.C. Yang
Electrochemical Performance of Li4Ti5O12 Spinels Prepared by a Wet Mixing Method

12:00 to 12:20
Hwa-Chiang Lo (Taiwan), Kuo-Chuan Ho, Chun-Yaw Lin, Jung-Chou Oung, Shi-Chern Yen
Electrochemical simulation of the pulse current at the solid-electrolyte interface

12:20 to 12:40
Katrin Bruder (Germany), Detlef Diesing, Achim Walter Hassel
Electronic tunneling through anodic oxide barriers

Tuesday 11 September - PM

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: F. Bedioui, G. Wittstock

15:00 to 15:40 Keynote
Mark Schoenfisch (USA), Heather Egolf-Fox, Evan Hetrick, Jae Ho Shin
Nitric Oxide-Releasing Glucose Biosensors

15:40 to 16:00
Pawel Krysinski (Poland), Wojciech Dzwolak, Anna Loksztejn
Tyrosine side chains as an electrochemical probe of stacked [beta]-sheet protein conformations

16:00 to 16:20 Invited
Antonella Curulli (Italy), Daniela Caschera, Antonio Cusmà, Francesca Focanti, Giuseppina Padeletti, Daniela Zane
Nanomaterials in electrochemistry: applications in biosensing

16:20 to 16:40
Coffee break

16:40 to 17:00
Judith Rishpon (Israel)
Highly Sensitive NanoParticles Modified Electrodes for Fast Diagnostics

17:00 to 17:20 Invited
Paolo Ugo (Italy), Stefano Pozzi Mucelli, Giorgio Stanta, Martina Zamuner
Immunosensors Based on Nanoelectrode Ensembles

17:20 to 17:40
Fred Lisdat (Germany), Martin Weigel
Catalytic oxygen reduction by bilirubin oxidase immobilised at carbon nanotubes on glassy carbon and gold electrodes

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: G. Blomgren, M. Mastragostino

15:00 to 15:40 Keynote
Yet-Ming Chiang (USA)
Nanoscale Mechanics and Phase Stability in Intercalation Compounds and Impact on Electrochemical Performance

15:40 to 16:00
Zhao Wu Tian (China)
A New Kind of Supercapacitors without Ultra Fine Solid Particles

16:00 to 16:20
Tsutomu Takamura (Japan), Hiroyuki Ishikawa, Osamu Omae, Kyoichi Sekine, Minako Sugita, Junji Suzuki
Change in the Electric Conductivity of a Single Fiber of Mesophase Carbon during Li Insertion/ Extraction

16:20 to 16:40
Coffee break

16:40 to 17:00 Invited
Wataru Sugimoto (Japan), Yoshio Takasu
Nanostructured Ruthenium Oxides for Electrochemical Energy Storage and Conversion

17:00 to 17:20
Peter Pickup (Canada), Xiaorong Liu, Aaron Rowe
Carbon supported Ru oxide supercapacitors

17:20 to 17:40
Alar Janes (Estonia), Heisi Kurig, Enn Lust, Thomas Thomberg
Nanoporous carbon based electrode materials and mixed electrolytes for electrochemical capacitors

17:40 to 18:00
Jeon-Kook Lee (Korea, Republic of), Seung-Won Jung, Joong Kee Lee, Hyung-Sup Min
Nanostructures controlled carbon electrodes for high energy density supercapacitors

Symposium 3: Proton Conduction and Transfer

Location: Max Bell Building, MB 253
Chair: T. Zawodzinski, M. Eikerling

15:00 to 15:20 Invited
James E. McGrath (USA), Mou Paul, Prof. Judy S. Riffle, Abhishek Roy
Proton Conductivity and Transport in Linear Block Copolymer and Crosslinked Proton Exchange Membranes

15:20 to 15:40 Invited
Olivier Diat (France), Gérard Gebel, Arnaud Morin, Feina Xu
Water concentration profile through Nafion® membrane under fuel cell operation by Small Angle Neutron Scattering (SANS)

15:40 to 16:00 Invited
Masayoshi Watanabe (Japan)
Bronsted Acid-Base Ionic Liquids and Ionic Melts for Fuel Cell Electrolytes

16:00 to 16:20 Invited
Emil Roduner (Germany), Elena Aleksandrova, Renate Hiesgen
Nanoscale Resolved Proton Conductivity Measurements in Fuel Cell Membranes Using Electrochemical Atomic Force Microscopy

16:20 to 16:40
Coffee break

16:40 to 17:20 Keynote
Mark Tuckerman (USA)
Anomalous transport mechanisms of charge-defects in hydrogen-bonded liquids probed via ab initio molecular dynamics

17:20 to 17:40 Invited
Eckhard Spohr (Germany)
Electroxidative Proton Generation at the Water / Platinum Interface

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: D. Schiffrin, M. Workentin

15:00 to 15:20 Invited
James Rusling (USA), Ashwin Bhirde, Bhaskara Chikkaveeraiah, Joseph Gong, Silvio Gutkind, Gary Jensen, Sang Kim, Bernard Munge, Fotios Papadimitrakopoulos, Vyomesh Patel
Carbon Nanotube-Based Arrays for Sensitive Detection of Cancer Biomarker Proteins

15:20 to 15:40
Jingxian Yu (Australia)
Chemical Attachment of Ferrocene to SWCNT Arrays Directly Anchored to Silicon (100) towards Information Storage Devices

15:40 to 16:00
Zhifeng Ding (Canada)
Electrochemical Preparation of Luminescent Carbon Nanocrystals and Electrochemical Assembly of Mutiwalled Carbon Nanotubes

16:00 to 16:20
Silvar Kallip (Estonia)
Adsorption of 2'2 bipyridine on Bi(111) electrode surface

16:20 to 16:40
Coffee break

16:40 to 17:00 Invited
Mark McDermott (Canada), Rongbing Du
Fabrication and Applications of Nanoscale Carbon Electrodes

17:00 to 17:20
Maryam Bayati (United Kingdom), Jose Maria Abad, David Schiffrin
Size-Controlled Preparation of Supported Platinum Nanoparticles on the Electro-oxidised HOPG

17:20 to 17:40
Kenneth Ozoemena (South Africa), Bolade Agboola, Dudu Nkosi
Self-Assembled Octasubstituted Metallophthalocyanine–Single-Walled Carbon Nanotubes Arrays: Nanoarchitectures with Excellent Electron Transport

17:40 to 18:00
Richard McCreery (Canada), Adam Bergren, Andrew Bonifas, Fengjun Deng, Jing Wu, Haijun Yan
Electron Transport and Redox Reactions in Carbon-based Molecular Electronic Junctions

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Donald Cameron Hall, N Wing, DCH 300
Chair: N. Wagner, C. Vayenas

15:00 to 15:20
Daniel Scherson (USA), Iosif Fromondi
Dynamics of Adsorbed CO Oxidation on Pt (111) in CO-saturated Solutions: Simultaneous In situ Time-Resolved Reflectance Spectroscopy and Second Harmonic Generation Studies

15:20 to 15:40
Frédéric Maillard (France), Antoine Bonnefont, Marian Chatenet, Ulrich Stimming
Effect of Pt-Ru/C particles agglomeration in COad monolayer electrooxidation

15:40 to 16:00
Daniela Anjos (Brazil), Adalgisa Andrade, Boniface Kokoh, Jean Michel Léger, Paulo Olivi, Josimar Ribeiro, Germano Tremiliosi-Filho
Ethanol oxidation on tri-metallic Pt-Based anode catalysts for DEFC applications

16:00 to 16:20 Invited
Manuel Andres Rodrigo (Spain), Miriam Arcis, Pablo Cañizares, Justo Lobato, Cristina Saez
Influence of the properties of p-Si BDD anodes on the efficiency of oxidation processes

16:20 to 16:40
Coffee break

16:40 to 17:20 Keynote
Zdenek Samec (Czech Republic), Jan Langmaier, Antonin Trojanek
Molecular catalysis of the oxygen reduction at a polarized liquid-liquid interface

17:20 to 17:40 Invited
Reidar Tunold (Norway), Sten-Egil Johnsen
Hydrogen Evolution on LaNi5 in Alkaline Solution Kinetic Characterisation and Modeling

17:40 to 18:00
Andrzej Lasia (Canada), Hugues Duncan, Manuel Martin
Hydrogen sorption in palladium in acid and alkaline media

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: G. Mutschke, K. Stevenson

15:00 to 15:20
Salvatore Daniele (Italy), M. Antonietta Baldo, Dario Battistel, Carlo Bragato, Rosalba Gerbasi
Performance of nanostructured Pt-TiO2 films prepared by MOCVD for electroanalytical measurements

15:20 to 15:40
Karel Vytras (Czech Republic), Lucie Baldrianova, Radovan Metelka, Matej Stoces, Ivan Svancara, Eva Tesarova
Bismuth-Based Sensors as an Environmental Alternative of Mercury Electrodes in Electrochemical Stripping Analysis

15:40 to 16:00
Margitta Uhlemann (Germany), Annett Gebert, Jakub Koza, Ludwig Schultz
Electrodeposition of Fe and CoFe thin films under the influence of uniform magnetic fields

16:00 to 16:20
Adriana Ispas (Germany), Benedetto Bozzini, Andreas Bund, Hisayoshi Matsushima
Nucleation and growth of Ni based layers under the influence of a magnetic field

16:20 to 16:40
Coffee break

16:40 to 17:00
Gerd Mutschke (Germany), Andreas Bund, Gunter Gerbeth
The Role of Magnetic Forces in Electrochemical Reactions - Numerics and Experiments

17:00 to 17:20
Steven Van Damme (Belgium), Johan Deconinck
An improved mass transport model for numerical electrochemical simulation

17:20 to 17:40
Zdenek Samec (Czech Republic), Jan Langmaier, Eva Samcova, Antonin Trojanek
Counterion binding to protamine polyion at a polarized liquid-liquid interface

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: J. Lessard, V. Birss

15:00 to 15:20 Invited
John Stickney (USA), Jay Yu Kim, Youn-Geun Kim, Chandru Thambidurai, Deepa Vairanapandian
Electrochemical Atomic Layer Deposition (ALD)

15:20 to 15:40
Jean-François Vanhumbeeck (Belgium), Joris Proost
In-situ monitoring of surface reactions using high-resolution curvature measurements: application to Ti anodising

15:40 to 16:00
Kay-Oliver Thiel (Germany), Constanze Donner, Antje Vollmer
Combined XPS and electrochemical study of lead deposition on modified Au(111) electrode

16:00 to 16:20
Volker Pointner (Austria), Johannes Etzkorn, Günter Fafilek, Bernhard Gollas, Ralph Herber, Hermann Kronberger, Gerhard Nauer
Electrodeposition of Rhenium by Pulse-Reverse Plating

16:20 to 16:40

Coffee break

16:40 to 17:00 Invited

Daniel Guay (Canada)

Metastable and nanostructured materials in electrochemistry: how laser-based techniques can be used to prepare them

17:00 to 17:20

Katrien Strubbe (Belgium), Katia De Henau, Inge Huygens

Controlled deposition of metal nanoparticles on semiconductor surfaces.

17:20 to 17:40

Robert Hillman (United Kingdom), Stanley Bruckenstein, Samantha Daisley

Ion and solvent fluxes for PEDOT n- and p-doping reveal timescale- and solvent-dependent mechanistic variations

17:40 to 18:00

Marian Chatenet (France), Eric Chainet, René Faure, Yvonne Soldo-Olivier

Using the electrochemical quartz crystal microbalance as a tool to determine nickel formal partial charge number during nickel-underpotential deposition on platinum

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: O. Hammerich, C. Combellas

15:00 to 15:20 Invited

Laurent Thouin (France), Christian Amatore

To Which Extend Currents Monitored at Microelectrodes are Indicative of the Composition of Diffusion Layers

15:20 to 15:40 Invited

Luis Echegoyen (USA), Alan Balch, Claudia Cardona, Bevan Elliott, Marilyn Olmsted, Josep Poblet

Chemical and Electrochemical Properties of Fullerene Derivatives and Endohedral Fullerenes

15:40 to 16:00

Jiri Ludvik (Czech Republic), Hayati Celik, Jaromir Jirkovsky, Petr Zuman

Electrochemical study of intramolecular electronic interactions in two types of dicarbonyl compounds and their derivatives

16:00 to 16:20

Csaba Visy (Hungary), Gábor Bencsik, Csaba Janáky, Emese Kriván

Synthesis and Characterization of Iron Group ElementCompound Containing Conducting Polymer Composites

16:20 to 16:40

Coffee break

16:40 to 17:20 Keynote

Debra Rolison (USA), Jeffrey Long

Using Disordered Nanomaterials to Enhance Electrochemical Performance

17:20 to 17:40 Invited

Zhongfan Liu (China)

Nanoelectronic Devices with Single-Walled Carbon Nanotubes –Chiral Growth, Surface Transfer and Electrochemical Discrimination

17:40 to 18:00

Ari Ivaska (Finland), Cariat Kvarnström, Tom Lindfors, Di Wei

Electrochemical functionalization of carbon nanotubes with poly(aniline) in ionic liquids

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: G. Stafford, S. Brankovic

15:00 to 15:40 Keynote
Sean J. Hearne (USA), Abhinav Bhandari, Brian W. Sheldon
Island Coalescence Stress and the Influence of Saccharine

15:40 to 16:00 Invited
Stanko Brankovic (USA), Jinnie George, Ryan Haislmaier
Physical Incorporation of Additive Molecules During Electrodeposited CoFe Magnetic Alloys

16:00 to 16:20 Invited
Gery Stafford (USA), Carlos Beauchamp, Ugo Bertocci, Christopher Zangmeister
In Situ Stress Measurements During the Electrochemical Adsorption/Desorption of Self-Assembled Monolayers

16:20 to 16:40
Coffee break

16:40 to 17:00 Invited
Cody Friesen (USA)
Fundamental Aspects of Surface Stress Evolution during Electrodeposition

17:00 to 17:20 Invited
Shuji Nakanishi (Japan), Tomoyuki Nagai, Yoshihiro Nakato
Periodic adsorption of surfactants during Cu-Sn alloy electrodeposition, leading to self-organized formation of layered nano-structures

17:20 to 17:40 Invited
Soo-Kil Kim (Korea, Republic of)
Ni Electrodeposition in Sub-micrometer Trenches

Symposium 10: General Session

Location: Trans Canada Pipelines Pavilion, TCPL 201 Aud
Chair: S.-G. Sun, C. Johans

15:00 to 15:20
Geir Martin Haarberg (Norway), Marte Bjørnsdotter, Ole Edvard Kongstein
Water Electrolysis to Supply Dissolved Oxygen to Lakes

15:20 to 15:40
Christoffer Johans (Finland), Kyösti Kontturi
Electrochemically driven emulsion inversion

15:40 to 16:00
Rodnei Bertazzoli (Brazil), Barbara De Oliveira
The role of the surfactant Aliquat 336 on the oxygen reduction and on the H2O2 generation rate

16:00 to 16:20
Ali Özcan (Turkey), Mehmet A. Oturan, Yücel Sahin
Mineralization of Propham in Aqueous Medium by Using an Electrochemical Advanced Oxidation Process

16:20 to 16:40

Coffee break

16:40 to 17:00

Joost Van Erkel (Netherlands), Roel Bisselink, Eric Das, Eric De Decker, Katrien Demeyer, Tim Jungkamp
Electrolytical splitting of sodium carboxylate solution.

17:00 to 17:20

Lucia Alvarado (Mexico), Gabriel A. Garcia, Omar Gonzalez, Israel Rodriguez-Torres
Cr(VI) separation by a combined process of Electrolysis – Electrodialysis

17:20 to 17:40

Atsushi Kobayashi (Japan), Sho Fujioka, Tsuneto Furuta, Minoru Inaba, Akira Nishida, Yoshinori Nishiki, Akimasa Tasaka, Masaharu Uno
Electrolytic Production of NF3 using Boron-doped Diamond Anode

17:40 to 18:00

Justo Lobato (Spain), Pablo Cañizares, Jose J. Linares, Manuel A. Rodrigo, Raúl Rodríguez-López
Gas Diffusion Layer in PBI Based High Temperature PEMFCs: Physical Characterisation and Fuel Cell Results

Wednesday 12 September - AM

Plenary Lecture

Location: Eric Harvie Theatre
Chair: J. Lipkowski

09:00 to 10:00
Wolfgang Knoll (Germany)
Tethered Bimolecular Lipid Membranes- a Novel Model Membrane Platform

10:00 to 10:20
Coffee break

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: A. Michael, W. Schuhmann

10:20 to 11:00 Keynote
Tomoakzu Matsue (Japan)
Electrochemical Cellular Devices for Detection of Gene Expression

11:00 to 11:20 Invited
Toby Jenkins (United Kingdom), Sam Boundy, John Clarkson, Jonathan Olds, Kerstin Reiß
Development of an electrochemical gene sensor for clinical microbiology

11:20 to 11:40
Marcin Opallo (Poland), Frank Marken, Joanna Niedziolka, Wojciech Nogala, Jerzy Rogalski, Ewa Rozniecka, Katarzyna Szot
Silicate modified electrodes with encapsulated mediator and laccase for bioelectrocatalytic dioxygen reduction

11:40 to 12:00 Invited
Isao Taniguchi (Japan)
New High Performance Glucose-air Bio-fuel Cells

12:00 to 12:20
Keith Baronian (New Zealand), Nicholas Haslett, Gotthard Kunze, Manjula Premaratne, Seetha Wanniyike
Comparison of yeast microbial fuel cell performance: double mediator, single mediator and mediator-less.

12:20 to 12:40 Invited
Nicolas Mano (France)
Miniature Membrane-less Biofuel Cell

12:40 to 13:00
Erik Kjeang (Canada), Alexandre G. Brolo, Ned Djilali, Meikun Fan, Amanda Finn, David A. Harrington, Manuel Marechal, Robert Sacci, Dan Sanderson, David Sinton
Microfluidic Biofuel Cells

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: R. Koetz, J. Miller

10:20 to 10:40 Invited
Kwang Bum Kim (Korea, Republic of)
Metal Oxide/Carbon Nanotube Composites for Electrochemical Capacitor Applications

10:40 to 11:00 Invited
Jeffrey Long (USA), Anne Fischer, Katherine Pettigrew, Debra Rolison, Matthew Saunders
Carbon nanoarchitectures with conformal, nanoscopic MnO2 coatings as high-performance electrode structures for batteries and electrochemical capacitors

11:00 to 11:20 Invited
John Miller (USA), Susannah Butler
Electrochemical Capacitor Life Predictions Made Using Self-discharge Current Measurements

11:20 to 11:40 Invited
Elzbieta Frackowiak (Poland), Grzegorz Lota
Electrochemical capacitor based on pseudocapacitance effects

11:40 to 12:00
Marina Mastragostino (Italy), Maurizio Biso, Mariachiara Lazzari, Francesca Soavi
Electrode materials for hybrid supercapacitors operating with bis(trifluoromethanesulfonyl)imide based ionic liquid electrolytes

12:00 to 12:20
François Béguin (France), Elzbieta Frackowiak, Volodymyr Khomenko, Encarnacion Raymundo-Pinero
High performance asymmetric capacitors in aqueous medium

12:20 to 12:40
Kenji Machida (Japan), Shunzo Suematsu, Kenji Tamamitsu
Cabon based Nanomaterials for Advanced Electrochemical Capacitors

12:40 to 13:00
Hiroyuki Nakano (Japan), Kaoru Dokko, Kiyoshi Kanamura, Sang-Wook Woo
Bimodal Porous Carbon for Hybrid Capacitors

Symposium 3: Proton Conduction and Transfer

Location: Max Bell Building, MB 253
Chair: E. Spohr, S. J. Paddison

10:20 to 10:40 Invited
Stephen Paddison (USA)
Proton Transfer in Anhydrous Polymeric Membranes for Fuel Cells: an ab initio study

10:40 to 11:00
Daniel Brandell (USA), Jaanus Karo, Josh Thomas
Molecular Dynamics Studies of the Nafion®, Dow® and Aciplex® Fuel-Cell Polymer Membrane Systems

11:00 to 11:20
Yoong-Kee Choe (Japan), Shi-Aki Hyodo, Tamio Ikeshoji, Eiji Tsuchida, Shunsuke Yamakawa
Proton Transfer in Nafion : First-principles Molecular Dynamics Study

11:20 to 11:40
Iordan Hristov (Canada), Stephen Paddison, Reginald Paul
Molecular Modeling of Proton Diffusion in the Short-Side-Chain Perfluorosulfonic Acid Ionomer

11:40 to 12:00
Michel Dupuis (USA), Ram Devanathan, Vassiliki-Alexandra Glezakou, Arun Venkatnathan
Proton Exchange Membrane under Low Hydration Level: Insights from Atomistic Simulations and Electronic Structure Computations

12:00 to 12:20
Cheng Huang (Canada), Zhong-Sheng Liu, Deqian Mu
Simulation of Proton Effective Conductivity in the Catalyst Layer of PEM Fuel Cells

12:20 to 12:40
Michael Eikerling (Canada), Sudha Narasimachary, Ata Roudgar
Proton-Conducting Membranes for Fuel Cells: The Role of Interfacial Structure and Dynamics

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: S.-G. Sun, E. Herrero

10:20 to 10:40 Invited
Mark Workentin (Canada), H. Ismaili, J Zhu
Preparation of Photo- and Electrochemically Responsive Organic Modified Metal Nanoparticles

10:40 to 11:00
Leonard Stoica (Germany), Sebastian Neugebauer, Wolfgang Schuhmann, Stefanie Schwamborn
Activated 4-Nitrothiophenol Modified Au Electrodes As Interface With Turn On/Off Ability For Local Activity

11:00 to 11:20 Invited
Ludwig Kibler (Germany)
Electrocatalysis with nanostructured model surfaces

11:20 to 11:40
Palle S. Jensen (Denmark), Qijin Chi
Incorporation of Metallic Nanoparticles into Surface Molecular Assemblies for Enhancement of Long-range Protein Interfacial Electron Transfer

11:40 to 12:00 Invited
Dan Bizzotto (Canada), Amanda Musgrove
Oxidative desorption of an alkylthiol monolayer adsorbed onto Au as studied by fluorescence and capacitance measurements

12:00 to 12:20
Ulrich Stimming (Germany), Claudia Baier, Holger Wolfschmidt
Reactivity of electrode surfaces modified with nanoislands of different size and distribution

12:20 to 13:00 Keynote
Hubert Girault (Switzerland), Mohamad Hojeij, Bin Su
Charge transfer reactions at nanonstructured molecular interfaces

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location:Donald Cameron Hall, N Wing DCH 300
Chair: J. Nørskov, V. Bogdanovskaya

10:20 to 10:40
Gwénaëlle Kérangueven (France), Antonio Berna, Juan Feliu, Jean-Michel Léger, Eric Sibert
Electrooxidation of Dimethoxymethane (DMM) on platinum single crystal electrodes in acid media

10:40 to 11:00
Jason Goodpaster (USA)
Ethanol Oxidation on Precious and Transition Metal Catalysts in Acidic and Alkaline Media

11:00 to 11:20
Masatsugu Morimitsu (Japan), Uchiyama Keigo
Effects of Thermal Decomposition Temperature on Electrocatalysis of Pt-IrO2/Ti Electrodes

11:20 to 11:40
Tianhong Lu (China), Jianchun Bao, Cun Li, Yawen Tang, Linlin Zhang
Carbon-Supported Pd-P Catalyst as Anodic Catalyst in Direct Formic Acid Fuel Cell

11:40 to 12:20 Keynote
Christophe Coutanceau (France), Sylvain Brimaud, Claude Lamy, Jean-Michel Léger, Séverine Rousseau, Fabrice Vigier
New methods for developing nanoelelectrocatalysts for the oxidation of organic compounds

12:20 to 12:40 Invited
Marco Antonio Quiroz (Mexico)
Electrocatalytic options to some important catalytic reactions: hydrogenation of aromatic organic compounds and degradation of biorrefractory organic compounds

12:40 to 13:00
Roman Kodým (Czech Republic), Henry Bergmann, Karel Bouzek
The mathematical optimization of a bipolar electrolyser applied in the direct drinking water disinfection with respect to the chlorine evolution efficiency

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: L. Gorton, W. Heineman

10:20 to 11:00 Keynote
Keith Stevenson (USA), Jennifer Lyon
Direct Electron Transfer of Peroxidase Assemblies at Tailored Nanocarbon Electrodes

11:00 to 11:20
Lo Gorton (Sweden), Parastoo Sabet Ghadam, Dietmar Haltrich, Roland Ludwig, Federico Tasca
Improving Biosensors via Single Wall Carbon Nanotubes: Development of Pyranose Dehydrogenase Modified Electrode for Amperometric Detection of Catecholamines and Diphenols

11:20 to 11:40
Bozidar Ogorevc (Slovenia)
Carbon Nanoparticles Thin Film Electrode Preparedby Using Substrate Induced Deposition Approach

11:40 to 12:00
Federico Tasca (Sweden)
Improving Biosensors via Single Wall Carbon Nanotubes and Low Potential Osmium Redox Polymer; Development of a New Biosensor with Enhanced Properties for Oxidation of NADH at -100 mV vs. AglAgCl.

12:00 to 12:20
Christopher Brett (Portugal), Madalina Barsan, Mariana-Emilia Ghica, Carla Gouveia-Caridade, Edilson Moura Pinto, Rasa Pauliukaite
Nanotechnological aspects in the development of sensors and biosensors based on carbon film electrodes

12:20 to 13:00 Keynote
William Heineman (USA), Chong Ahn, Adam Bange, Brian Halsall, Jian Tu, Xiaoshan Zhu
Electrochemical Immunoassay of Biological Agents: Detection with a Nanoscale Interdigitated Array

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: G. Tremiliosi, A. Wieckowski

10:20 to 11:00 Keynote
Dieter M. Kolb (Germany)
The Emergence of an Electrochemical Surface Science: A Tribute to Brian Conway

11:00 to 11:20 Invited
Andrzej Wieckowski (USA)
From Radioactive Labeling to Sum Frequency Generation of CO on Pt and Ru/Pt Electrodes: Surface/Bulk Exchange and Oxidation Processes

11:20 to 11:40 Invited
Kohei Uosaki (Japan), Hidenori Noguchi, Tsubasa Okada
Potential dependent structure of water at electrode/electrolyte interfaces

11:40 to 12:00
Gregory Jerkiewicz (Canada), Frederic Perreault, Zorana Radovic-Hrapovic
Nature and Strength of the Interfacial Bonding of UPD Layers. An Overview

12:00 to 12:20
Thamara Laredo (Canada), Ian Burgess, Maohui Chen, John Dutcher, Jay Leitch, Jacek Lipkowski
Measurement of the charge number per adsorbed molecule and packing densities of self-assembled long chain monolayers of thiols.

12:20 to 12:40
Vlad Zamlynny (Canada), Simon Birnie-Lefcovitch, Robyn Jackson, Elizabeth Potter, Stuart Read
Analysis of Ultrathin Organic Films at Metal Surfaces using Infrared Reflection Absorption Spectroscopy

12:40 to 13:00
Alexei Kornyshev (United Kingdom)
Double layer capacitance in ionic liquids: paradigm change?

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: J. Heinze, D. Rolison

10:20 to 10:40 Invited
Dominic Rochefort (Canada), Anne-Laure Pont
Characterization of the coupled proton-electron transfer occurring on metal oxide electrodes in ionic liquids

10:40 to 11:00
Leif Nyholm (Sweden), Oscar Alm, Hanna Bryngelsson, Kristina Edström, Jonas Eskhult
Electrochemical Deposition of Metal/Metal Oxide Nanomaterials based on Induced Local pH variations

11:00 to 11:20
Alain Pailleret (France), Hubert Cachet, Claude Deslouis, Priscila Martinhon-Tomiasso
CS-AFM and EIS probing of the correlationbetween surface reactivity, conductivity, topography, and compositionin sputtered amorphous nitrogen-doped carbon films

11:20 to 11:40
Pascal Maire (Switzerland), Tobias Hintermann, Colin Morton, Peter Nesvadba, Petr Novák
Electrochemistry of novel nitroxide materials

11:40 to 12:00
Bernardo Antonio Frontana-Uribe (Mexico), Jürgen Heinze
Experimental conditions effect on the electropolymerization of bithiophene and response of the prepared conducting films

12:00 to 12:20
Denny Thiemig (Germany), Andreas Bund, Ronny Lange
Pulse plating of metal matrix nanocomposites

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Session B

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: M. Ryan, W. Santos

10:20 to 11:00 Keynote
Monica Santamaria (Italy)
Characterization of Passive Film/Electrolyte Junctions by Photocurrent Spectroscopy and Impedance Measurements

11:00 to 11:20 Invited
Manuel Lohrengel (Germany), Marc Amkreutz, Andreas Schreiber
Grain Dependent Dissolution and Passivation of Iron

11:20 to 11:40
Rimantas Ramanauskas (Lithuania)
Effect of nanocrystalline grain size on corrosion behaviour of zinc coatings

11:40 to 12:00 Invited
Victoria Gelling (USA), Katharine Gohmann, Alice Harper, Xiaoning Qi, Chris Vetter
Polypyrrole/Aluminum Flake Hybrids as Corrosion Inhibitors for Aluminum 2024-T3

12:00 to 12:20
Eimutis Juzelunas (Lithuania), Leinartas Konstantinas, Rimantas Ramanauskas
Microbially Influenced Corrosion Acceleration and Inhibition – Long-Term Influence of Aspergillus Niger as Studied by EIS, XPS and QCM

12:20 to 12:40
Yimin Zeng (Canada), Jamie Noel, Peter Norton, David Shoesmith
Influence of Titanium Oxide Films on Hydrogen Absorption into Titanium

Symposium 10: General Session

Location: Trans Canada Pipelines Pavilion, TCPL 201 Aud
Chair: P. Vanysek, M. Filpiak

10:20 to 10:40
Marian Filipiak (Poland)
Electrochemistry of oligonucleotides

10:40 to 11:00
Mohamed Ghoneim (Egypt)
Voltammetry and Quantification of the Muscle Relaxtant Drug Tetrazepam in Formulation and Human Serum

11:00 to 11:20
Janaina F. Gomes (Brazil)
New Information about Adsorbed Intermediates of the Electrooxidation of Ethanol on Pt as Probed by SFG Spectroscopy

11:20 to 11:40
Petr Vanýsek (USA)
Determination of Gibbs energies of transfer of extremely lipophilic supporting electrolytes in liquid-liquid electrochemistry

11:40 to 12:00
Michel Perdicakis (France), Catherine Corbel, Elisa Leoni, Patrick Simon
Ultramicroelectrochemistry under irradiation

12:40 to 13:00
Nick Birbilis (Australia)
High-resolution electrochemical and microscopic characterization of localized corrosion of light alloys: Possibilities and ramifications.

Thursday 13 September - AM

Plenary Lecture

Location: Eric Harvie Theatre
Chair: J. Feliu

09:00 to 10:00
Hector Abruna (USA), Hector Abruna
Redox and Photoactive Nanometric Building Blocks and Devices

10:00 to 10:20
Coffee break

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: M. Boutelle, A. Curulli

10:20 to 10:40 Invited
Woonsup Shin (Korea, Republic of), Yousung Kim, Chang Hwan Kim, Ahyeon Koh, Jieun Song
Electrochemical Production of Organic Acids from Carbon Dioxide by Microbes

10:40 to 11:00
Claire Dumas (France), Régine Basséguy, Alain Bergel
Exploring electrode materials for microbially assisted electron transfer by Geobacter sulfurreducens.

11:00 to 11:20 Invited
Martyn Boutelle (United Kingdom), Robin Bhatia, Emma Corcoles, Delphine Feuerstein, Parastoo Hashemi, Andrew Manning, Anthony Strong, Christos Tolias
On-line biosensor systems to capture the chemical signature of brain injury

11:20 to 12:00 Keynote
Adrian Michael (USA)
Voltammetry in the brain: a tool for exploring the link between behavior and chemistry

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: S. Mukerjee, F. Charreteur

10:20 to 11:00 Keynote
Kyung-Won Park (Korea, Republic of)
Nanostructure Materials for Methanol Fuel Cells

11:00 to 11:20
Alfred Lam (Canada), David Wilkinson, Jiujun Zhang
A Novel DMFC Electrode Assembly based on a Membraneless Architecture and Advanced 3D Anodes

11:20 to 11:40
Min-Hsing Chang (Taiwan), Falin Chen, Hung-I Lin
Analysis of a novel MEMS-based design of micro direct methanol fuel cell

11:40 to 12:00
Martin Paidar (Czech Republic), Karel Bouzek
Application of polyaniline based electrode in PEM fuel cell

Symposium 3: Proton Conduction and Transfer

Location: Max Bell Building, MB 253
Chair: E. Pines

10:20 to 11:00 Keynote
Gerhard Hummer (USA)
Proton Conduction Mediated by Water: From Nanotubes to Cytochrome c Oxidase

11:00 to 11:20 Invited
Régis Pomès (Canada)
Theoretical Studies of Proton Translocation in Membrane Proteins

11:20 to 11:40 Invited
David Silverman (USA), Zoe Fisher, Robert McKenna, Chingkuang Tu
Proton transfer through intervening water molecules in catalysis by carbonic anhydrase

11:40 to 12:00 Invited
James Hynes (USA)
Proton Transfer and Glycine Formation in the Interstellar Medium

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: M. McDermott, J. Rusling

10:20 to 10:40 Invited
Allan Hjarbæk Holm (Denmark), Kim Daasbjerg
Use of Aryldiazonium and Diaryliodonium Salts for the Functionalization of New Materials

10:40 to 11:00
Ian Burgess (Canada), Burke Barlow, J.P. Vivek
Evaluation of 4-Dimethylaminopyridine and Halide Co-Adsorption on Colloidal and Electrified Gold Surfaces

11:00 to 11:20 Invited
François Laforge (USA), Michael Mirkin, Peng Sun
Nanoelectrochemistry of Biological Cells

11:20 to 12:00 Keynote
Shunsaku Kimura (Japan)
Influence of Redox Groups on Electron Transfer through Helical Peptides

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Donald Cameron Hall, N Wing, DCH 300
Chair: M. Morimitsu, E. Santos

10:20 to 10:40 Invited
Karel Bouzek (Czech Republic), Zuzana Macova
Electrochemical Ferrate(VI) Synthesis: a Study on the Influence of Potassium Ion Addition into the Anolyte

10:40 to 11:00
Maria Gisela Sustersic (Argentina), Sonia Albano, Sylvia Esquenoni, Dario Segobia, Alicia Von Mengershausen, Thelma Zanon
Hydrogen Adsorption on Polycrystalline Gold Electrodes

11:00 to 11:20
Remigiusz Kowalik (Poland), Piotr Handzlik, Piotr Zabinski
Electroplating of Ni-W alloys for hydrogen evolution in alkaline media

11:20 to 11:40
Renato Carvalho (Portugal), Francisco Lemos, Fernando Ramôa Ribeiro
Digital Simulation of Cyclic Voltammetry on Porous Electrodes

11:40 to 12:00
Ryan Baker (Canada), David Wilkinson, Jiujun Zhang
Electrocatalytic Activity and Stability of Substituted Iron Phthalocyanines Towards Oxygen Reduction Evaluated at Different Temperatures

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: Hong-Yuan Chen, I. Fritsch

10:20 to 11:00 Keynote
Shelley Minteer (USA), Robert Arechederra, Daria Sokic-Lazic
Mitochondria Modified Electrodes

11:00 to 11:20 Invited
Hong-Yuan Chen (China)
Research of Electrochemical Immunosensor for Identifying the Property of Peripheral Nerve Fiber Rapidly

11:20 to 11:40
Haesik Yang (Korea), Jagotamoy Das
Ultrasensitive Electrochemical Detection of Proteins Using Catalytic Reduction of p-Nitrophenol by Gold-Nanoparticle Labels

11:40 to 12:00 Invited
Ingrid Fritsch (USA), Zoraida Aguilar, Emily Anderson, Andrea Henrichs
Microelectrochemical Detection and Enhanced Sample Preparation For Dust Allergens

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: D. Wilkinson, M. Watanabe

10:20 to 11:00 Keynote
Germano Tremiliosi-Filho (Brazil)
Ethanol oxidation: Fundamental and applied studies

11:00 to 11:20 Invited
David Wilkinson (Canada), Simon Fan, Haijiang Wang
Advanced Approaches to the Electro-oxidation of Methanol and Ethanol

11:20 to 11:40
Masahiro Watanabe (Japan), Keiji Kunimatsu, Kenji Miyatake, Takako Sato, Hiroyuki Uchida
Temperature-dependent adsorption/oxidation of CO on highly dispersed Pt/C and PtRu/C electrocatalysts studied by ATR-FTIRAS

11:40 to 12:00
Liang Qi (USA), Yoshiya Fujiwara, Ju Li
Study of oxygen reduction reaction on electronic level

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: R. Kelly, M. Orazem

10:20 to 10:40 Invited
Mary Ryan (United Kingdom), Bridget Ingham, Eleanor Schofield, Michael Toney, Alan Turnbull
Strain Development during the Formation of Nanoporous Gold by Dealloying

10:40 to 11:00
Achim Walter Hassel (Germany), Kirsten Agnes Lill, Ralf Rablbauer, Martin Stratmann
Corrosion and passivity of FeAlCr light weight steels

11:00 to 11:20
Nadine Pebere (France), Christine Blanc, Gregory Boisier, Jean-Baptiste Jorcin, Bernard Tribollet, Vivier Vivier
On the influence of pH on the corrosion behaviour of aluminium 2024

11:20 to 11:40
Saadia Jebnoun (France), Eliane Sutter, Bernard Tribollet
Charaterization of the copper/electrolyte interface on two copper conductors under bias

11:40 to 12:00
Francesco Di Quarto (Italy), Patrizia Bocchetta, Viviana Figà, Monica Santamaria
Physico-chemical Characterisation of Polypyrrole Film Grown in Aqueous and Non-aqueous Solution on Different Substrates

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: I. Burgess, W. Plieth

10:20 to 11:00 Keynote
Kyoung-Shin Choi (USA), Carmen Lopez, Matthew Siegfried, Ryan Spray, Ellen Steinmiller
Electrochemical Synthesis of Inorganic Electrodes with Controlled Micro- and Nano-Structures

11:00 to 11:20
Torsten Oekermann (Germany), Cathrin Boeckler, Thomas Bredow, Michael Wark
Electrodeposition of nanostructured ZnO in the presence of surfactants and large organic molecules

11:20 to 11:40
Jay Leitch (Canada), Ian Burgess, John Collins, John Dutcher, Andreas Friedrich, Jacek Lipkowski, Ulrich Stimming, Vlad Zamlynny
Structural Determination of an Adsorbed Film of Sodium Dodecyl Sulfate at the Au(111) Surface using SNIFTIRS

11:40 to 12:00
Thierry Pauporté (France)
Dye- and Polymer-Assisted Electrodeposition of ZnO

Thursday 13 September - PM

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: M. Schoenfisch, P. Smith

15:00 to 15:20 Invited
Fethi Bedioui (France), Guy Chabot, Charlotte Dumézy, Sophie Griveau, Daniel Scherman, Johanne Seguin
Electroanalytical methodology for the in vivo detection of NO in tumor-bearing mice

15:20 to 15:40 Invited
Stéphane Arbault (France), Christian Amatore
Electrochemical Detection of NO in Biological Systems: from Enzymes in vitro to Single Cells in vivo.

15:40 to 16:00
Gunther Wittstock (Germany), Malte Burchardt, Carolina Nunes Kirchner, Markus Träuble
SECM investigation of enzyme microstructures with controllable amount of enzyme loading

16:00 to 16:20
Qijin Chi (Denmark)
Electrochemical and Scanning Tunneling Microscopy Approaches to Molecular Bioelectronics

16:20 to 16:40
Coffee break

16:40 to 17:00
Diego Millo (Netherlands), Alois Bonifacio, Marco Borsari, Cees Gooijer, Antonio Ranieri, Gert Van Der Zwan
Combining electrochemistry and Raman Spectroscopy: a new approach to study heme proteins.

17:00 to 17:20
Vladimir Vetterl (Czech Republic), Sonja Bartakova, Stanislav Hason, Jiri Vanek
Application of electrochemical methods in biomedicine and dental implantology.

17:20 to 17:40
Johanna Löberg (Sweden), Elisabet Ahlberg
Semi-conducting properties of modified titanium dioxide samples for application in dental implants

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: D. Wilkinson, S. Yan

15:00 to 15:20
Sanjeev Mukerjee (USA)
Anodic Dissolution of Ru and Its Effect on the Electrocatalysis of ORR in DMFCs

15:20 to 15:40
Fanny Charreteur (Canada), Frédéric Jaouen
Catalysts based on Co/Fe precursors for O2 reduction in PEM Fuel Cells

15:40 to 16:00
Susan Yan (USA)
Effect of Oxygen Evolution Reaction Catalysts on Durability of PEM Fuel Cell Cathodes

16:00 to 16:20
Adam Lewera (Poland), Beata Baranowska, Peter Bogdanoff, Iris Dorbandt, Sebastian Fiechter, Aneta Kolary-Zurowska, Pawel Kulesza, Roberto Marassi, Krzysztof Miecznikowski, Agata Zieleniak
Activation of Methanol-Tolerant Carbon-Supported RuSex Electrocatalytic Nanoparticles Towards More Efficient Oxygen Reduction.

16:20 to 16:40
Coffee break

16:40 to 17:00
Franz Moraw (Canada), Khalid Fatih, Francois Girard, David Wilkinson
Hybrid PEM Fuel Cell: Redox Cathode Approach

17:00 to 17:20
Catia Arbizzani (Italy), Maurizio Biso, Elisa Manferrari, Marina Mastragostino
Poly(3,4-ethylenedioxythiophene)-polystyrene-4-sulfonate as PtRu support for DMFC anodes

17:20 to 17:40
Ting He (USA)
High Throughput Screening and Nanosynthesis of Pt Binary and Ternary Alloy Electrocatalysts

17:40 to 18:00
Alex Bauer (Canada), Elod Gyenge, Colin Oloman
Direct Methanol Fuel Cell with Extended Reaction Zone Anode: PtRu and PtRuMo supported on graphite felt

Symposium 3: Proton Conduction and Transfer

Location: Max Bell Building, MB 253
Chair: J. E. McGrath, M. Watanabe

15:00 to 15:20 Invited
Guenther Scherer (Switzerland)
Influence of crosslinking on irradiated ETFE based grafted membranes

15:20 to 15:40
Kenji Miyatake (Japan), Masahiro Watanabe
Proton Conductive Polyether Ionomer Membranes with Improved Properties

15:40 to 16:00
Tetyana Sobolyeva (Canada)
Through-Plane Impedance Measurement for Evaluation of Anisotropy of Ionic Conductivity in Proton Exchange Membranes

16:00 to 16:20
Masayoshi Takami (Japan), Masahiro Ueda, Toshihiko Yoshida
Possibility of Polyethylene-based Electrolyte Membrane for PEMFCs

16:20 to 16:40
Coffee break

16:40 to 17:00 Invited
Serguei Lvov (USA)
Surface chemistry and electrochemistry of metal oxides for composite membranes in proton exchange membrane fuel cells

17:00 to 17:20
Andrew Herring (USA), James Horan, Mei-Chen Kuo
Understanding Proton Conduction in a Series of Novel PolyPOM Ionomers.

17:20 to 17:40
Thomas Zawodzinski (USA), Hossein Ghassemi, Ram Subbaraman
Nitrogen Based Heterocyclic Compouns as Proton Transport Facilitators

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: P. Schmuki, A. Holm

15:00 to 15:20 Invited
Zhongqun Tian (China), Fengru Fan, Pingping Fang, Jianfeng Li, Bin Ren, Jianjun Sheng, Bingsheng Yin
Electrochemical Surface-enhanced Raman Spectroscopy of Au@Pd and Pd Nanocubes Film Electrodes

15:20 to 15:40
Zhi-You Zhou (China), De-Jun Chen, Zhi-Zhong Huang, Shi-Gang Sun, Na Tian, Zhi-You Zhou
Electrodeposition of Monodispersed Pt Nanospheres and Their Size-dependent Infrared Spectroscopy

15:40 to 16:00 Invited
Erica Forzani (USA), Nongjian Tao
Nanosensors Based on Electrodeposited Conducting Polymers

16:00 to 16:20 Invited
Frederic Kanoufi (France), Catherine Combellas
Scanning ElectroChemical Microscopy of perfluorinated Self Assembled Monolayers

16:20 to 16:40
Coffee break

16:40 to 17:00 Invited
Philip Bartlett (United Kingdom)
Templated electrodeposition of structured metal surfaces for SERS

17:00 to 17:20
Susana Cordoba De Torresi (Brazil), Marcio Vidotti
Electrophoretic deposition technique for the immobilization of nanoparticles to prepare high performing electrochromic electrodes

17:20 to 17:40
Oleg Semenikhin (Canada)
Nanoscale Inhomogeneity of Conducting Polymers and Its Effect on the Performance of Polymer-Based Solar Cells and Other Devices

17:40 to 18:00
Valentina Lazarescu (Romania), Mihail-Florin Lazarescu, Catalin Negrila, Rares Scurtu
Self Organized Organic Monolayers on Semiconductor Electrodes

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Donald Cameron Hall, N Wing, DCH 300
Chair: M. Musiani, E. Ahlberg

15:00 to 15:20
Kiyoshi Yamaura (Japan)
Photocatalytic properties of ITO for PET film

15:20 to 15:40
Viktor Safonov (Russian Federation), Piter Glatzel, Evgenii Lubnin, Yurii Polukarov, Olga Safonova, Lyudmila Vykhodtseva
Application of X-ray emission spectroscopy (XES) to an investigation of the role of electrocatalysis in the chromium electrodeposition from Cr(III) electrolytes

15:40 to 16:00
Linda Nylén (Sweden), Ann Cornell
The Impact of Different Electrolyte Parameters on the Chlorate Cathode

16:00 to 16:20
Josef Krysa (Czech Republic), Georg Waldner
Photo(electro)catalysis on various types of TiO2 films

16:20 to 16:40

Coffee break

16:40 to 17:00 Invited

Romeu C. Rocha-Filho (Brazil), Luis Avaca, Sonia Biaggio, Nerilso Bocchi, Adriana Carvalho

The kinetics of redox reactions on boron-doped diamond surfaces: on the possible role of adsorbed water

17:00 to 17:20 Invited

Tribidasari Anggraningrum Ivandini (Japan), Yasuaki Einaga, Akira Fujishima

Electrochemical Properties of Metal-Implanted Boron-Doped Diamond Electrodes

17:20 to 17:40

Claude Deslouis (France), Hubert Cachet, Catherine Debiemme-Chouvy, Priscila Tamiasso-Martinhon

Electrochemistry on thin films of nitrogen-doped amorphous carbon: electron transfer and surface reactivity

17:40 to 18:00

Yuri Pleskov (Russian Federation), Valerii Elkin, Marina Krotova, Pau-Yee Lim, Sergei Pimenov, Viktor Ralchenko, Alexey Saveliev

Nitrogenated nanocrystalline diamond, an n-type conductor: the effect of the nitrogenation on the electrochemical properties

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: J. Leddy, S. Andria

15:00 to 15:40 Keynote

Daniel Mandler (Israel)

Developing Selective Electrodes and Sensors: Self-Assembled Monolayers vs. Thin Polymeric Films

15:40 to 16:00

Sara Andria (USA), William Heineman, Carl Seliskar

Spectroelectrochemical Characterization and Selectivity Concept Demonstration with a Novel Thin Film Material for Chemical Sensing

16:00 to 16:20 Invited

Minh-Chau Pham (France), Vincent Noel, Benoit Piro, Steeve Reisberg

Steric Effect in the Electrochemical Transduction during DNA Hybridization on a Quinone-based Sensor

16:20 to 16:40

Coffee break

16:40 to 17:00

Po-Yen Chen (Taiwan), Kuo-Chuan Ho, Guey-Sheng Liou

An uric acid biosensor based on a molecularly imprinted polymer from an aromatic poly(amine-imide) thin film

17:00 to 17:20

Yusuke Fuchiwaki (Japan), Izumi Kubo, Naoki Sasaki, Akio Shimizu

Development of electrochemical sensing system using molecularly imprinted artificial receptor for simazine

17:20 to 17:40

Omar Herrera (Canada), Walter Merida, David P. Wilkinson

Polyaniline Electrode Sensors for Electrochemical Application

17:40 to 18:00

Johna Leddy (USA), Luke Haverhals

Fuel Cell-Based Breath Sensors for Ethanol and Smoking By-Products

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: I. Burgess, J.-P. Dodelet

15:00 to 15:20 Invited
Jean-Pol Dodelet (Canada)
Fe and Co based Electrocatalysts for Oxygen Reduction in PEM fuel cells

15:20 to 15:40
Gabor Samjeské (Japan), Masatoshi Osawa
A new insight into the reaction mechanism of oscillations during the oxidation of formaldehyde at Pt-film-electrodes based on in-situ time-resolved surface-enhanced IR spectroscopy (SEIRAS)

15:40 to 16:00
Nagahiro Hoshi (Japan), Kosuke Mikita, Masashi Nakamura
Promotion of CO Oxidation by Co-adsorbed Water on Pt(S)-[n(100)×(110)] Electrodes

16:00 to 16:20
Alykhan Sumar (Canada), Viola Birss
Deposition of Iridium on Platinum for Fuel Cell Applications

16:20 to 16:40
Coffee break

16:40 to 17:00
Ana Mani (Canada), Viola I. Birss
Kinetics of Oxygen Reduction at Non-noble Metal Catalysts for PEM Fuel Cells

17:00 to 17:20
Frode Seland (Norway), David A Harrington, Reidar Tunold
Oxidation of Formic Acid at Polycrystalline Pt Electrodes

17:20 to 17:40
Wen-Feng Lin (United Kingdom)
New Insight into The Ru(0001) Surface Electrochemistry

17:40 to 18:00
Ryoichi Aogaki (Japan), Ryoichi Morimoto
Secondary Nodule Formation in a Magnetic Field

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: N. Missert, V. Gelling

15:00 to 15:40 Keynote
Jingli Luo (Canada), Baotong Lu
Anodic Dissolution Kinetics of Passive Metals in Flowing Slurries

15:40 to 16:00
Mark Orazem (USA), Vicky Huang, Kevin Ogle
Mathematical Models for Cathodic Delamination of Coated Metals

16:00 to 16:20
Bill Santos (Canada)
Corrosion and Fouling of Carbon and Stainless Steels in Petrochemical Environments

16:20 to 16:40

Coffee break

16:40 to 17:00

Baotong Lu (Canada), Peter Norton
Effects of Dissolved Hydrogen, Elastic and Plastic Deformation on Active Dissolution of Pipeline Steel in Near-Neutral pH Groundwater

17:00 to 17:20

Zack Qin (Canada), W-J. Cheong, P. G. Keech, D. W. Shoesmith, J. C. Wren
Modelling the Development of Locally Acidified Sites within Corroding Nuclear Fuel Surfaces

17:20 to 17:40

Michael Broczkowski (Canada), Peter Keech, Jamie Noel, Dave Shoesmith
The role of dissolved hydrogen for inhibiting UO2 corrosion in the presence of H2O2

17:40 to 18:00

Erika Kalman (Hungary), Ilona Felhosi, Gyula Tolnai
Self-Repair Nanocoating System for Protection of Iron

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: G. Zangari, W. Schwarzacher

15:00 to 15:20

Eric Favry (France), Arnaud Etcheberry, Nadia Frederich, Francois Jomard, Laurent Omnès
Investigation of organics adsorption and inclusionat the growing interfaces during the Damascene process

15:20 to 15:40 Invited

Benedetto Bozzini (Italy), Lucia D'Urzo, Claudio Mele, Abderrahmane Tadjeddine
An in situ SFG and SERS Investigation of Copper in contact with aqueous solutions containing 4-2-[1-(2-cyanoethyl)-1,2,3,4-tetrahydroquinolin-6-yl]diazenyl benzonitrile

15:40 to 16:00 Invited

Masanori Hayase (Japan), Masayuki Nagao
Effect of agitation on accelerator removal by reverse pulses in copper electroplating

16:00 to 16:20 Invited

Givoanni Zangari (USA), Wenbo Shao
Influence of Chloride, Sulfamate and Thiourea on the Electrodeposition of Copper

16:20 to 16:40

Coffee break

16:40 to 17:00 Invited

Claude Gabrielli (France), Philippe Moçotéguy, Hubert Perrot, Alan Zdunek
Probing additive degradation in the Damascene Process by Electrochemical Impedance Analysis

17:00 to 17:20 Invited

Walther Schwarzacher (United Kingdom), Peter Heard, Manon Lafouresse
Surface evolution of Cu electrodeposited in presence of Cl-

17:20 to 17:40

Thomas Moffat (USA), Daniel Josell, Soo-Kil Kim, Daniel Wheeler
Superconformal Film Growth: Mechanism and Quantification

17:40 to 18:00

Gi Taek Lee (Korea, Republic of), Geon Hi Kim, Jae Hong Kim
The Study of Cu film impurity and micro void according to plating RPM in Cu electroplating Process

Friday 14 September - AM

Plenary Lecture

Location: Eric Harvie Theatre
Chair: G. Jerkiewicz

09:00 to 10:00
Jeff Dahn (Canada), David Stevens, Andrew Todd, Ruizhi Yang
Combinatorial studies of Li-ion battery electrode materials and PEM fuel cell catalysts

10:00 to 10:20
Coffee break

Symposium 1: Bioelectrochemistry

Location: Donald Cameron Hall, S Wing, DCH 17
Chair: T. Matsue, T. Jenkins

10:20 to 10:40 Invited
Peter JS Smith (USA)
Chemically profiling the microdomains of extracellular space

10:40 to 11:00
Hidehiko Asanuma (Canada), Hidenori Noguchi, Kohei Uosaki, Hua-Zhong Yu
Effect of Cations on the Molecular Orientation in DNA Monolayers on Silicon Surfaces

11:00 to 11:20
Andrew Mount (United Kingdom)
Electrochemical control of the conformational switching of a DNA HJ bioswitch

11:20 to 11:40
Juhyoun Kwak (Korea)
Label Free Electrochemical DNA Sensor Based On PNA Probe

11:40 to 12:00
Ana Maria Oliveira-Brett (Portugal), Ana-Maria Chiorcea-Paquim, Oana Corduneanu, Victor C. Diculescu, Merrill Garnett
Electrochemistry for probing in situ DNA damage

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Max Bell Building Auditorium
Chair: R. Torresi, I. Serebrenikova

10:20 to 10:40
Irina Serebrennikova (USA)
Can-cathode interface in alkaline Zn/MnO2 batteries: Optimization of can plating composition

10:40 to 11:00
Frank Walsh (United Kingdom)
Electrochemical Energy Conversion in Fuel Cells and Redox Flow Cells: The Importance of High Surface Area Materials

11:00 to 11:20
Steeve Rousselot (Canada), Daniel Guay, Lionel Roué
MgxTi(1-x) (0<x<1) materials prepared by ball milling. Application as negative electrode for Ni-MH batteries

11:20 to 11:40

Tetsuro Kobayashi (Japan), Madoka Hasegawa, Yuichi Itou, Yasuhito Kondo, Hidehito Matsuo, Hiroshi Nozaki, Tsuyoshi Sasaki, Yoshiki Seno, Yoshio Ukyo

New Phase of NiOOH and Its Electrochemical Properties

11:40 to 12:00

Xingwen Yu (Canada), Stuart Licht

Zirconia Coating Stabilized Super-Iron Alkaline Battery

12:00 to 12:20

Willem Peter Kalisvaart (Netherlands), Peter Notten

Mg-Ti based materials: A new class of high-capacity, light-weight hydrogen storage materials

12:20 to 12:40

Roberto Torresi (Brazil), Fernanda F. C. Bazito, Tânia M. Benedetti

Electrophoretic deposition of MnO2 nanoparticles: electrochemistry in a room temperature ionic liquid

Symposium 2: Energy Storage and Energy Conversion Systems

Session B

Location: Max Bell Building, MB 253

Chair: J. Vondrak, G. Nurk

10:20 to 10:40

Jean-Francois Drillet (Germany), Roland Dittmeyer, Klaus Jüttner

Study of the activity and long-term stability of PEDOT as Pt catalyst support in the DMFC anode

10:40 to 11:00

Alexander Modestov (Russian Federation), Viktor Emets, Alexander Modestov, Mikhail Tarasevich

Tests of single cells with PBI, supported PBI, and composite PBI proton exchange membranes.

11:00 to 11:20

Jiri Vondrak (Czech Republic), Peter Barath, Bohuslav Klapste, Ondrej Krejza, Marie Sedlarikova, Jana Velicka

Capacity of a glassy carbon electrode in PC electrolytes

11:20 to 11:40

Gunnar Nurk (Estonia)

Electroanalysis of Porous La0.6Sr0.4CoO3-d SOFC Cathodes with Different Porosities Supported on Ce0.9Gd0.1O1.9 Electrolyte.

11:40 to 12:00

Tsz Hang Tommy Cheng (Canada), Elod Gyenge

Extended reaction zone anodes for direct methanol fuel cells: enhancing catalyst utilization

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Laszlo Funtek Teaching Wing, LF 222
Chair: S. Córdoba de Torressi, E. Forzani

10:20 to 10:40 Invited
Aicheng Chen (Canada), Kallum Koczkur, Xinsheng Peng, Dan Thomas, Jingpeng Wang
Synthesis and Electrochemical Study of Pt-based Nanoporous Materials

10:40 to 11:00 Invited
Julia Kunze (Germany), Jan M. Macak, Lenka Müller, Frank Müller, Patrik Schmuki, Hiroaki Tsuchiya
Early and later stages of apatite growth on anodic TiO2 nanotubes

11:00 to 11:20
Guido Grundmeier (Germany), Xuemei Wang
Combined spectroscopic, microscopic and electrochemical analysis of release properties of Ag-nanoparticles embedded in fluorocarbon plasma polymer films

11:20 to 11:40
Manfred Buck (United Kingdom), Cai Shen, Christophe Silien
Electrochemical Nanotechnology: Studies on Metal Deposition Controlled by Self-Assembled Monolayers

11:40 to 12:00
Hany El-Sayed (Canada), Viola Birss
Fabrication of Tantalum Nanohole Arrays Using One Step Electrochemical Etching

12:00 to 12:20
Andrew Jonathan Smith (Germany), Achim Walter Hassel, Srdjan Milenkovic
Selective Electrodissolution of Directionally Solidified Eutectic Alloys for "Mass Production" of Metallic Nanowires with Extreme Aspect Ratios

12:20 to 12:40
Patrik Schmuki (Germany)
Self-Organized Formation of Hexagonal Ultra High Aspect Ratio Titanium Oxide Nanotubes

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Donald Cameron Hall, N Wing, DCH 300
Chair: K. Bouzek, R. Tunold

10:20 to 10:40 Invited
Marco Musiani (Italy), Sandro Cattarin, Paolo Guerriero, Lourdes Vazquez-Gomez
Preparation and electrochemical Characterization of Ni+RuO2 composite cathodes of large effective area

10:40 to 11:00
Hiroshi Okamoto (Japan), Mitsunobu Kikuchi, Yoshiharu Mukouyama
Influence of Chloride Ion on Potential Oscillation Generated by Formic Acid Oxidation

11:00 to 11:20
Jakub Jirkovsky (Czech Republic), Jiri Franc, Petr Krtil, Marina Makarova
Particle size and substitution effect of Co, Fe and Ni on the electrocatalytic activity of nanocrystalline Ru based oxide electrodes with rutile structure

11:20 to 11:40
Petr Krtil (Czech Republic), Hana Hoffmannova, Jakub Jirkovsky, Macounova Katerina, Makarova Marina
The role of particle shape and surface composition in electrocatalytic behavior of nanocrstructured oxide electrodes

11:40 to 12:00
Elena Baranova (Canada), Christina Bock, Dimitri Ilin, Yvon Le Page, Barry MacDougall
Synthesis and Characterization of Alloy vs. Core-Shell Nano-Catalysts and Abnormal Diffraction Effects

12:00 to 12:20
Stefania Siracusano (Italy)
Study of oxygen-depolarized Ag-based cathode catalysts for electrolysis in chlor-alkali cell

12:20 to 12:40
Piotr Zabinski (Poland), Wojciech Gagatek, Remigiusz Kowalik
Amorphous Co-Mo Cathodes for Hydrogen Evolution

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Donald Cameron Hall, S Wing, DCH 30
Chair: Y.-B. Shim, H-Z Yu

10:20 to 10:40
Edith Chow (Australia)
Recent Advances in Gold Nanoparticle Film Chemiresistors: From Gas Sensing to Liquid Phase Sensing Devices

10:40 to 11:00
Giuseppe Palleschi (Italy), Lara Cristofanelli, Emanuela Tamburri, Maria Letizia Terranova, Federica Valentini
Gold and platinum microelectrodes modified with functionalised carbon nanomaterial/polymer-GOx composite films for the detection of glucose with the extended linearity.

11:00 to 11:20
Yoon-Bo Shim (Korea, Republic of)
Aptamer-Based Immunosensor with Gold Nanoelectrodes: An Ultrasensitive Electrocatalytic Protein Detection

11:20 to 11:40
Po-Chin Nien (Taiwan), Fuh-Yu Chang, Kuo-Chuan Ho, Meng-Chi Huang
An on-chip low-interference glucose biosensor in a microfluidic system

11:40 to 12:00
Hua-Zhong (Hogan) Yu (Canada)
Aptamer-based biosensors for label-free voltammetric detection of charged proteins

12:00 to 12:20
Fran Jones (United Kingdom), Robert Dryfe, Simon Hill
Numerical Modeling of Liquid-Liquid Flow Cells

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Max Bell Building, MB 252
Chair: P. Kulesza, W. Pell

10:20 to 10:40 Invited
Wendy Pell (Canada), Heather Andreas, Brian Conway, Jianjun Niu
Significance of Temperature and Nature of the Electrolyte on Double Layer Capacitance and Pseudocapacitance at Carbon Electrodes

10:40 to 11:00
Masayuki Morita (Japan), Minato Egashira, Nobuki Kihara, Nobuko Yoshimoto
Electric Double-layer Capacitance at Carbon Electrodes in Organic Electrolyte Solutions

11:00 to 11:20
Daniel Bélanger (Canada), Stève Baranton, Neus Vilà
In situ generation of diazonium cations for electrochemical modification of carbon surface

11:20 to 11:40
Pawel Kulesza (Poland), Malgorzata Chojak, Barbara Kowalewska, Krzysztof Miecznikowski, Magdalena Skunik
Pseudocapacitive Effects in the Network Films of Carbon Nanostructures Modified with Ultra-Thin Films of Polyoxometallates and Conducting Polymers.

11:40 to 12:00
Peter Keech (Canada), James Noël, Derrick Ofori, David Shoesmith
The Electrochemical Reactivity of Spent Nuclear Fuel (UO2) under Intermediate pH to Acidic Conditions

12:00 to 12:20
Guenter Trettenhahn (Austria)
In situ FTIR Spectroelectrochemical Investigations of the Hexacyanoferrate-II/-III Redox Couple

12:20 to 12:40
Akihito Imanishi (Japan), Yoshihiro Nakato, Tomoaki Okamura
Photoinduced Oxygen Evolution on Well-defined Single Crystal (rutile)TiO2 Surfaces Studied by PL Emission

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Laszlo Funtek Teaching Wing, LF 224
Chair: Jingli Luo, M. Lohrengel

10:20 to 10:40 Invited
Thomas Suter (Switzerland), Fabian Eckermann, Marco Stampanoni
Electrochemical Tools for Studies on the Micrometer and Submicrometer Level

10:40 to 11:00 Invited
Robert Kelly (USA), Zhuoyuan Chen
Cathode Limitations on Localized Corrosion Propagation under Atmospheric Exposure: Analytical Modeling and Comparison to Experiment

11:00 to 11:20
Nancy Missert (USA), Guild Copeland, Natasa Vasiljevic
Morphological Changes Preceding Pit Initiation in Model Aluminum-Copper Alloys

11:20 to 11:40
Kathrin Eckhard (Germany), Thomas Erichsen, Wolfgang Schuhmann, Albert Schulte
Local investigation of corrosion precursor and actively corroding sites using multi-dimensional frequency-dependent AC - SECM

11:40 to 12:00
Sascha E Pust (Germany), Dieter Scharnweber, Gunther Wittstock
Scanning Electrochemical Microscopic Studies on the Electron Transfer Kinetics of the Passive Film on Ti6Al4V

12:00 to 12:20
Leonard Berlouis (United Kingdom), Pierre-Francois Brevet, Brian McMillan
Surface anisotropy of anodic sulphide films on CdxHg1-xTe by second harmonic generation in reflection.

12:20 to 12:40
Salvatore Piazza (Italy), Guastaldi Antonio, Nilson Camarindo Oliveira, Salvatore Piazza, Carmelo Sunseri
Photo-electrochemical Investigation of Anodic Oxide Films on cast Ti-Mo Alloys

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Laszlo Funtek Teaching Wing, LF 122/124
Chair: T. Moffat, S. Brankovic

10:20 to 11:00 Keynote
Karin Leistner (Germany), Sebastian Fahler, Peter Schaaf, Heike Schlorb, Ludwig Schultz
The role of interfacial hydroxide formation on the composition and growth of Fe-Pt

11:00 to 11:20 Invited
Tetsuya Osaka (Japan), Yuta Kikuchi, Atsushi Sugiyama, Masahiro Yoshino
Effects of fluid flow and magnetic field on magnetic properties of electrolessly CoNiFe alloy

11:20 to 11:40
Gerhard E. Nauer (Austria), Diana C. Guio-Perez, Hermann Kronberger, Paola Pessenda-Garcia, Helena Simunkova
Electrochemical Preparation of Nickel Composite Coatings Containing Nano Sized Ceramic Particles

11:40 to 12:00 Invited
Andreas Zielonka (Germany), Teodora Valkova
Incorporation of surfacemodified gold nanoparticels in electrodeposited layers

Symposium 1		
S01-P-001 – S01-P-018	SESSION 2	Sally Borden Building (Lower Level) Poster Presentation Session 2A Tuesday 18:00-19:00
S01-P-019 – S01-P-031	SESSION 2	Sally Borden Building (Lower Level) Poster Presentation Session 2C Thursday 18:00-19:00
Symposium 2		
S02-P-001 – S02-P-021	SESSION 1	Professional Development Centre (Poster Display Wing) Poster Presentation Session 1A Monday 14:00-15:00
S02-P-022 – S02-P-043	SESSION 1	Professional Development Centre (Poster Display Wing) Poster Presentation Session 1B Monday 18:00-19:00
S02-P-044 – S02-P-063	SESSION 2	Sally Borden Building (Lower Level) Poster Presentation Session 2B Thursday 14:00-15:00
S02-P-064 – S02-P-087	SESSION 2	Sally Borden Building (Lower Level) Poster Presentation Session 2C Thursday 18:00-19:00
Symposium 3		
S03-P-001 – S03-P-017	SESSION 1	Professional Development Centre (Poster Display Wing) Poster Presentation Session 1B Monday 18:00-19:00
Symposium 4		
S04-P-001 – S04-P-012	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1A Monday 14:00-15:00
S04-P-013 – S04-P-023	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1B Monday 18:00-19:00
S04-P-024 – S04-P-046	SESSION 2	Professional Development Centre (Poster Display Wing) Poster Presentation Session 2B Thursday 14:00-15:00
Symposium 5		
S05-P-001 – S05-P-012	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1A Monday 14:00-15:00
S05-P-013 – S05-P-023	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1B Monday 18:00-19:00
S05-P-024 – S05-P-035	SESSION 2	Sally Borden Building (Lower Level) Poster Presentation Session 2A Tuesday 18:00-19:00
S05-P-036 – S05-P-047	SESSION 2	Sally Borden Building (Lower Level) Poster Presentation Session 2C Thursday 18:00-19:00
Symposium 6		
S06-P-001 – S06-P-015	SESSION 1	Professional Development Centre (Poster Display Wing) Poster Presentation Session 1A Monday 14:00-15:00
S06-P-016 – S06-P-036	SESSION 1	Professional Development Centre (Poster Display Wing) Poster Presentation Session 1B Monday 18:00-19:00
Symposium 7		
S07-P-001 – S07-P-021	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1C Tuesday 14:00-15:00
S07-P-022 – S07-P-042	SESSION 2	Professional Development Centre (Poster Display Wing) Poster Presentation Session 2A Tuesday 18:00-19:00
Symposium 8		
S08-P-001 – S08-P-013	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1A Monday 14:00-15:00
S08-P-014 – S08-P-024	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1B Monday 18:00-19:00
S08-P-025 – S08-P-050	SESSION 2	Professional Development Centre (Poster Display Wing) Poster Presentation Session 2C Thursday 18:00-19:00
Symposium 9		
S09-P-001 – S09-P-007	SESSION 1	Sally Borden Building (Lower Level) Poster Presentation Session 1A Monday 14:00-15:00
Symposium 10		
S10-P-001 – S10-P-027	SESSION 2	Professional Development Centre (Poster Display Wing) Poster Presentation Session 2A Tuesday 18:00-19:00

Poster presentation program

SESSION 1

Times for viewing: Monday 13:00-23:00
Tuesday 10:00-15:00
Chair: A. Chen, D. Bélanger

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 1A Monday 14:00-15:00

S02-P-001
Toby Astill (Canada), Steven Holdcroft, Ken Shi, Zhong Xie
Characterization of Gas Diffusion Electrodes and Membrane Electrode Assemblies Incorporating an Electrode Electrolyte Based on Sulfonated Poly (Ether Ether Ketone) (SPEEK)

S02-P-002
Saïd Bouhtiyya (Canada), Lionel Roué
The electrochemical hydriding behaviour of Pd/Mg-X/Pd thin films (with X= Ni, Ti, Si) prepared by pulsed laser deposition

S02-P-003
P. C. Barbosa (Portugal), L. C. Rodrigues, M. Manuela Silva, M. J. Smith
Characterization of PEO/siloxane ormolytes based on lithium tetrafluoroborate

S02-P-004
Mauricio Blanco (Canada), Dan Bizzotto, Liu Simon, Haijiang Wang, David Wilkinson
Liquid Methanol Transport in DMFC Diffusion Layers

S02-P-005
Pascale Bommersbach (Canada), Daniel Guay, Mohamed Mohamedi
Development of new catalysts for ethanol oxidation in Direct Alcohol Fuel Cells applications

S02-P-006
Karel Bouzek (Czech Republic), Sabina Moravcova, Sven Stammwitz
Influence of the Hydrogen Contamination by Mercury on the PEM Fuel Cell Lifetime

S02-P-007
David Bruce (Canada), David Wilkinson
Characterization of interfacial charge transfer in PEM based photoelectrochemical hydrogen generation

S02-P-008
Jian Chen (China), Haifeng Xu, Baolian Yi, Huamin Zhang
Facilitating the Mass Transport in Gas Diffusion Layer of PEMFC by Appling Dry-Layer Preparation of Micro Porous Layer

S02-P-009
Xingxing Chen (Germany), Yvonne Ackermann, Michael Bron, Kathrin Eckhard, Nan Li, Martin Muhler, Wolfgang Schuhmann, Min Zhou
Structured catalyst on carbon nanotube modified carbon material: Catalytic activity towards oxygen reduction

S02-P-010
Hua Cheng (United Kingdom)
Electrochemical reduction of oxygen onruthenium-selenium-transition metal catalysts

S02-P-011
Derek Cheng (Canada), Elod Gyenge, Siyu Ye
Application of Electrochemical Impedance Spectroscopy (EIS) as a Characterization Tool for PEM Fuel Cell Diffusion Layer

S02-P-012
Hiroki Chiba (Japan), Yutaka Kohno, Shin-Ichi Komazaki, Masao Watanabe
Mechanical Properties of Polymer Hydrogel Electrolyte Membranes in PEFC under Operation

S02-P-013
Takayuki Doi (Japan), Shigeto Okada, Jun-Ichi Yamaki
Electrochemical Properties of Nano-sized LiFePO4 Particles Prepared by a Spray Pyrolysis Method

S02-P-014
Mika Eguchi (Japan), Taku Suzuki, Yasuyuki Tsutsumi, Katsuhiro Uno
Basic Concept of the MEA Structure for PEFC

S02-P-015
Hossein Farsi (Iran (Islamic Republic of)), Fereydoon Gobal
On the Modeling of the Performance of Mixed Oxide Electrochemical Capacitors

S02-P-016
Khalid Fatih (Canada), Teng Ma, Haijiang Wang
Corrosion Behaviour of 304 and 316 Stainless Steels in PEMFC Environment

S02-P-017
Hideaki Fujiwake (Japan), Kenji Kikuchi, Taro Kinumoto, Jyunichi Nakamura, Zempachi Ogumi
Hydrogen peroxide produced from the activated carbon used in polymer electrolyte fuel cells

S02-P-018
Nagakazu Furuya (Japan), Motoko Umebayashi
Aqueous Li ion – Zi Secondary Battery

S02-P-019
Annett Gebert (Germany), Bogdan Khorkounov, Christine Mickel, Ludwig Schultz, Angelika Teresiak, Margitta Uhlemann
Hydrogenation and electrochemical characteristics of amorphous-nanostructured Mg-Ni-Y alloys

S02-P-020
Nelly Giroud (France), Eric Chainet, Jean-Claude Poignet, Helene Rouault
Physical and chemical study of the ionic liquids' structure and influence of the lithium salt associated

S02-P-021
Kenji Hata (Japan), Toru Katakabe, Ryuji Kawano, Masayoshi Watanabe
Ionic Plastic Crystal Electrolytes for Solid-State Dye-Sensitized Solar Cells

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 1B Monday 18:00-19:00

S02-P-022
Justin Ho (USA), Sossina M. Haile
Electrochemical Characterization of Ba0.5Sr0.5Co0.8Fe0.2O3-[delta] : A Mixed-Conducting Cathode for Solid Oxide Fuel Cells

S02-P-023
Nikolaus Stefan Hochgatterer (Austria), Peter Rudolf Raimann, Mario Rene Schweiger, Michael Oliver Sternad, Martin Winter
Development of nanostructured Sn/SnSb/Cu composite anode and their characterization via ESEM

S02-P-024
Yuichi Honda (Japan), Masashi Ishikawa, Takaharu Kitamura, Hideki Shiozaki, Masayuki Takeshige
Electric Double Layer Behavior at Vertically Aligned MWCNT Sheet in Various Electrolytes

S02-P-025
Xiang-fu Hong (Taiwan), Lin-Chi Chen
Preparation of Nanostructured Indium Hexacyanoferrate Thin-Film Electrodes for Electrochromic Applications

S02-P-026
Alan Ilicic (Canada), Khalid Fatih, Francois Girard, David Wilkinson
High Fuel Concentration DMFC with Redox Couple Cathode

S02-P-027
Yusuke Isshiki (Japan), Seiichiro Tabata, Masayoshi Watanabe
Charge and Discharge Behavior of Lithium Ions for Inverse Opal Carbon Electrodes

S02-P-028
Atsushi Ito (Japan), Koichi Kobayakawa, Yuichi Sato
Improved cycle performance of Li-rich layered materials by galvanostatic charge/discharge electrochemical pre-treatment

S02-P-029
Jasna Jankovic (Canada), Rob Hui
Proton-Conducting Ceramic Materials for a High Temperature PEMFC

S02-P-030
Seung-ho Kang (Korea), Hae-Won Cheong, Sung-Baek Cho, Kwang-Il Chung, Hyun-Jin Ji, Jong-Myong Kim, Sung-Min Lee
Effect of Heat Treatment and Additive on Electrode Pellets for Thermal Batteries

S02-P-031
Taro Kinumoto (Japan), Tomoaki Hirai, Zempachi Ogumi, Yoshiharu Uchimoto
A Model Study of Oxygen Reduction Reaction in Triple-Phase Boundary of PEFCs

S02-P-032
Akira Kitani (Japan), Tomohisa Shiraga, Jun Yano
Platinum and tin particle-dispersed polyaniline electrodes for the anodes of the direct methanol fuel cell

S02-P-033
Petr Krtil (Czech Republic), Tereza Kostlanova, Marina Makarova
Solvent polarity role in solvothermal synthesis of nanocrystalline Li-Ti-O Li insertion hosts

S02-P-034
Tatiana Kulova (Russian Federation), Oleg Kon'kov, Yurii Pleskov, Alexander Skundin, Anna Solov'eva, Evgenii Terukov, Sergey Timashev, Viktoriya Timofeeva, Irina Trapeznikova
AFM Study of Passive Film Formation on Amorphous Silicon Electrode

S02-P-035
Tatiana Kulova (Russian Federation), Mark Bruk, Vladimir Kal'nov, Yuliana Roginskaya, Alexander Skundin, Evgenii Zhikharev
Li Insertion into Magnetron-sputtered Silicon Films

S02-P-036
Tatiana Kulova (Russian Federation), Oxana Grigorieva, Viktor Mukhin, Sergey Rezvov, Alexander Skundin
Effect of Doping on the Structure and Electrochemical Properties of LiCoO2

S02-P-037
Jong Myung Lee (Korea), Junghyun Lee, Rajaram K. Nagarale, Woonsup Shin
Comparative Studies of Polymer Films for Continuous Discharge of Zn anode in Physiological Condition

S02-P-038
W-F Lin (United Kingdom)
New Electrode Structures for Direct Methanol Fuel Cells

S02-P-039
Vincent Lam (Canada), Akram Alfantazi, Elod Gyenge
Performance and Cell Component Optimization for Direct Borohydride Fuel Cells

S02-P-040
Junghyun Lee (Korea), Adam Heller, Woonsup Shin
A Miniature Zinc-Ag/AgCl Battery Operating in Physiological Condition

S02-P-041
Ezequiel Pedro Marcos Leiva (Argentina), Mariana Isabel Rojas
DFT Study of a Ti/graphene sheet in contact with different adsorbates

S02-P-042
Justo Lobato (Spain), Pablo Cañizares, Jose J. Linares, Rubén López-Vizcaíno, Manuel A. Rodrigo
PBI-Based Direct Methanol Fuel Cells

S02-P-043
Grzegorz Lota (Poland), Elzbieta Frackowiak
Ionic liquids - a new generation of electrolyte for supercapacitors

Symposium 3: Proton Conduction and Transfer

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 1B Monday 18:00-19:00

S03-P-001
Sneha Bajpe (Canada), Venkataraman Thangadurai
Investigation of Structural Stability and Transport Properties of Doped Barium Cerates

S03-P-002
Olivier Diat (France), Armel Guillermo, Pierre Levitz, Sandrine Lyonnard, Jean-Christophe Perrin, Ferdinand Volino
Proton dynamics in ionomer membranes by NMR reaxometry and QNES

S03-P-003
Lioudmila Doubova (Italy), Simona Barison, Stefano Boldrini, Gaetano Chiodelli, Sergio Daolio, Monica Fabrizio, Cecilia Montalò
The Conductivity of Proton Conductors BaCe1-xYxO3 Prepared by a modified Sol-gel method

S03-P-004
Valeria Felice (Canada), Eric Dupuis, Valeria Felice, Ana Tavares
Swelling behaviour of Nafion in pure methanol

S03-P-005
Sho Katsura (Japan), Yasuhiro Awakura, Yuki Taninouchi, Tetsuya Uda
Measurement of polarization behavior of hydrogen and oxygen electrode on solid acid fuel cell using area-asymmetric cell

S03-P-006
Klaus Dieter Kreuer (Germany), Joachim Maier, Michael Schuster
Exploring the Limits of Sulfonic Acid Based Proton Conducting Membranes

S03-P-007
Yue Ma (Denmark), Per L. Hansen, Eivind Skou
Solvent Uptake in Nafion® Membranes from Water-Alcohol Mixtures

S03-P-008
Chun-An Ma (China)
Preparation and Characterization of Hollow Global Tungsten Carbide Loaded Platinum Nanoparticles and Its Electrocatalytic Activity for Hydrogen Evolution

S03-P-009
Chun-An Ma (China)
Electrochemical Behaviour of Nitro-aromatics on Pt Microelectrode in Aprotic Medium

S03-P-010
Chun-An Ma (China)
The Electrochemical Behavior of Nitromethane in Room Temperature Ionic Liquid BMIMBF4

S03-P-011
Aldo Magistris (Italy)
Synthesis and characterization of new PBI-based composite membranes for PEMFCs

S03-P-012
Sabina Moravcova (Czech Republic), Karel Bouzek
Study on the Ion Exchange Kinetics of the Heterogeneous Membranes on the Base of the Poly(Phenylene Sulphide)

S03-P-013
Atsuko Nosaka (Japan), Yoshio Nosaka
Behavior of Water Molecules in PEFC Membranes as Studied by 1H NMR spectroscopy

S03-P-014
Arata Ohishi (Japan), Shin-Ichiro Imabayashi, Hideyuki Matsuoka, Masayoshi Watanabe
Proton Conducting Membranes Having Sulfonimide Group for PEFC Electrolytes

S03-P-015
Tim Peckham (Canada)
Main Chain, Statistically Sulfonated Proton Exchange Membranes: The Relationships of Acid Concentration and Proton Mobility to Water Content and Their Effect Upon Proton Conductivity

S03-P-016
Koichi Suehiro (Japan), Yasuhiro Awakura, Susumu Imashuku, Tetsuya Uda
Hydration and protonic conduction properties of solid solutions of cubic perovskite forming between La0.6Ba0.4ScO2.8 and BaZrO3

S03-P-017
Gang Eric Ye (Canada)
Studies of Proton Conductors Based on Nafion and Sulfonated Polyether Ether Ketones (S-PEEK) Using High-resolution Solid State NMR

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1A Monday 14:00-15:00

S04-P-001
Shinichiro Arima (Japan), Yukihiro Sakamoto, Matsufumi Takaya
Preparing Carbon Nanotubes on a Substrate Surface by Ohmic Heating in Alcohl Solution System

S04-P-002
Fethi Bedioui (France), Sophie Griveau, Cyrille Richard, Francisco Silva, José Zagal
Glassy carbon electrodes modified with single walled carbon nanotubes and metallophthalocyanines: highly stable new hybrids with enhanced electron transfer rates

S04-P-003
Andreas Bund (Germany), Henry White
Ion Current Rectification at Conical Glass Nanopores

S04-P-004
Lourdes I. Cabrera (Spain), Silvia Gutierrez, Pilar Herrasti, Nieves Menendez, Puerto Morales, Jesus Tornero
Electrochemical Synthesis of Magnetite Nanoparticles

S04-P-005
Ernesto Calvo (Argentina), Cecilia Bonazzola, Alex Fainstein, Alejandra Ricci, Nicolas Tognalli, Federico Williams
Electron Transfer at Au-S and Au-C Tethered OsII(bpy)2PyCl+

S04-P-006
Ernesto Calvo (Argentina), Edgar Volker, Federico Williams
Layer-by-Layer Self-Assembled Redox Polyelectrolytes on passive Steel

S04-P-007
Monica Cerro-Lopez (Mexico), Martha Audiffred-Mayoral, Carlos Martinez-Huitle, Marco Antonio Quiroz, Jesús Sampedro-juarez
Synthesis and Characterization of Nanostructured Materials with Electrocatalytic Properties

S04-P-008
Taek Dong Chung (Korea), Ji-Hyung Han
Apparent Electrocatalysis on Nanoporous Surfaces

S04-P-009
Rajshekar Das Gupta (United Kingdom)
Carbon Nanotube based Anode for Lithium Ion Batteries

S04-P-010
Shigehito Deki (Japan), Minoru Mizuhata, Akiyoshi Nakata
Novel Fabrication Method for Nanoparticles in Polymer Solution by the Liquid Phase Deposition Method

S04-P-011
Meikun Fan (Canada), Alexandre Brolo, Amanda Finn, David Harrington, Manuel Marechal
Characterizing a Biofuel Cell Anode by Surface-Enhanced Raman Scattering (SERS)

S04-P-012
Sunyoung Ham (Korea), Yunhee Hwang, Noseung Myung, Ki-jung Paeng
Photoelectrochemical synthesis of CdTe nanoparticles using Poly(vinyl pyrrolidone) (PVP)

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1B Monday 18:00-19:00

S04-P-013
Philippe Hapiot (France), Frédéric Barrière, Alison J. Downard, Marie Pellissier, Dodzi Zigah
Scanning Electrochemical Microscope Imaging of Micro-Patterned Organic Films Arrays on Carbon Surfaces

S04-P-014
Akari Hayashi (Japan), Ken'ichi Kimijima, Hideo Notsu, Ichizo Yagi
Oxygen Reduction Reactivity of Pt/Mesoporous Carbon Catalyst

S04-P-015
Robert Hillman (United Kingdom), Rosa Bessada, Andrea Carneiro, Joana Fonseca, Cristina Freire, Joao Tedim
Synergistic effects in composite films of poly[M(salen)] and carbon single walled nanotubes

S04-P-016
Trissa Kantzas (Canada), Narayana Appathurai, Astrid Jurgensen, Oleg Semenikhin, Tsun-Kong Sham
Improving Photovoltaic Properties of Polybithiophene Photoelectrodes Using Post-Polymerization Treatment

S04-P-017
Chang Hwan Kim (Korea), Woonsup Shin
Effects of Tip Voltage, Deflection Setpoint, Tip Velocityin Scanning Probe Microscope InducedLocal Anodization on Si surface

S04-P-018
Izumi Kubo (Japan), Erika Ohashi, Reina Shiraishi
Selective Oxidation of Serotonin with an Alkanethiol-Modified Electrode

S04-P-019
Josua Lehr (New Zealand), Alison Downard, David Garrett
Microcontact Printing of Carbon Surfaces via Reaction with Diazonium Salts

S04-P-020
Ezequiel Leiva (Argentina), Wolfgang Lorenz, Carlo Mayer, Oscar Oviedo, Georgi Staikov
Electrochemistry of Low Dimensional Metallic Nanostructures. Monte Carlo Simulations and Phenomenological Approach

S04-P-021
Chun-An Ma (China)
Studies on the directly electrochemical synthesis of metal alkoxide

S04-P-022
Hiroshi Matsubara (Japan), Kazunori Hodouchi, Yasunobu Inoue, Ryu Nakajima, Hiroshi Nishiyama, Nobuo Saito
Effect of Citrate on the Codeposition of Nanodiamond Particles and Nickel in Plated Films

S04-P-023
Mir Fazlollah Mousavi (Iran (Islamic Republic of)), A. Alizadeh, S.Z. Bathaie, S.H. Kazemi, Ali Mehdinia, M. Shamsipur
Electrochemical studies of DNA immobilization on the self-assembled monolayers and its interaction with anticancer agent Taxol

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1A Monday 14:00-15:00

S05-P-001
Elsa Miriam Arce Estrada (Mexico), Hector Dorantes Rosales, Araceli Ezeta Mejia, Rosa Guadalupe Gonzalez Huerta, Miguel Hesiquio, Omar Solorza Feria
Ru-se and Ru-Mo electrocatalysts produced by mechanical alloying for oxygen reduction reaction

S05-P-002
Renata Bilewicz (Poland), Krzysztof Biesiada, Ewa Nazaruk, Andrzej Olszyna, Jerzy Rogalski, Krzysztof Stolarczyk
Mediatorless Reduction of Oxygen Catalyzed by Laccase on Different Carbon Materials

S05-P-003
Karel Bouzek (Czech Republic), Henry Bergmann, Tatiana Jurcuk, Roman Kodym
Kinetic studies at the BDD anodes for the water disinfection

S05-P-004
Karel Bouzek (Czech Republic), Tomas Bystron
On the kinetics and selectivity of the 4 Methylanisole methoxylation on glassy carbon electrode

S05-P-005
Karel Bouzek (Czech Republic), Henry Bergman, Roman Kodym
DPD method for disinfection electrolysis?

S05-P-006
Shen-Ming Chen (Taiwan), Kuo-Chiang Lin, Yogeswaran Umasankar
The electrocatalytic properties of electrodes functionalized with PNR films and f-MWCNTs incorporated PNR composite films

S05-P-007
Caroline R. Cloutier (Canada), David P. Wilkinson
Electrochemical Reforming of Methanol

S05-P-008
Abhishek Deshpande (United Kingdom), Adrian Fisher, Sinead Mattews, Nigel Slater, Kamran Yunus
Development Of Microelectrochemical Biosensors For Application In Biocatalysis

S05-P-009
Fangxia Feng (Canada), Sherman Kung, Viola Birss
Mesoporous NiO-YSZ for Use in Solid Oxide Fuel Cells

S05-P-010
Rossy Feria (Mexico), Guadalupe García, Teresita Oropeza, Gabriel Solana
Effect of Surfactants in Phenanthrene Removal from Soil Using RVC-TiO2 Anodes

S05-P-011
Serguey Grigoriev (Russian Federation), Vladimir Fateev, Pierre Millet
Carrier-supported electrocatalysts for PEM water electrolysis applications

S05-P-012
John Gustavsson (Sweden), Ann Cornell, Linda Nylén
Potential alternatives to chromate in the chlorate process

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1B Monday 18:00-19:00

S05-P-013
Gert Göransson (Sweden), Elisabet Ahlberg, Jacub Jirkovsky, Petr Krtil
Oxidation of Allyl Alcohol on Nanostructured Nickel electrodes

S05-P-014
Ricardo Hernández (Venezuela), Yris Martínez, Carlos Rojas
Metal-Porphyrin interactions with small molecules and its electrocatalytic activity towards CO2 reduction

S05-P-015
Figen Kadirgan (Turkey), Figen Kadirgan, Sibel Ozenler, Nurten Sayar
Vulcan XC-72 supported nanosized cobalt particles for oxygen reduction in PEM fuel cells

S05-P-016
Mitsunobu Kikuchi (Japan), Yoshiharu Mukouyama, Hiroshi Okamoto
Chloride Ion Influencing Potential Oscillation Generated by Formaldehyde Oxidation

S05-P-017
Ahyeon Koh (Korea), Sun-Joo Hwang, Junghyun Lee, Woonsup Shin, Jieun Song
Simple nM Detection of Ferrocenemethanol by Chemical Amplification

S05-P-018
Pawel Kulesza (Poland), Beata Baranowska, Malgorzata Chojak, Hanna Elzanowska, Katarzyna Karnicka, Aneta Kolary-Zurowska, Barbara Kowalewska, Adam Lewera, Krzysztof Miecznikowski, Magdalena Skunik
Multifunctional Electrocatalytic and Bio-Electrocatalytic Systems for Oxygen Reduction.

S05-P-019
Sherman Kung (Canada), Viola Birss, Peter Keech
Aqueous Electrochemical Performance Evaluation of Ni-based SOFC Anode Materials

S05-P-020
Gyozo G. Lang (Hungary)
In Situ Monitoring of the Electrochemical Degradation of Poly(3,4-Ethylenedioxythiophene) on Gold using the Bending Beam Method

S05-P-021
Ezequiel Pedro Leiva (Argentina), Marcelo Mariscal, Cecilia Vazquez
Monte Carlo simulations of the adsorption of ionic species at the catalist/gas interface

S05-P-022
Guohua Li (China), Chun-An Ma
Preparation and electrochemical property of WC/TiO2 composite microsphere

S05-P-023
Yi Liu (USA), Hideki Abe, Héctor Abruña, Daniel Blasini, Francis Disalvo
In-situ Grazing Incidence X-ray Characterization of Intermetallic Anode Materials for Fuel Cell Applications

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 1A Monday 14:00-15:00

S06-P-001
Stéphane Arbault (France), Christian Amatore, Yong Chen, Cécile Crozatier, Issa Tapsoba
Electrochemical Detection of Oxidative Stress on Macrophage Cells in a Microfluidic Device

S06-P-002
Ronnee Andrews (USA), William Heineman, Carl Seliskar
Development of a spectroelectrochemical sensor for 8-hydroxypyrene-1,3,6-trisulfonic acid (HPTS)

S06-P-003
Hiroshi Aoki (Japan), Hiroaki Tao
Label- and Marker-Free DNA Detection: Development of A Self-Reporting PNA Probe

S06-P-004
Jonggyu Baek (Korea), Jin-San Kim, Ki-Jung Paeng, Insook Rhee
The potentiometric performances of membrane electrodes based on tetracycline antibiotics

S06-P-005
Renata Bilewicz (Poland)
Electrodes Modified by Lipid Cubic Phases for the Construction of Biofuel Cells

S06-P-006
Soledad Bollo (Chile), Gustavo A. Rivas
SECM characterization of self assembled multilayers of gold nanoparticles, polyethilenimine and DNA. Kinetic evaluation of ferrocene methanol oxidation

S06-P-007
Soledad Bollo (Chile), Nancy Ferreyra, Silvia Miscoria, Gustavo Rivas
SECM study of the effect of dispersing agents in the preparation of carbon nanotubes modified glassy carbon electrodes

S06-P-008
Hsien-Chang Chang (Taiwan), Chia-Chin Chang, Li-Chia Chen
Electrochemical behavior of histidine at anodic oxidized boron-doped diamond electrode

S06-P-009
M.M Davila (Mexico)
Analysis of Tea Catechins by DPV and HPLC Using a Carbon Composite Electrode

S06-P-010
Hanna Elzanowska (Poland), Viola Birss, Andrzej Czerwinski, Lo Gorton, Katarzyna Klimek, Włodzimierz Kutner
A Role of Mediators of Oxygen Electroreduction at Laccase (C60 - Pd) Film Coated Electrode

S06-P-011
Hanna Elzanowska (Poland), Viola Birss, Andrzej Czerwinski, Lo Gorton, Katarzyna Klimek, Włodzimierz Kutner
A Role of Mediators of Oxygen Electroreduction at the Laccase/(C60 - Pd) Film Coated Electrode

S06-P-012
Ma. Guadalupe García-Jiménez (Mexico), Luis De León-Rodríguez
Intracellular electrochemical sensing of a ferrocenyl-HIV-tat peptide in gold electrodes

S06-P-013
Grégoire Herzog (Ireland), Damien Arrigan, Myriam Lefoix, Brian McMahon, Humphrey Moynihan
Dopamine detection at the polarised liquid liquid interface using an oxacalixarene ionophore

S06-P-014
Akira Kotani (Japan), Hideki Hakamata, Fumiyo Kusu
Voltammetric Detection of Cholesterol Using Boron-Doped Diamond Electrode

S06-P-015
Fred Lisdat (Germany), Thomas Balkenhohl, Jan Kafka
Impedance spectroscopy for the detection of antibodies and nucleic acids

Symposium 6: Electroanalysis and Electrochemical Sensors

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 1B Monday 18:00-19:00

S06-P-016
Fred Lisdat (Germany), Thomas Balkenhohl
Development of a disposable immunosensor for the detection of anti-transglutaminase antibodies involved in celiac disease

S06-P-017
Manki Sarah Maoela (South Africa), Priscilla Baker, Emmanuel Iwuoha
Development of a Superoxide Dismutase Biosensor for the Amperometric detection of Antioxidants

S06-P-018
Radovan Metelka (Czech Republic), Jan Krejci, Matej Stoces, Karel Vytras
Electroanalysis with Powdered Bismuth-Modified Screen Printed Carbon Electrodes

S06-P-019
Zekra Mousavi (Finland), Johan Bobacka, Ari Ivaska
Electrochemical Characterization of Poly(3,4-ethylenedioxythiophene) doped with Sulfonated Thiophenes

S06-P-020
Katsuhiko Nishiyama (Japan), Toshihiko Sakurai, Kengo Shimamura, Isao Taniguchi
Effect of Secondary Structure and Lingands on Electrochemical Responses at Oligopeptide-modified Au(111) Electrode

S06-P-021
Bozidar Ogorevc (Slovenia)
Bismuth-Polymer Composite Film Electrodes for Environmental Stripping Analysis

S06-P-022
Soraya Osegueda (Mexico), Luis De León, Guadalupe García, Kazimierz Wrobel
Analysis of urinary 8-hidroxy-2'-deoxyguanosine with Cloud Point extraction by high-performance liquid chromatography–electrochemical detection

S06-P-023
Saul Pazos-Knoop (Canada), Walter Merida, David Wilkinson
Diagnostic Cell for Detection of Abnormal Reactant Flow in a PEMFC Stack

S06-P-024
Eva Samcova (Czech Republic), Vlastimil Jurka, Petr Tuma
Electrophoretic separation of inorganic ions in a polydimethylsiloxane microchip with contactless conductivity detection

S06-P-025
Nelson Ramos Stradiotto (Brazil)
Simultaneous determination of neutral nitrogen compounds in gasoline and diesel by differential pulse voltammetry

S06-P-026
Vitali Syritski (Estonia), Robert Gyurcsányi, Gyula Jágerszki, Anna Menaker, Jekaterina Reut, Andres Öpik
Synthesis and characterization of conducting polymer/magnetite nanorods

S06-P-027
Kouji Takahashi (Japan), Fumiyo Kusu
Real-Time Measurement of Ferroin Concentration at an ITO and a Carbon Electrodes Surface by SOWG Spectroscopy

S06-P-028
Federico Tasca (Sweden)
Development of a CNT Paste Electrode Os2+/3+ Polymer-Mediated Biosensor for Determination of Glucose in Alcoholic Beverages

S06-P-029
Olivier Vittori (France)
Bismuth film on glassy carbon electrode for the analysis of azoic dyesused in food and textile

S06-P-030
Lucie Viry (France), Alain Derré, Patrick Garrigue, Alexander Kuhn, Philippe Poulin, Neso Sojic
Carbon nanotube fiber microelectrodes as potential analytical tools

S06-P-031
Gunther Wittstock (Germany), Malte Burchardt, Stephanie Malek, Carolina Nunes Kirchner, Markus Träuble
New approach for extracting kinetic parameters for SECM approach curves in the feedback mode

S06-P-032
Ching-Chou Wu (Taiwan), Hsiang-Ning Luk, Yen-Ting Tsai Lin, Chia-Yin Yung
Fabrication of Clark-Based Cell Chip for Estimating Metabolic Activity of Mammalian Cells

S06-P-033
Haesik Yang (Korea), Jagotamoy Das
Electrochemical Immunosensor Using p-Aminophenol Redox Cycling by Hydrazine Combined with a Low Background Current

S06-P-034
Maria Valnice Boldrin Zanoni (Brazil), Magno Aparecido GonÇalves Trindade
Determination of dyes used the marker fuels by square-wave voltammetry

S06-P-035
Maria Valnice Boldrin Zanoni (Brazil), Marcio F. Bergamini, Ana Maria O. Brett, Daniela Pereira Santos
Voltammetric sensor for amoxicillin determination in human urine using films of poly glutamic acid

S06-P-036
Levent Özcan (Turkey), Yücel Sahin
Preparation of Molecularly Imprinted Polypyrrole Modified Electrode andIts Application for Determination of Ascorbic Acid

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1C Tuesday 14:00-15:00

S07-P-001
Mohammad Alsabet (Canada), Michal Grden, Gregory Jerkiewicz
Comprehensive Study of the Growth of Monolayer Oxides on Pt Electrodes in Aqueous H2SO4 at Well-Defined Potential, Time and Temperature Conditions

S07-P-002
Tatiana Arzhanova (Russian Federation), Aleksey Golikov
The Influence of the Nucleation Mechanism on the Heterogeneity of the Electrodeposited Copper Structures on Glassy Carbon

S07-P-003
Eric Atamanik (Canada), Venkataraman Thangadurai
Dielectric Properties of Mixed Perovskites Containing Niobium

S07-P-004
Mohammed Bazzaoui (Portugal), El Arbi Bazzaoui, José Inácio Martins, Laura Martins
Comparative Study of Polypyrrole Films Electrosynthesized on Zinc from Acetonitrile and Aqueous Electrolytic Solutions

S07-P-005
Mohammed Bazzaoui (Portugal), El Arbi Bazzaoui, José Inácio Martins, Laura Martins
Electrochemical Behaviour of Conducting Polymers Coated Stainless Steel Plates in H2SO4 Medium

S07-P-006
Mohammed Bazzaoui (Portugal), El Arbi Bazzaoui, José Inácio Martins, Laura Martins
Corrosion Protection of Oxidizable Metals by Polypyrrole Electrodeposited from Sodium Saccharinate Aqueous Medium

S07-P-007
Fethi Bedioui (France), Caro Claudia, Ochoa Gonzalo, Appleby John, Zagal Jose, Gulppi Miguel, Griveau Sophie, Nyokong Tebello
Tuning the redox properties of metalloporphyrin and metallophthalocyanine based molecular electrodes for the highest electrocatalytic activity for the oxidation of thiols

S07-P-008
Jean-Pierre Caire (France), Sarah Cordier, Francis Dalard, Philippe Lavie
A new numerical model for forecasting of the Vehicle Corrosion

S07-P-009
Aicheng Chen (Canada), Brad Miller
Electrochemical Oscillations during Anodic Oxidation of Sulfide

S07-P-010
Lioudmila Doubova (Italy), Sergio Daolio, Alessandro Fornili, Sandra Rondinini
Comparison of the Insulation Properties of Self Assembling Monolayers on Ag and Au Single Crystal Substrates

S07-P-011
Banham Dustin (Canada), Viola Birss, Jeff Soderberg
The Effect of Physical and Morphological Properties of Porous Electrodes on the Efficiency of Electrochemical Catalysis

S07-P-012
Hossein Farsi (Iran (Islamic Republic of)), Michael Eikerling, Fereydoon Gobal
Model of Impedance Response of Faradaic Pseudocapacitors with Hierarchical Pore Structure

S07-P-013
Luiz Henrique Da Silva Gasparotto (Brazil), Sonia Regina Biaggio, Nerilso Bocchi, Romeu Cardozo Rocha-Filho
Water influence on the electrochemistry of the Au(111)/1-butyl-3-methylimidazolium tetrafluoroborate system

S07-P-014
Ernesto Rafael Gonzalez (Brazil), Flavio Colmati, Juan M. Feliu, Enrique Herrero, Germano Tremiliosi-Filho
Effect of sulfate adsorption on ethanol electro-oxidation on stepped Pt single crystals

S07-P-015
Ting He (USA)
An Electrochemical STM Study of Platinum Films

S07-P-016
Magdalena Hromadova (Czech Republic), Petra Morkovska, Lubomir Pospisil
Current Oscillations in the Reduction of Bifenox Anion Radical.

S07-P-017
Eneli Härk (Estonia), Enn Lust
Impedance study of cathodic hydrogen evolution reaction at Bi(001) electrode from the aqueous solutions

S07-P-018
Takashi Kakiuchi (Japan), Ryoichi Ishimatsu, Naoya Nishi
Electrical double layers at polarized interface between hydrophobic ionic liquid and water

S07-P-019
Ludwig Kibler (Germany), Luyang Han, Dieter Kolb, Peter Schäfer, Ulf Wiedwald, Paul Ziemann
Electrocatalysis of Pd/Au surfaces

S07-P-020
Silvio Koehler (Germany), Ursula Rammelt, Georg Reinhard
EIS characterization of the inhibition of mild steel corrosion with carboxylates in neutral aqueous solutions

S07-P-021
Chirakkal Krishnan (USA), Benjamin Chu, Merrill Garnett
Spatiotemporal Oscillations in Biological Molecules: 5. Histidine-Molybdate Interactions

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1A Monday 14:00-15:00

S08-P-001
Abdolhamid Alizadeh (Iran (Islamic Republic of)), Mahdi Hesari, Tayyebeh Kanjouri, Mohammad M. Khodaei, Narges Pakravan
Electrochemically Induced Reaction of Catechols with Thiols: Green and Eco-Friendly Entry to Novel Tetrazolic Catechol Thioethers

S08-P-002
Shaimaa Mohammad Awadh (Kuwait), F. M. Al Kharafi, Badr Ateya, Shaimaa Awadh
Effect of potential on the dezincification of alfa brass

S08-P-003
Alexandra Banu (Romania), Stefana Jurcoane, Maria Marcu, Octavian Radovici
Immobilization Efficiency of an Acetylhidrolaze in Polipyrrole Films

S08-P-004
Janet Baron (Canada), Anna Frydrychewicz, Jacek Lipkowski
Electrochemical study of the thiosulfate-gold interface under leaching conditions

S08-P-005
Fethi Bedioui (France), Charlotte Dumézy, Philippe Goldner, Sophie Griveau
Decomposition of NO donors (diazeniumdiolates) in phosphate buffer solution: electrochemical and UV visible analysis.

S08-P-006
Jana Bulickova (Czech Republic), Jaroslav Cihelka, Svatopluk Civis, Miroslav Gal, Magdalena Hromadova, Lubomir Pospisil, Jan Tarabek
Nitrogen Fixation by Reduced Fullerene in the Cavity of Gamma-Cyclodextrin

S08-P-007
Marco Cartaxo (Portugal), Youssef Berghoute, Jamaâ Douch, Mohamed Hamdani, Maria Mendonça, José Nogueira, Maria Pereira
Studies on the electrooxidation of phenol on spinel oxide electrodes

S08-P-008
Jingyuan Chen (Japan)
Characteristic of electrically conducting of polyaniline-coated latex particles

S08-P-009
Shinn-Jyh Ding (Taiwan), Po-Jen Chien
Electrochemical Behavior of Heat-Treated Hydroxyapatite/Titanium Composite Coatings

S08-P-010
Paula Drob (Romania), Steliana Ivanescu, Mihai Popa, Doina Raducanu, Ecaterina Vasilescu, Cora Vasilescu
Long-term Monitoring of the Corrosion Behavior of Some Biocompatible Alloys

S08-P-011
Silviu Drob (Romania), Paula Drob, Julia Claudia Mirza Rosca, Ecaterina Vasilescu, Cora Vasilescu
Modeling of Corrosion Processes at Metal/Protective Coating Interface

S08-P-012
Hassan Elsentriecy (Japan), Kazuhisa Azumi, Hidetaka Konno
Stannate chemical conversion coating on Mg alloy using potentiostatic polarization method

S08-P-013
Miroslav Gal (Czech Republic), Jana Bulickova, Magdalena Hromadova
Redox Reactions of the Selected Cyclooxygenase-2 Inhibitors in Supramolecular Nanocavities

R.A. Hillman (UK), Mohamoud Mohamoud, Andrew Glidle, Thomas Gutberlet
Use of in situ neutron reflectivity-derived solvent profiles in polyaniline films to interpret viscoelastic phenomena

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1B Monday 18:00-19:00

S08-P-014
Annett Gebert (Germany), Oliver Gutfleisch, Mihaela Rada, Ludwig Schultz, Margitta Uhlemann
Effect of texture and magnetization on the corrosion behavior of high performance NdFeB permanent magnets

S08-P-015
Gregory Jerkiewicz (Canada), Michal Grden
Materials Science and Electrochemical Characterization of Microstructured Nickel Foam

S08-P-016
Tatsuki Kawano (Japan), Matsufumi Takaya, Hiroshi Tamehiro
Effect of Impregnation of Iodine Complex on Friction of Anodic Oxide of Magnesium

S08-P-017
Minsoo Kim (Korea), Tak Kang, Seong-Jae Mun, Tae Hong Yim
Anodic behavior of electrodeposited NiCu alloy in acidic buffer solution

S08-P-018
Shin-Ya Kishioka (Japan)
Electrochemical property of metal film electrodes prepared by template-stripped methods

S08-P-019
Emese Kriván (Hungary), Csaba Visy
Some Interesting Consequences of Protonation/Deprotonation of Polypyrrole Films

S08-P-020
Josef Krysa (Czech Republic), Jan M. Macak, Patrik Schmuki, Martin Zlamal
Application of self-organized titanium dioxide nanotubes in photocatalysis

S08-P-021
Wan-Jin Lee (Korea), Hong-Ryun Jung, Mi-Young Kim
Synthesis and electrochemical properties of Sn/PEDOT anode materials for lithium battery

S08-P-022
Joo Yul Lee (Korea), Man Kim, Sik-Chol Kwon
Investigation on the Relationship between Compositional Transition of Bath and Deposit's Surface Properties during Decorative Trivalent Chromium Electrodeposition

S08-P-023
Joo Yul Lee (Korea), Man Kim, Sik-Chol Kwon, Viet Hue Nguyen
Surface Characterization of the Electrochemically Prepared Chromium-Nano diamond Composite Layers

S08-P-024
Zelin Li (China), Yanping Deng, Bin Peng, Jina Wu, Jufang Zheng
New Oscillators in the Electrooxidation of Metals

Symposium 9: Surfactant and Additive Effects on Thin Film Deposition and Particle Growth

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 1A Monday 14:00-15:00

S09-P-001
Thomas Doneux (United Kingdom), Claudine Buess-Herman, Richard Nichols
Dissolution Kinetics of Alkanethiolate Monolayers Electroadsorbed on Au(111)

S09-P-002
Massimo Innocenti (Italy), Maria Luisa Foresti, Elisa Lastraioli, Emanuele Salvietti
In-situ STM and electrochemical Investigation of Sulfur on low index faces of Silver

S09-P-003
Hyo-Chol Koo (Korea), Seo-Young Kim
Various surface pretreatment for Ag electroless plating on TiN

S09-P-004
Yunny Meas (Mexico), Eric Chainet, Thomas Chapman, Raul Ortega, Jose Luis Ortiz-Aparicio, Patrick Ozil, Gabriel Trejo
Development of a Zn-Iron-Group Alloy Baths based on an Alkaline Gluconate Electrolyte. Effect of Quaternary Ammonium Compounds

S09-P-005
Derck Schlettwein (Germany), Thomas Loewenstein, Bruno K. Meyer, Christian Neumann, Joachim Sann
Electrodeposition of Nanostructured ZnO Thin Films: Influence of Structure-Directing Molecular Adsorbates on the Lattice Constant of Wurtzite ZnO

S09-P-006
Klaus Wandelt (Germany), Peter Broekmann, Helmut Dosch, Hubert Zajonz
Halid interaction with copper single crystal electrodes: Surface X-ray scattering measurements

S09-P-007
Klaus Wandelt (Germany), Stefan Breuer, Peter Broekmann, Helmut Dosch, Knut Gentz, Nguyen Thi Minh Hai, Sascha Huemann, Ralf Hunger, Pham Duc Thanh, Hubert Zajonz, Caroline Zörlein
Phase transitions in selfassembled viologen-monolayers

SESSION 2

Open times for viewing: **Tuesday 18:00-23:00**
Wednesday 10:00-13:00
Thursday 10:00-23:00

Chair: A. Chen, D. Bélanger

Symposium 1: Bioelectrochemistry

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 2A Tuesday 18:00-19:00

S01-P-001
Stéphane Arbault (France), Christian Amatore, Manon Guille, Frédéric Lemaitre, Yann Verchier
New Insights Into Microelectrode Detection of Catecholamines Release by a Chromaffin Cell

S01-P-002
Stéphane Arbault (France), Christian Amatore, Manon Guille, Frédéric Lemaitre, Yann Verchier
Study by Microelectrodes of the Dynamics of Vesicular Exocytotic Events on Chromaffin Cells : Influence of Membrane Composition.

S01-P-003
Stéphane Arbault (France), Christian Amatore, Danielle Ferreira, Marilia Goulart, Issa Tapsoba
Comparative Electrochemical Studies of [alpha]- and [beta]-Lapachones Effects on the Oxidative Stress of Single Macrophage Cells

S01-P-004
Ernesto Calvo (Argentina), Alex Fainstein, Victoria Flexer, Maria Veronica Ielmini, Pablo Scodeller, Nicolas Tognalli, Horacio Troiani
Layer-by-layer Self Assembled Multilayers of Glucose Oxidase and Osmium Polyelectrolyte on Gold Nano-particles: A Nanosensor Responsive to Glucose

S01-P-005
Shen-Ming Chen (Taiwan), S. Ashok Kumar, Chia-Ching Tseng
Direct electrochemistry and electrocatalysis of hemoglobin and myoglobin on DDAB film and myoglobin on arylhydroxylamine film modified electrodes: A comparative study

S01-P-006
Vasile Coman (Sweden), Lo Gorton, Tobias Gustavsson, Cecilia Hägerhäll
Electrical Wiring of Living Bacillus subtilis Cells Using Flexible Osmium-Redox Polymers

S01-P-007
Tesfaye Hailu Degefa (Korea), Juhyoun Kwak
Protein Sensors Based On Aptamer

S01-P-008
Güray Güven (Germany), Carmen Momeu, Jovana Nazor, Radivoje Prodanovic, Ulrich Schwaneberg, Ziwei Ziwei Zhu
Engineering of Redox Proteins for Electrochemical Applications

S01-P-009
Karolina Haberska (Sweden)
Electrochemical and in Situ Ellipsometric Characterisation of a Self-assembled Polyelectrolyte Films.

S01-P-010
Frantisek Jelen (Czech Republic), Alena Kourilova, Libuse Trnkova, Vladimir Vetterl
Analysis of Oligonucleotides and Nucleic Acid Bases by Adsorptive Stripping Technique in Combination with Elimination Voltammetry

S01-P-011
Chirakkal Krishnan (USA), Merrill Garnett, Bill Jones
RNA Interactions and Electronic Oscillation

S01-P-012
Seong Jung Kwon (Korea), Juhyoun Kwak, Haesik Yang
Electrochemical Biosensor Using Enzymatically Polymerized Conducting Polymer

S01-P-013
Lars Laurentius (Canada), Rongbing Du, Mark McDermott, Andrew Smith
Electrochemically Deposited Aryl Layers for Biomolecule Immobilization in Sensing Applications

S01-P-014
Jie Li (Canada), Jacek Lipkowski, Grzegorz Szymanski
Development of a novel SEIRAS Setup for studying a single living cell

S01-P-015
Fred Lisdat (Germany), Oliver Pänke
Voltammetric Detection of Single Base Pair Mismatches within Labeled and Non-labeled DNA Duplexes

S01-P-016
Fred Lisdat (Germany), Roman Dronov, Dirk Kurth, Frieder Scheller
Direct electron transfer of bilirubin oxidase and reaction with cytochrome c at modified gold

S01-P-017
Fred Lisdat (Germany), Jan Kafka
Impedimetric detection of unlabeled ss-DNA on gold chip electrodes

S01-P-018
Luis Nuñez-Vergara (Chile)
Electrochemical Characterization of some new chromeno[3,4-c]pyridines in aprotic medium

Symposium 1: Bioelectrochemistry

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 2C Thursday 18:00-19:00

S01-P-019
Jun Hui Park (Korea), Juhyoun Kwak, Hwang Seongpil
Optical and Electrochemical Detection of Glucose by Biocatalytic Formation of Prussian Blue.

S01-P-020
Lars Rose (Canada), Toby Jenkins
Solid Supported Biomimetic DPPTE/EPC Membranes Under The Effect Of The Ionophore Valinomycin And UV Radiation

S01-P-021
Abdollah Salimi (Iran (Islamic Republic of))
Immobilization of hemoglobin on cobalt oxide nanoparticles: Direct voltammetry and electrocatalytic activity

S01-P-022
Yoon-Bo Shim (Korea)
In vivo nitric oxide detection with cytochrome c modified conducting polymer microelectrode

S01-P-023
Juan Squella (Chile)
Voltammetric behaviour of a 4-Nitroimidazole derivative: reduction of 1-methyl-4-nitro-2-carboxyimidazole in aprotic medium.

S01-P-024
Marc Steichen (Belgium), Claudine Buess-Herman
Electrochemical DNA hybridization detection using the [Ru(NH3)6]3+/DNA interactions on PNA modified gold electrodes by ac voltammetry

S01-P-025
Ulrich Stimming (Germany)
Catalytic activity of Horseradish Peroxidase directly adsorbed on different electrode surfaces

S01-P-026
Libuse Trnkova (Czech Republic), Frantisek Jelen, Radka Mikelova
Double Elimination of Short Oligonucleotides

Libuse Trnkova (Czech Republic), Lenka Zerzankova, Filip Dycka, Frantisek Jelen
Analysis of Some Purine Derivatives at Modified Carbon Electrodes in the Presence of Copper Ions

S01-P-027
Jan Vacek (Czech Republic), Katerina Cahova, Miroslav Fojta, Hana Pivonkova
Electrochemical analysis of DNA damage by chromium species

S01-P-028
Vladimir Vetterl (Czech Republic), Sonja Bartakova, Lukas Fojt, Ludek Strasak, Jiri Vanek
Adsorption of human blood plasma fibrinogen on titanium implants

S01-P-029
Jarmila Vytrasova (Czech Republic), I. Brozkova, L. Cervenka, M. Hrubes, M. Pejchalova, I. Peskova
Amperometric Detection of Salmonella Enteritidis

S01-P-030
Yan Wang (China), Lo Gorton, Dietmar Haltrich, Roland Ludwig, Sergey Shleev
Direct Electrochemistry of Laccase from Bacterial Origin on Various Electrodes

S01-P-031
Elicia Wong (United Kingdom), Terry Chilcott, Hans Coster, Justin Gooding, Michael James
Electrochemical Applications of DNA Biosensors

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 2B Thursday 14:00-15:00

S02-P-044
Dzmitry Malevich (Canada), Ela Halliop, Kunal Karan, Brant Peppley
Electrochemical Impedance Spectroscopy and Cyclic Voltammetry Studies of Proton Exchange Membrane Fuel Cell Operated at Low Humidity Conditions

S02-P-045
Jun Maruyama (Japan), Abe Ikuo
Carbon Surface Oxidation by Short-Term Ozone Treatment for Mimicry of Long-Term Degradation of Fuel Cell Cathodes

S02-P-046
Yuji Matsuo (Japan), Kenji Kikuchi, Taro Kinumoto, Zempachi Ogumi, Yoshiharu Uchimoto
Stability of Partially Immersed Pt/C Electrode

S02-P-047
Junichi Nakamura (Japan), Hideaki Fujiwake, Kenji Kikuchi, Taro Kinumoto, Zempachi Ogumi
Correlation between Hydrogen Peroxide Formation and Surface Functional Groups on Activated Carbon Powders

S02-P-048
Toshiro Nakamura (Japan), Kazuhisa Azumi, Koji Fushimi, Hidetaka Konno
Measurement of pH distribution in PEFC using small glass electrodes.

S02-P-049
Tetsuo Nishida (Japan), Yasuhiro Fukunaka, Takeshi Mori, Kei Nishikawa, J.R. Selman
Interferometry Study of Negative Electrode Materials

S02-P-050
Eugenii Nizhnikovsky (Russian Federation), Valerii Frol´chenkov, Tatiana Kulova, Vladimir Poluboyarinov, Alexander Skundin
Modified Oxide Graphite as a Base for Silicon-carbon Composites

S02-P-051
Yoshio Nosaka (Japan), Masahiro Kitazawa, Atsuko Nosaka
Radical Formation in the Polymer Electrolyte Fuel Cell Components as Studied by ESR Spectroscopy

S02-P-052
Masafumi Nose (Japan), Takeshi Abe, Hyun-Suk Choo, Yasutoshi Iriyama, Taro Kinumoto, Zempachi Ogumi
Electrochemical Stability and Oxidation Mechanism of Highly Oriented Pyrolytic Graphite in Acidic Solution

S02-P-053
Chan-Jin Park (Korea), Park Choong-Nyeon, Yang Dong-Cheol, Choi Jeon, Kim Jong-Hyun
Effects of the Addition of Mn and AB5 Type Alloy on the Electrochemical Characteristics of Ti-Cr-Mn-V BCC Type Alloys

S02-P-054
Soo-Gil Park (Korea), Han-Joo Kim, Hong-Il Kim
Electrochemical Characteristics of TiO2/MWNT Composite Electrode for Supercapacitor

S02-P-055
Dominic Rochefort (Canada), Laure Devigne, Béatrice Garcia, Anne-Laure Pont
Protic ionic liquids as electrolyte for RuO2 and MnO2 pseudocapacitors

S02-P-056
Luisa Rodrigues (Portugal), P. C. Barbosa, E. Fortunato, A. Gonçalves, L. C. Rodrigues, M. Manuela Silva, M. J. Smith, P. Valente
Study and characterization of polyether-poly(methyl methacrylate)-lithium perchlorate blend electrolytes

S02-P-057
Steeve Rousselot (Canada), Daniel Guay, Lionel Roué
Comparative study of MgTi-based metal hydrides prepared by high-energy ball milling and RF magnetron sputtering

S02-P-058
Ville Saarinen (Finland), Olli Himanen, Tanja Kallio, Kyösti Kontturi, Göran Sundholm
A 3D model for the free-breathing direct methanol fuel cell: Methanol crossover aspects and validations with current distribution measurements

S02-P-059
Guenther Scherer (Switzerland)
Micro Polymer Electrolyte Fuel Cells - A novel concept with less particular parts

S02-P-060
Mario Rene Schweiger (Austria), Nikolaus Stefan Hochgatterer, Peter Rudolf Raimann, Michael Oliver Sternad, Martin Winter
Electrolyte Decomposition On Chemically And Electrochemically Formed Li-Intermetallics

S02-P-061
Marie Sedlarikova (Czech Republic), Tibor Jirak, Jana Velicka, Jiri Vondrak
Potentiometric estimation of the ionic mobilities in PMMA gel electrolytes

S02-P-062
Marie Sedlarikova (Czech Republic), Karel Bartusek, Ondrej Krejza, Jana Velicka, Jiri Vondrak
PMMA based gel electrolytes investigated by NMR

S02-P-063
M. Manuela Silva (Portugal), P. Barbosa, V. De Zea Bermudez, S. C. Nunes, D. Ostrovskii, M. J. Smith
Spectroscopic study of sol-gel derived poly(oxyethylene)/siloxane hybrids doped with LiTFSI

Paul Stonehart (USA)
Influence of the Acid Environment for Oxygen Reduction, Applied to Superionic Polymer Structures

Symposium 2: Energy Storage and Energy Conversion Systems

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 2C Thursday 18:00-19:00

S02-P-064
Yuu Sugawara (Japan)
EQCM Study on Dissolution of Ruthenium in Sulfuric Acid

S02-P-065
Shi-Gang Sun (China)
Synthesis and Characterization of a novel composite solid-state polymer electrolyte doping ionic-liquid (PVdF-HFP-LiPF6-BMIMPF6) for rechargeable lithium batteries

S02-P-066
Mikhail Tarasevich (Russian Federation), Vera Bogdanovskaya, Viktor Emez, Alexander Kapustin, Alexander Modestov, Mikhail Tarasevich
Electrocatalytical parameters of commercial platinum catalysts and synthesized PtM systems in model experiments and in MEA

S02-P-067
Thomas Thomberg (Estonia), Alar Jänes, Enn Lust
Microporous carbon derived from vanadium carbide

S02-P-068
Katsuhiro Uno (Japan), Mika Eguchi, Taku Suzuki, Yasuyuki Tsutsumi
Optical measurement for microporous media of catalyst layers in membrane-electrode assemblies

S02-P-069
Marcela Vazquez (Argentina), Mariana Berruet, Albert Goossens, Matías Valdés
Solar cells prepared by electrodeposition of CuInSe2 on various substrates

S02-P-070
Eric Vieil (France)
How paths in a Graph may help to design Electrochemical Systems?

S02-P-071
Marco Villa (Italy), Paolo Nelli, Erwin Verardi, Giovanni Zangari
Electrochemical hydrogen storage in Raney Nichel

S02-P-072
Jiri Vondrak (Czech Republic), Tibor Jirak, Jaromir Makovicka, Marie Sedlarikova
Cathode materials based on LiCoO2 for lithium batteries

S02-P-073
Jiri Vondrak (Czech Republic), Peter Barath, Jiri Kazelle, Marie Sedlarikova, Petr Spicak, Vit Svoboda
Electrochemical ion insertion into oxides studied by QCMB

S02-P-074
Yasuaki Wakizaka (United Kingdom), John Owen
High Throughput Measurements of the Effects of Water on the Cathodic Stability of an Ionic Liquid

S02-P-075
Lianbang Wang (China)
Degradation Mechanism of Sn-based Alloys for Li-ion Batteries

S02-P-076
Lianbang Wang (China)
Rare Earth Hydrogen Storage Alloy Used as Anode Material in Borohydride Fuel Cells

S02-P-077
Edward Wright (United Kingdom)
Analysis of Fuel Cell Limitations using Differential Impedance Analysis

S02-P-078
Y.P. Wu (China), Q. Cao, L.J. Fu, G.J. Wang, B. Wang, H.P. Zhang
Effects of Nano Carbon Coating on Electrochemical Performance of Electrode Materials

S02-P-079
Amar Yadav (Japan)
EQCM Study on Electrodeposition of Pt on Au-QCM and Its Dissolution in Acidic Solutions

S02-P-080
Shigeaki Yamazaki (Japan), Masashi Ishikawa, Yoshiharu Matsuda, Keigo Obata, Yoshiaki Okuhama
Ionic Diffusion Behavior in Activated Carbon/DNA Composite Electrodes for Aqueous EDLC

S02-P-081
Wanqing Yuan (United Kingdom), Hua Cheng
A comparison of methods for fabricating ruthenium-based methanol tolerant cathode catalysts for direct methanol fuel cells

S02-P-082
Thomas Zawodzinski (USA), Christopher Brockman, Hossein Ghassemi, Abhishek Guha, Sean Loughran, Ram Subbaraman
Material Properties of Fuel Cell Electrodes

S02-P-083
Huamin Zhang (China)
Investigation on the Composite Membranes for PEM Fuel Cells

S02-P-084
Alireza Zolfaghari (Iran (Islamic Republic of)), Fariba Hashemi, Kobra Nasiri Avanaki, Parisa Pourhossein, Hossein Z. Jooya
Methane Storage in Single Walled Carbon Nanotubes: A Combined MD – QM Approach

S02-P-085
Alireza Zolfaghari (Iran (Islamic Republic of)), Fatemeh Ataherian, Mehdi Ghaemi
A study on mechanism of charging/discharging at manganese oxide electrode in supercapacitor

S02-P-086
Yanhua Cui (China)
The Influence of Solution Additive on Reserve Zinc-Silver Battery

S02-P-087
Sun Shigang (China), Huang Ling, Fan Xiaoyong
Preparation and Characterization of Cu6Sn5 Anode via Electrodepositon using rough Copper Foil as Current Collector

S02-P-088
Frederic Jaouen (Canada), Jean-Pol Dodelet
Turn-over frequency of O2 electro-reduction for Fe/N/C and Co/N/C catalysts in PEFC

Symposium 4: Electrochemical Nanoscience and Nanotechnology

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 2B Thursday 14:00-15:00

S04-P-024
Renat Nazmutdinov (Russian Federation), Qijin Chi, Ibragim Manyurov, Jens Ulstrup, Jingdong Zhang, Tamara Zinkicheva
Adsorption of cysteine on the Au(110)/electrolyte solution interface: towards a sub-molecular resolution of tunneling contrasts

S04-P-025
Shouhei Noguchi (Japan), Munetaka Oyama
Formation of nickel nanofilms on some conducting materials and their electrochemical properties

S04-P-026
Kevin O'Neil (Canada), Oleg A. Semenikhin
Local Crystallinity and Mechanical Properties of Conducting Polymers

S04-P-027
Torsten Oekermann (Germany), Inga Bannat, Michael Wark, Katrin Wessels
Electrodeposition of gold nanostructures in mesoporous TiO2 sol-gel films

S04-P-028
Salvatore Piazza (Italy), Rosalinda Inguanta, Salvatore Piazza, Carmelo Sunseri
Template Fabrication of Nano-Structures using Anodic Alumina Membranes

S04-P-029
Scott Rosendahl (Canada)
Anomalous pH Dependent Electrochemistry of 4-Mercaptobenzoic Acid Self-Assembled Monolayers on Gold Electrodes

S04-P-030
Shi-Gang Sun (China), Shu-Shan Gong, Xin-Wen Zhou, Zhi-You Zhou
Synthesis, structure characterization and anomalous IR properties of CoPt nanonecklaces

S04-P-031
Abdollah Salimi (Iran (Islamic Republic of))
Electrochemical properties and catalytic activity of cobalt oxide nanoparticles modified glassy carbon electrode; Application to nanomolar detection of H2O2

S04-P-032
Monica Santamaria (Italy), Patrizia Bocchetta, Francesco Di Quarto
Electrodeposition and characterization of 1-D cerium based nanostructures

S04-P-033
Antoine Seyeux (Germany), Julia Kunze, Patrik Schmuki
TiO2 Nanotubes - Formation and growth

S04-P-034
Shi-Gang Sun (China),
Synthesis of star shaped gold nanoparticles in Deep Eutectic Solvents (DES)

S04-P-035
Shi-Gang Sun (China)
An in-situ FTIR Investigation of Adsorbed Sulfate Species on Platinum Nanostructured Film in Sulfate Acid

S04-P-036
Alexander Vaskevich (Israel), Shani Eliyahu, Dan Meisel, Israel Rubinstein, Tali Sehayek
Template Synthesis of Nanoparticle Nanotubes

S04-P-037
Xuemei Wang (China)
High Sensitive Electrochemical Detection of Cancer Cells Based on Gold Nanoparticle Biosensing Interface

S04-P-038
Chompunuch Warakulwit (Thailand), Marie-Hélène Delville, Alexander Kuhn, Jumras Limtrakul
Metal decoration of carbon nanostructures

S04-P-039
Sachio Yoshihara (Japan), Keiko Hanzawa
Post CMP Process; the Application of Double Step Magnetic Abrasive Finishing by Use of Aluminum Oxide Dispersed Iron Abrasives and Nano-sized Diamond Dispersed Co-Ni Electroless Plated Plastic Balls

S04-P-040
Takako Yoshino (Japan)
Enhancement of Electrochromic Properties of Electrochemically Fabricated Mesoporous Cobalt hydroxide Thin Films

S04-P-041
Giovanni Zangari (USA), Hilary Bart-Smith, Matthew Begley, Robert Kelly, Michael Reed, Eric Rouya
Synthesis of Nanoporous Gold Structures via Dealloying of Electrodeposited Au-Ni thin films

S04-P-042
Zhi-You Zhou (China), Shi-Gang Sun, Na Tian, Zhi-You Zhou
Tuning the Shape and Facets of the Fivefold Twinned Palladium Nanorods by Electrochemistry

S04-P-043
Alireza Zolfaghari (Iran (Islamic Republic of)), Zaynab Hariri, Farinaz Roshani, Hani Sayahi, Hossein Zolfaghari Jooya
Thickness Controlled Electrodeposition of Titanium Oxide Thin Film Electrodes

S04-P-044
Alireza Zolfaghari (Iran (Islamic Republic of)), Fatemeh Ataherian, Leila Hedayati, Hani Sayahi, Hossein Z. Jooya
Nanostructured iron oxide for aqueous electrochemical supercapacitor

S04-P-045
Elizabeth Fatima De Souza (Brazil), David Mendez Soares, Omar Teschke, Juracyr Ferraz Valente Filho,
Atomic Force Microscopy Patterns Formed During Surface Scanning

S04-P-046
Mohammad Khanfar (Canada), Sylvie Morin
Electrochemistry of Metal Phthalocyanines Monolayers

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 2A Tuesday 18:00-19:00

S05-P-024
Maria Luisa Lozano-Camargo (Mexico), Laura Galicia, Silvia Gutiérrez Granados, José Sandoval Cortés
Fe(III)-5-Amino 1,10 Phenanthroline complex incorporation to the vitreous carbon -Nafión-Nanotubes

S05-P-025
Chun-An Ma (China)
Electrocatalytic reductive dehalogenation of halogenated phenols in aqueous solutions at Ag electrodes

S05-P-026
Chun-An Ma (China)
Oxidation of Diethylene glycol to Diglycolic acid

S05-P-027
Ana Mani (Canada), Dustin Banham, Hebert Molero
Determination of Active Sites of Co-based Oxygen Reduction Catalysts for PEM fuel cell applications.

S05-P-028
Sanjeev Mukerjee (USA)
Electrochemical and In situ XANES Studies of some Novel Enzyme Mimics for Oxygen Reduction Reaction

S05-P-029
Yoshiharu Mukouyama (Japan), Mitsunobu Kikuchi, Hiroshi Okamoto
Appearance of a New Electrochemical Oscillation during Hydrogen Evolution Reaction

S05-P-030
David Reyter (Canada), Daniel Bélanger, Marek Odziemkowski, David Reyter, Lionel Roué
Electrochemical surface activation of copper electrode. Application to nitrate electroreduction

S05-P-031
David Reyter (Canada), Daniel Bélanger, David Reyter, Lionel Roué
Elaboration of copper/palladium alloys and composites. Application to nitrate electroreduction

S05-P-032
Manuel Andres Rodrigo (Spain), Pablo Cañizares, Carlos Jimenez, Justo Lobato, Fabiola Martinez, Cristina Saez
Electrocoagulation of synthetic wastewaters using aluminum and iron as electrode materials

S05-P-033
Eliane Sutter (France), Mai Tran
Activation of water reduction in the presence of REM salts

S05-P-034
Cristina Saez (Spain), Miriam Arcis, Pablo Cañizares, Manuel Andres Rodrigo
Electrochemical generation of ferrate at boron doped diamond electrodes

S05-P-035
Morihiro Saito (Japan), Jun Kuwano, Hidenobu Shiroishi, Haruhiko Toda
Oxygen Reduction Activities of Ba(Ce,Gd,Ru)O3-[delta] Oxides

Symposium 5: Electrocatalysis, Catalysis, Bioelectrocatalysis: the Common Aspects, the Practical Applications

Location: Sally Borden Building (Lower Level)
Poster Presentation Session 2C Thursday 18:00-19:00

S05-P-036
Elizabeth Santos (Argentina), Wolfgang Schmickler
Unified model for electron transfer in electrocatalysis

S05-P-037
Sun Shi-Gang (China)
Preparation and Properties of Pd-Pb Electrocatalysts for the Selective Electrooxidation Glyoxal into Glyoxylic Acid

S05-P-038
Sun Shi-Gang (China)
Surface Processes of HCOOH oxidation on Pt single crystal electrodes

S05-P-039
Jieun Song (Korea), Misuk Cho, Jong In Lee, Woonsup Shin
Electrochemical Formate Production from CO2 by Clostridium pasteurianum and Paracoccus species (DSMZ 12584): Comparison to Moorella thermoacetica

S05-P-040
Ulrich Stimming (Germany), Petra Bele
Evaluation and Calculation of Chemical Active Areas of Fuel Cell Catalysts

S05-P-041
Norbert Wagner (Germany), Regine Reissner, Carl Albrecht Schiller
Surface Science and Electrochemical Study of Interaction of Nickel and Alkaline Solutions

S05-P-042
Tae-Hyun Yang (Korea), Kim Chang-Soo, Jin-Soo Park, Lee Won-Yong, Yoon Young-Gi
Investigation of Anodic Oxidation of BH4- in the Direct Borohydride Fuel Cell

S05-P-043
Jang-Hee Yoon (Korea), Ju Young Lee, Mi-Sook Won
The Electrochemical Degradation of Phenol and chlorophenol with Ti/Pt and BDD electrodes

S05-P-044
Dae Jong You (Korea), Hyuk Chang, Sang Hoon Joo, Chanho Pak
Preparation of Pt-ATO cathode catalyst for DMFC

S05-P-045
Maria Valnice Boldrin Zanoni (Brazil), Fabiana Maria Monteiro Paschoal
Photoelectrocatalytic Oxidation of Anionic Surfactant and a Leather dye on Ti/TiO2 Thin-Film Electrode

S05-P-046
Piotr Zabinski (Poland), Marcin Gorski, Remigiusz Kowalik
Electrodeposited Co-P Alloys for Hydrogen Evolution

S05-P-047
Jorge Omar Zerbino (Argentina), Verónica Díaz, María Elisa Martins, María Griselda Sustersic, Carlos Fernando Zinola
Catalytic methanol electrooxidation by cathodic polarization of platinum electrodes in aqueous sulphate solutions.

Symposium 7: Surface Electrochemistry: In Honour of Professor Brian E. Conway

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 2A Tuesday 18:00-19:00

S07-P-022
Karmen Lust (Estonia), Mart Väärtnõu
Influence of solvent on adsorption of halide ions at Cd(0001) and Bi(hkl) planes

S07-P-023
Eva Machnikova (USA), Norman Hackerman
Theoretical and Experimental Study of Corrosion Inhibition of Carbon Steel in Acidic Media by Furan Derivatives

S07-P-024
Takeaki Maeda (Japan), Takashi Matsunami, Hirofumi Watanabe, Takashi Yokohata
Influence of Cu+ dissolving component on Stable via-filling plating

S07-P-025
Seong-Jae Mun (Korea), Tak Kang, Minsoo Kim, Tae Hong Yim
Electrodeposition and characterization of Fe-Ni-Mo alloy using membrane cell

S07-P-026
Tomoyuki Nagai (Japan), Daisuke Ihara, Shuji Nakanishi, Yoshihiro Nakato
Vectorial motion of an oil droplet driven by an electrochemical oscillation

S07-P-027
Renat Nazmutdinov (Russian Federation), Michael Bronshtein, Nina Titova, Galina Tsirlina, Pavel Zagrebin
Viscosity Effects in Adiabatic Reactions with the Bond Rupture

S07-P-028
Lakshman Neelakantan (Germany), Gunther Eggeler, Achim Walter Hassel
Electropolishing of NiTi - Insight in its mechanism

S07-P-029
Takashi Ohsaka (Japan), Katsuhiko Hirano, Yukio Matsubara, Tomoji Ohishi
Effect of alcohol addition on electroplating of iridium

S07-P-030
Cristian Pirvu (Romania)
Conducting organic coatings as a treatment of zinc-coated steel surfaces

S07-P-031
Alexandre Ponrouch (Canada), Patrice Simon, Pierre Louis Taberna
Development of ruthenium electrodes with high surface/volume ratio

S07-P-032
Viktor Safonov (Russian Federation), Maria Choba
Oxygen chemisorption on silver electrodes and its effect on the adsorption behavior of adamantanol-1

S07-P-033
Eric Sibert (France), Marian Chatenet, René Faure, Christelle Lebouin, Frédéric Maillard, Yvonne Soldo-Olivier
Underpotential deposition (UPD) of a Cu submonolayer on Pt(111) in presence of chlorides: in situ polarized XAS study

S07-P-034
Wataru Sugimoto (Japan), Matthias Hahn, Ruediger Koetz, Yoshio Takasu
In-situ Height Change Measurements during Potential Cycling of Layered Ruthenic Acid

S07-P-035
Hisasi Takenouti (France), Najat Hajjaji, Gery Raikova, Kamal Rahmouni, Zdrovko Stoynov, Vincent Vivier
Differential Impedance Analyses (DIA) to study a protective effect of some triazole derivatives on the bronze patina

S07-P-036
Hisasi Takenouti (France), Liana Muresan, Kamal Rahmouni, Simona Varvara
Evaluation of some non-toxic thiadiazole derivatives as bronze corrosion inhibitors in aqueous solution

S07-P-037
Zhong-Qun Tian (China), Bin Ren
A Density Functional Study of Interfacial Structure of Interfacial Water and Hydrogen on Pt Electrode Surfaces

S07-P-038
Ecaterina Vasilescu (Romania)
Effect of the Microstructure of Some Implant Titanium Alloys on Their Electrochemical Reactivity

S07-P-039
Matthew Wood (United Kingdom), Walther Schwarzacher
The Effect of Halides on the Surface Morphology of Electrodeposited Thin Copper Films

S07-P-040
Eveline Zschippang (Germany), A.P. Abbott, J.C. Barron, Andreas Bund, K. Ryder
Electrodeposition of Metals from Choline Chloride based Ionic Liquids

S07-P-041
Salah Salman (Japan)
Improved Corrosion Resistance of AZ31 Magnesium Alloy by Cerium-based Conversion Coating

S07-P-042
Shuehlin Yau (Taiwan)
In Situ STM Imaging of Pt(111) Surface in Perchloric Acid Saturated with Carbon Monoxide

Symposium 8: Electrochemical Materials Science and Molecular Electrochemistry

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 2C Thursday 18:00-19:00

S08-P-025
Hadria Medouer (Algeria), Saci Messaadi, André Tosser-Roussey
Variations in the Composition of the Electrodeposited Ni100-XFeX Thin Films with Total Metallic Ion Concentration

S08-P-026
Saci Messaadi (Algeria), Hadria Medouer
Variations in the Cristalline Parameters of Electrodeposited Ni100-XFeX Thin Films With the Fe Concentration

S08-P-027
Atsushi Naganuma (Japan), Naganuma Atsushi, Kazuhisa Azumi, Koji Fushimi, Hiroki Habazaki
Development of multi-channel electrode method and its application to crevice corrosion

S08-P-028
Gerhard E. Nauer (Austria), Norica Godja, Gerhard E. Nauer, Matthias Pölzler, Josef Wendrinsky
Corrosion Studies of Spark Anodized Al and Mg Alloys

S08-P-029
Gerhard E. Nauer (Austria), Rudolf Mann
Galvanic Corrosion of Selected Aluminium Alloys with Steel and Magnesium

S08-P-030
Eugenii Nizhnikovsky (Russian Federation), Vladimir Kuznetsov, Nina Makhova, Albert Vedenyapin, Marina Vedenyapina
Synthesis of 3,3-dialkyldiazirines by an electrochemical oxidation of 3,3-dialkyldiaziridines

S08-P-031
Marcin Opallo (Poland), Shul Galyna, Chen Jingyuan, Satoh Masanori
Three phase electrochemistry of ferrocenes and porphyrinato complexes in toluene-ionic liquid mixture

S08-P-032
Octavian Radovici (Romania), Alexandra Banu
Adsorption Pseudocapacitance Produced by Phenol Oxidation in Polyphenol Layers

S08-P-033
Yukihiro Sakamoto (Japan), Kazuya Koyama, Hidehiko Ohtsu, Matsufumi Takaya, Satoshi Yamashita, Kazuya Yasuda
Preparation of CVD diamond films and their electrochemical properties

S08-P-034
Svetlana Satinskaya (Germany), Manuel Lohrengel
Microimpedance

S08-P-035
Guenther Scherer (Switzerland)
Morphological evolution of polycrystalline Platinum during electrochemical roughening

S08-P-036
Patrik Schmuki (Germany)
Direct Electrodeposition into TiO2 Nanotubes

S08-P-037
Dwayne Shewchuk (Canada), Mark McDermott
Structural Considerations of Mixed Layers on Au(111) Surfaces Comprised of Alkanethiolates and Aryl Groups Generated Electrochemically from Diazonium Salt Solutions

S08-P-038
Ming-You Shi (Taiwan), Shinn-Jyh Ding, Chia-Che Ho
Corrosion Behavior of Titanium Oxide Layer Formed on Titanium Surface in Saliva

S08-P-039
Romana Sokolova (Czech Republic), Jan Fiedler, Stefania Giannarelli, Magdalena Hromadova, Lubomir Pospisil
Coupled Chemical Reactions to the Electron Transfer of Selected Halogenated Aromatic Pesticides

S08-P-040
Manabu Takai (Japan), Matsufumi Takaya
Effect of Conversion Coatings on Bonding Strength of Magnesium and Aluminum Alloys

S08-P-041
Jean-Pierre Tessier (Canada), Daniel Guay, Lionel Roué, Robert Schulz
Oxidation of ruthenium-based compound using a cavity microelectrode

S08-P-042
Quentin Van Overmeere (Belgium), Luc Langer, Joris Proost, Jean-François Van Humbeeck
In-situ detection of growth instabilities during aluminium anodizing by high-resolution curvature measurements

S08-P-043
Marcela Vazquez (Argentina), Silvia Ceré, Raúl Procaccini
Characterization of passive films on brass in slightly alkaline solutions

S08-P-044
Marcela Vazquez (Argentina), María Beatriz Valcarce
The efficiency of nitrite ions as inhibitors of steel corrosion in carbonated pore simulating solutions

S08-P-045
Hitoshi Wada (Japan), Ryoichi Ichino, Kensuke Kuroda, Yasuhiro Nishisaka, Masazumi Okido
Electrodeposition of Bi-Cu Film in Aqueous Solutions

S08-P-046
Norbert Wagner (Germany), Hans-Joachim Kohnke
Electrochemical Study of Interaction of Nickel and Alkaline Solutions

S08-P-047
Di Wei (Finland), Ari Ivaska, Carita Kvarnstrom, Tom Lindfors
Electrochemcial functionalization of single walled carbon nanotubes with conjugated polymers in room temperature ionic liquids

S08-P-048
Taeeun Yim (Korea), Hyo-Jin Kim, Sangmi Kim, Hyun Yeong Lee, Gwan-Hong Min, Junyoung Mun, Seung M. Oh
Synthesis and properties of pyrrolidinium and piperidinium bis(trifluoromethanesulfonyl)imide ionic liquids with allyl substituents

S08-P-049
Shuehlin Yau (Taiwan)
Molecular-Resolution STM Imaging of Aniline Monomer and its Electropolymerization on Au(111) Electrode in Sulfuric Acid

S08-P-050
Levent Özcan (Turkey), Betül Ercan, Ali Ozcan, Levent Ozcan, Yücel Sahin, Mutlu Sahin
Synthesis, Characterization and Electrochemical Behaviour of Soluble Fluoro- and Chloro-polyaniline

Symposium 10: General Session

Location: Professional Development Centre (Poster Display Wing)
Poster Presentation Session 2A Tuesday 18:00-19:00

S10-P-001
Lucia Alvarado (Mexico), Adriana Ramirez, Israel Rodriguez-Torres, Shaoxian Song
Characterization by EIS of ion-exchange resin IRA-67 applied to ion Cr(VI) removal

S10-P-002
Elsa Miriam Arce Estrada (Mexico), Antonio Hernandez Espejel, Constancio Rodriguez Meneses
Electrochemical Kinetic corrosión of Al-Si-Cu in acid chloride solutions

S10-P-003
Karel Bouzek (Czech Republic), Roman Kodym, Pavel Novak, Dalimil Snita
Mathematical simulation of the processes at the cathodically protected metal surface

S10-P-004
Ernesto Calvo (Argentina), Miguel Vago, Federico Williams
Enantioselective Electrocatalytic Reduction of Ethyl Pyruvate over Pd/C Electrodes

S10-P-005
W. Ronald Fawcett (USA)
The Series Approach to Modelling Ion Size Effects in the Diffuse Double Layer

S10-P-006
José García-Antón (Spain), M. Encarnación Blasco-Tamarit, Anna Igual-Muñoz
Galvanic behaviour of the pair Alloy 31-Welded Alloy 31 in LiBr solutions at different temperatures

S10-P-007
José García-Antón (Spain), Dionisio Miguel García-García, Anna Igual-Muñoz
Open Circuit Measurements of Duplex Stainless Steels Under Cavitation – Corrosion Conditions in Aqueous LiBr

S10-P-008
Jaime Gonzalez Velasco (Spain)
A revision of the expression of the rate constant in interfacial charge transfer processes

S10-P-009
David Harvey (Canada), Craig Baker, Kunal Karan, J.G. Pharoah, Goran Vlajnic
Development of a Microstructural Model for Conventional PEMFC Pt/C Catalysts

S10-P-010
Nobuo Hattori (Japan), Yoshiyuki Kawade, Masazumi Okido, Masaki Tanigawa
Corrosion resistance of the organic pre-coated aluminum sheets after forming

S10-P-011
Nobuo Hattori (Japan), Masazumi Okido, Masaki Tanigawa
Improvement of the drawing formability of the organic pre-coated aluminum sheets

S10-P-012
Tor Hemmingsen (Norway), Kristin Barkve Andersen, Linda Bolstad
Hydrogen permeation rates under stationary and tensile straining conditions

S10-P-013
Gregory Jerkiewicz (Canada), Michael Cunningham, Andrew Munro
Application and Properties of Protective Polymer Films to Electrochemically Formed Colored Layers on Ti

S10-P-014
Raissa Jerohova (United Kingdom), Peter Birkin
Electrochemical Investigation of Single Bubble Sonoluminescence

S10-P-015
Han-Joo Kim (Korea), HanJoo Kim, Soo-Gil Park, Sang-Wook Ryu, Sun-Kyung You
Electrolytic Hydrogen Peroxide Generation System for Water Purification

S10-P-016
Jekaterina Kuleshova (United Kingdom), Peter Birkin, Joanne Elliott
Hydrodynamic modulated voltammetry: a novel oscillating jet system

S10-P-017
Shoichi Nagata (Japan), Kenji Kikuchi, Zempachi Ogumi, Yasuhiro Saihara, Yoshinori Tanaka
Electrochemical characteristics of hydrogen nanobubbles in electrolyzed water.

S10-P-018
Hideyuki Negishi (Japan), Akira Endo, Takao Ohmori, Keiji Sakaki
Preparation and Adsorption Properties of Water Vapor of Mesoporous Silicate Powder Coating by Electrophoretic Deposition Method

S10-P-019
Ichiro Otsuka (Japan)
Dynamic behaviours of O2-filled submicron-sized bubbles induced by dilution of an electrolyte solution

S10-P-020
Valentín Pérez-Herranz (Spain), José García-Antón, Montserrat García-Gabaldón, José Luis Guiñón
Study of tin ions transfer through ion-exchange membranes by chronopotentiometry

S10-P-021
Valentín Pérez-Herranz (Spain), María Guadalupe Arroyo, José García-Antón, José Luís Guiñón, María Teresa Montañés
Effect of pH and chloride concentration on the electrocoagulation of Cr(VI) solutions.

S10-P-022
Nico Smets (Belgium)
Time Averaged Temperature Calculations in Pulse Electrochemical Machining

S10-P-023
Nelson Ramos Stradiotto (Brazil), Ana Paula Esteves, Maria José Medeiros, André Luiz Santos, Regina M Takeuchi
Study of electrochemical reduction of antiamoeabic dichloroacetamides

S10-P-024
Margarita Teutli (Mexico), Contreras Job, Villarroel Mario, Navia Rodrigo
Electrocoagulation of mature landfill leachate

S10-P-025
Cora Vasilescu (Romania), Ioan Dan, Paula Drob, Mihai Popa, Ecaterina Vasilescu
Electrochemical Characterization of a Non-toxic Dental Alloy in Artificial Saliva

S10-P-026
Eric Vieil (France)
Formal Graphs: A new language for modeling and thinking

S10-P-027
Claudia Yañez (Chile), Paola Jara-Ulloa, Claudia Neira
Complexation of progesterone with [beta]-cyclodextrin: An chronocoulometry study

Special Meetings, Social Program and General Information

Special Meetings

Monday 10 September

Division Officers' Meeting – Luncheon Meeting
13:00-15:00 DCH Function Room 5

Regional Representatives' Meeting – Luncheon Meeting
13:00-15:00 DCH Function Room 6

Tuesday 11 September

Council Meeting – Luncheon Meeting
13:00-15:00 DCH Function Room 6

Division 1 Analytical Electrochemistry – Reception Meeting
18:00-19:30 TPCL 202 + 201

Division 3 Electrochemical Energy Conversion and Storage – Reception Meeting
18:00-19:30 MB Lounge + MB 252

Division 4 Electrochemical Materials Science – Reception Meeting
18:00-19:30 DCH Function Room 6

Thursday 13 September

General Assembly
12:00-13:00 MB Auditorium

Division 2 Bioelectrochemistry – Luncheon Meeting
13:00-15:00 DCH Function Room 5

Division 5 Electrochemical Process Engineering and Technology – Luncheon Meeting
13:00-15:00 DCH Function Room 4

Division 6 Molecular Electrochemistry – Luncheon Meeting
13:00-15:00 DCH Function Room 6

Division 7 Physical Electrochemistry – Luncheon Meeting
13:00-15:00 DCH Function Room 3

Social Program

Sunday 9 September

Welcome Reception (included with registration fee) *sponsored by Elsevier*
18:00-20:00 Eric Harvie Theatre Foyer
(one free drink Welcome Reception ticket included with Registration sheet)

Monday 10 September

Lunch (included with registration fee)
13:00-14:00 Donald Cameron Hall or Sally Borden Building

Poster/Exhibition viewing with coffee
14:00-15:00 Sally Borden Building (Lower level) and Professional Development Centre (Poster Display wing)

Exhibition Reception (included with registration fee) *sponsored by Thermo Fisher Scientific*
18:00-19:30 Sally Borden Building
(Lower level) and Professional Development Centre (Poster Display wing)
(one free drink with Exhibition Reception ticket, included with Registration sheet)

Exhibition and Poster displays remain open with cash bar from
19:30-23:00

Tuesday 11 September

Lunch (included with registration fee)
13:00-14:00 Donald Cameron Hall or Sally Borden Building

Poster/Exhibition viewing with coffee
14:00-15:00 Sally Borden Building (Lower level) and Professional Development Centre (Poster Display wing)

Exhibition and Poster displays remain open with cash bar from
18:00-23:00

Wednesday 12 September

Excursion (Requires pre-purchased ticket for specified excursion, included with Registration sheet, bag lunch provided)
13:30-18:00 (Busses will return delegates directly to the Barbecue)
1) **Lake Louise and Moraine Lake Tour**
2) **Bow Lake and Peyto Lake Tour**
3) **Johnston Canyon Hike**

Barbecue (included with registration fee)
18:30-21:30 (one free drink with Barbecue ticket, included with Registration sheet)
Transportation:
TO: 18:00-18:30 Bus pickup at specified locations for delegates who do not participate in the Excursion, private cars are not allowed onsite at the Barbecue. Delegates on excursions will be taken directly to the Barbecue.
FROM: 21:00-21:30 Bus transportation for all delegates to specified locations close to hotels.

Lake Louise & Moraine Lake Tour

The bus will travel along the scenic Bow Valley Parkway where you will view the soaring heights of Castle Mountain followed by an afternoon excursion to Lake Louise, the "Jewel of the Canadian Rockies" situated in a hanging valley. The world famous Chateau Lake Louise sits at the opposite end of the lake from Mt. Victoria and Victoria Glacier. There will be time to stroll along the shores of the lake or explore some of the wilderness sights and sounds. While at the Chateau, a number of activities are available to everyone, including canoeing, horseback riding, and guided hikes at additional local prices. Please note that accessChateau Lake Louse is limited to public areas.

The tour continues to Moraine Lake, nestled in the Valley of the Ten Peaks.

The bus will then return to Banff and deliver delegates directly to the site for the barbecue dinner which all delegates will attend.

Bow Lake & Peyto Lake Tour

The Icefields Parkway is arguably one of the most spectacular stretches of road in the entire world. There is an abundance of wildlife, and the bus will likely have to slow for mountain goats, big horn sheep or bears that amble onto the highway. The Bow Summit is the highest point on the Icefields Parkway (2156m). From this viewpoint you will see beautiful Peyto Lake, which is the most emerald lake in the Rockies.

The return trip includes a sightseeing stop at Bow Lake and Crowfoot Glacier.

The bus will then return to Banff and deliver delegates directly to the site for the barbecue dinner which all delegates will attend.

Johnston Canyon Hiking Tour

The sightseeing bus will take you from the Bow Falls and Tunnel Mountain Drive, which overlooks the splendour of the Bow River Valley, to visit the Hoodoos which have been shaped by centuries of wind. The tour continues along the Bow Valley Parkway to Johnston Canyon. Here guests will have an opportunity to walk to the lower falls. Please note that, although hiking boots are not required for this walk, sturdy (non slip) walking shoes are recommended.

The bus will then return to Banff and deliver delegates directly to the site for the barbecue dinner which all delegates will attend.

Thursday 13 September:

Lunch (included with registration fee)
13:00-14:00 Donald Cameron Hall or Sally Borden Building

Poster/Exhibition viewing with coffee
14:00-15:00 Sally Borden Building (Lower level) and Professional Development Centre (Poster Display wing)

Exhibition and Poster displays remain open with cash bar from
18:00-23:00

Banquet (Requires pre-purchased ticket, included with Registration sheet)
19:30-21:30 Donald Cameron Hall Dining Room
Entertainment: World Champion Native Hoop Dancer

General Information

Registration / Registration Fees

The Registration Desk will be located in the Eric Harvie Theatre Foyer

Registration hours during the Meeting will be

Sunday 9 September	13:00-20:00
Monday 10 September	8:30-12:00 and 13:00-18:00
Tuesday 11 September	8:30-12:00 and 13:00-15:00
Wednesday 12 September	8:30-12:00
Thursday 13 September	8:30-12:00 and 13:00-15:00
Friday 14 September	8:30-12:00

On site Registration Fees

Regular (ISE non members)	480 Euros
Regular ISE members	430 Euros
Student (ISE non members)	175 Euros
Student ISE members	140 Euros
Accompanying Persons	120 Euros

Regular and Student Registration fees include: Admission to all scientific and exhibition sessions, 3 Lunches (Mon, Tues, Thurs), Barbecue, Welcome Reception and Exhibition Reception, Conference bag, Program book and Abstract CD-ROM, and coffee breaks.

Accompanying Persons Registration fees include: 3 Lunches (Mon, Tues, Thurs), Barbecue, Welcome Reception, and Exhibition Reception.

Shuttle Service between Hotels and Banff Centre (Eric Harvie Theatre Entrance)

Sunday: (Welcome Reception)	17:30-20:00
Monday – Friday: (to sessions)	8:00 - 9:00
Monday, Tuesday, Thursday: (after sessions)	18:30-20:00
Monday, Tuesday, Thursday: (after Posters)	22:00-23:00
Friday: (after sessions)	13:00-14:00

Only for delegates NOT on an excursion

Wednesday: (after morning sessions)	13:00-14:00
Wednesday: (pickup for Barbecue)	18:00-18:30

Lunch

Lunch provided for Monday, Tuesday, and Thursday with Registration Fee

Locations:		
	Donald Cameron Hall Dining Room (DCH)	12:00-13:30
	Vistas Dining Room (SBB)	12:00-13:30

Dining Room Hours for Evening Meals –NOT included with Registration Fee

Vistas Dining Room (seats 350) (SBB)	17:30-19:30
Three Ravens Restaurant (seats 70) (SBB)	17:00-22:00
Three Ravens Wine Bar (serves meals) (seats 30) (SBB)	16:00-24:00
Prop Pub (Seats 40) (DCH)	16:30-01:00

Coffee breaks

Monday-Friday 10:00-10:20
Monday 16:00-16:20
Tuesday, Thursday 16:20-16:40

Locations: close to Symposia rooms

LF hall first floor (Symposium 9)
LF hall second floor (Symposia 4 and 8)
MB 251, MB foyer and MB Lounge (Symposia 2, 3 and 7)
TCPL foyer (Symposium 10)
DCH 307 (Symposium 5)
DCH 28 (Symposium 6)
DCH 14 (Symposium 1)

Exhibition/Poster coffee:

Monday, Tuesday, Thursday 14:00-15:00

Locations: Sally Borden Building (Lower level) and
Professional Development Centre (Poster Display wing)

Internet Service

Wireless Internet Service is provided throughout the Banff Centre.
Lounges are provided near each Symposia area with chairs and tables for your convenience.
Internet Cafés are provided at: LF 221 and MB 251 for the following times:

Monday, Tuesday, Thursday 10:00-18:00
Wednesday 10:00-13:00
Friday 10:00-12:00

Publications

Meeting Abstracts will be published in electronic form (CD-ROM).
A special issue of Electrochimica Acta will contain selected papers presented at the meeting and invited to be submitted before 31 October, 2007.

Sightseeing

Visit the information desk for information regarding booking additional sightseeing tours or contact Discover Banff Tours at http://banfftours.com/banff/s_summer.shtml during the conference.

Travel

Book with Banff Airporter
(http://www.banffairporter.com Username: explore; Password: sept07)
for 20% discount on advance booked return travel between Banff and Calgary Airport. Allow at least 4.5 hours between pickup in Banff and time of flight departure for international flights from the Calgary airport. For domestic flights allow at least 3.5 hours.

THE BANFF CENTRE

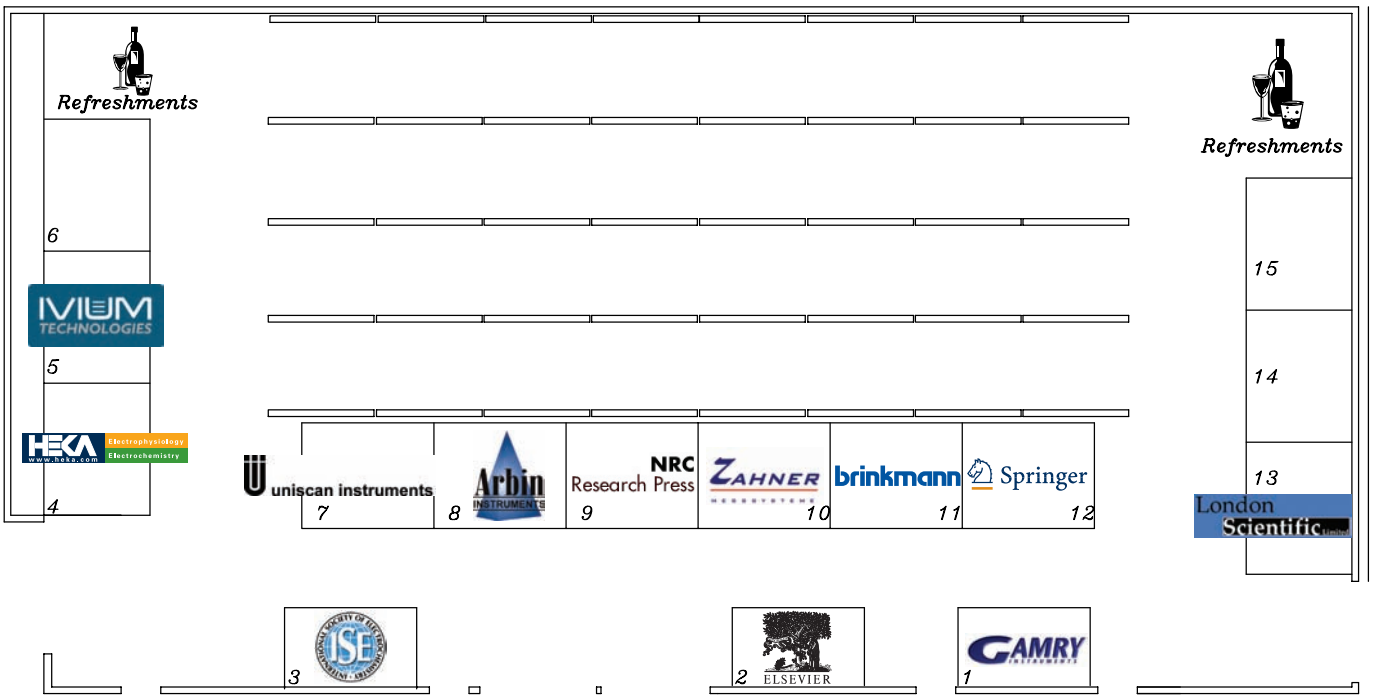
Guest PUBLIC Wireless Access

If you wish to access the Internet with your laptop while visiting the Banff Centre, you will require a wireless network card and it must be configured for public access. Most computers can automatically detect the 'public' wireless network and establish a connection. If you do need to modify your settings, you will need to set the wireless access for public and to have no encryption. Although there are many types of laptops and wireless cards, the instructions below should be enough to guide you the required changes.

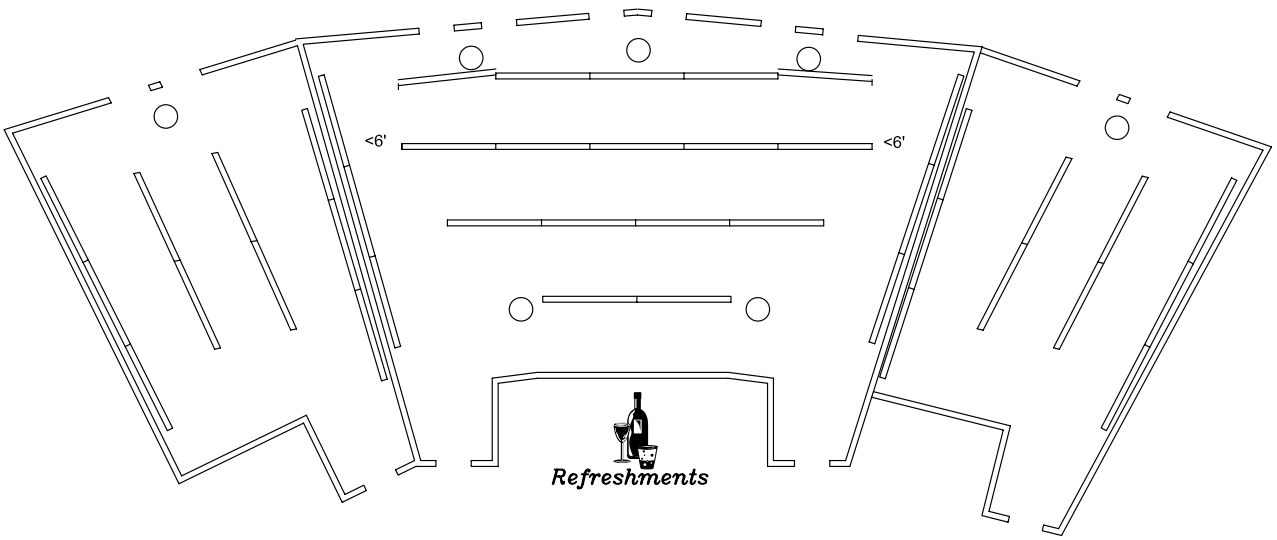
Users are advised to ensure their computers are equipped with the latest security updates and that the virus software is up to date.

1. Run the Wireless Client Manager.
2. Click Actions on command menu and select Add/Edit configuration profile.
3. Click on Add button in Select Profile window.
4. Profile name: type Public Access .
5. Network type: select Access Point.
6. Click Next.
7. Network name (SSID): type public.
8. Click Next.
9. No for Enable Data Security (default setting). Uncheck this option if enabled.
10. Click Next.
11. Power Management: Off (default setting).
12. Click Next.
13. TCP/IP behavior; Select renew IP address when selecting this profile.
14. Click Finish.
15. Click OK to complete.

Sally Borden Building – Posters and Exhibitors

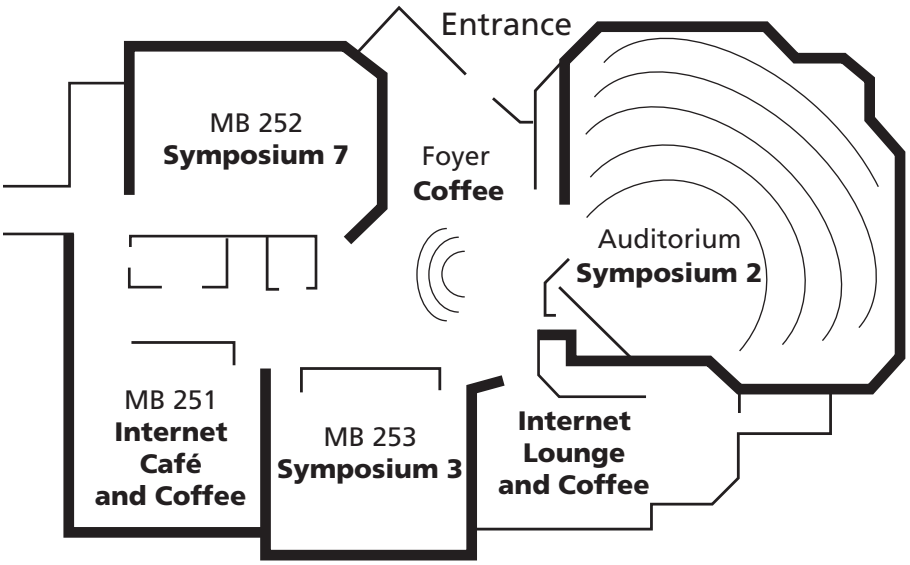


Professional Development Centre – Posters



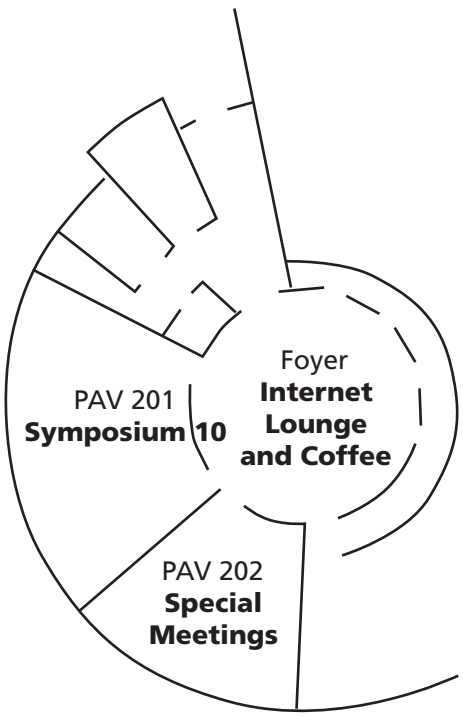
Max Bell Building

Symposium 2
Symposium 3
Symposium 7

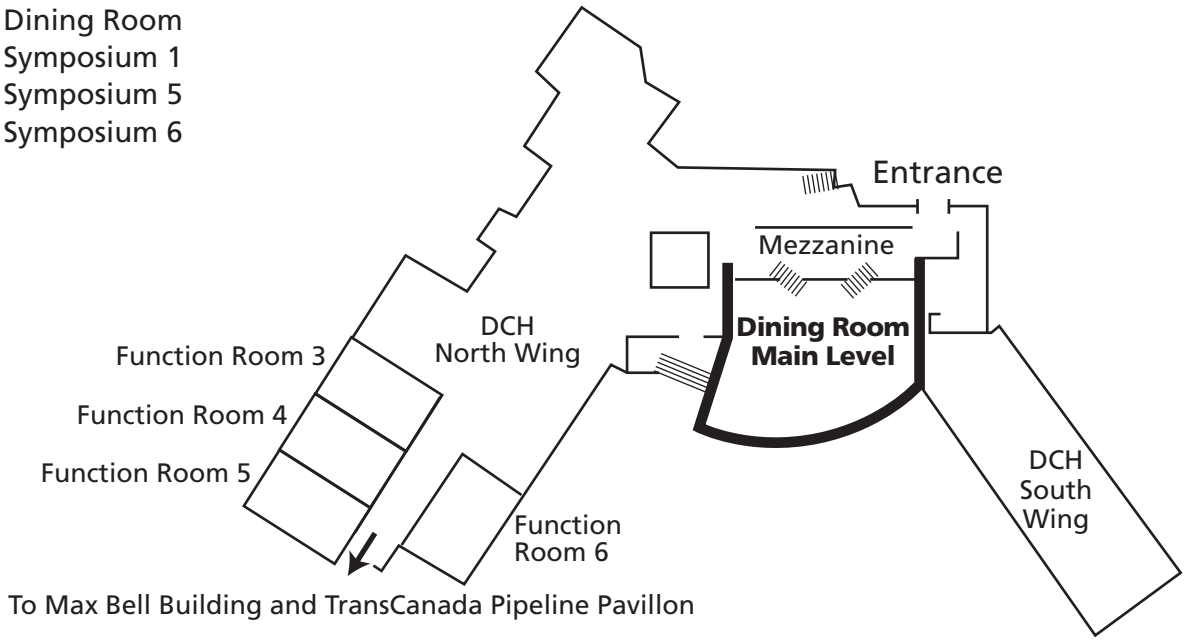


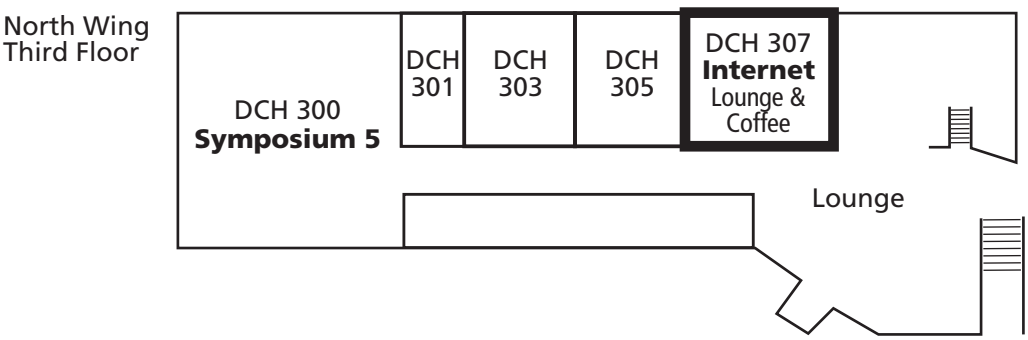
Trans Canada Pipelines Pavilion

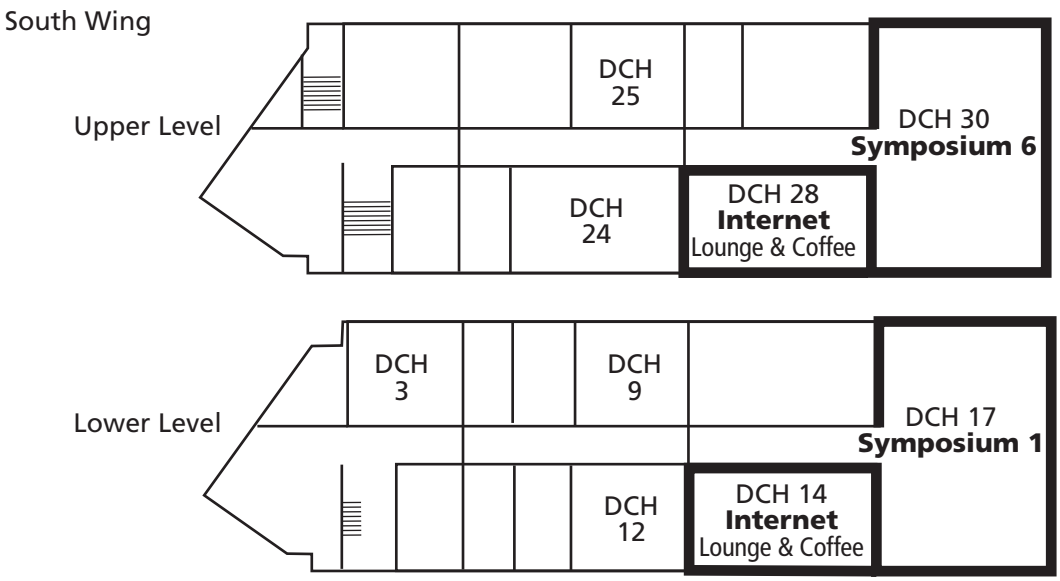
Symposium 10
Special Meetings



Donald Cameron Hall

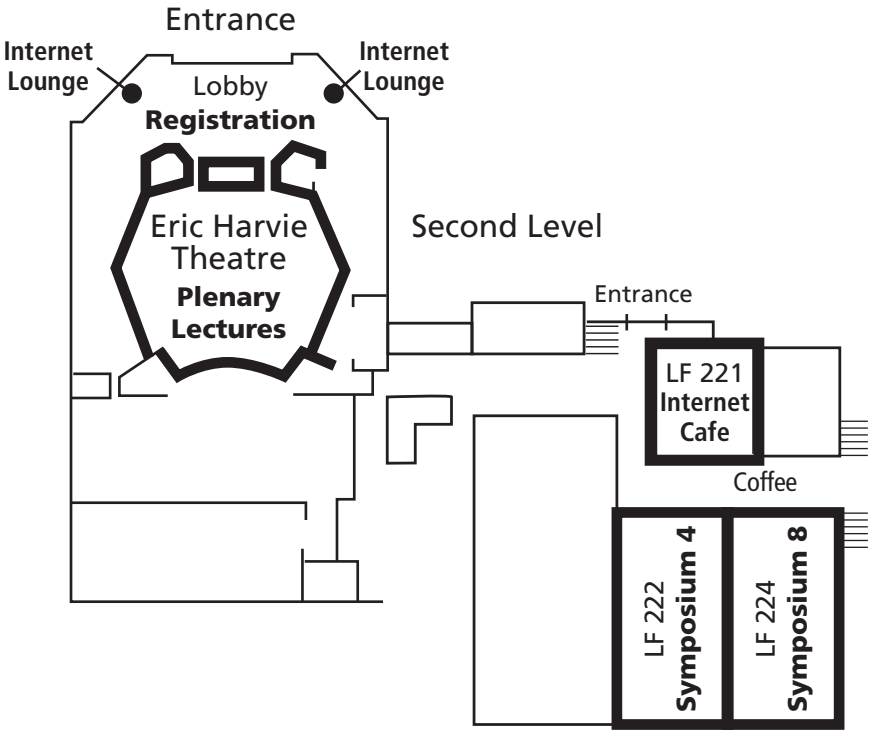






Eric Harvie Theatre and Laszlo Funtek Teaching Wing

Plenary Lectures
Symposium 8
Symposium 4



Laszlo Funtek Teaching Wing – First level

Symposium 9