

Wednesday 29.08.2018

16.30 – 16.40 Opening Ceremony <i>(P.J. Kulesza, G. Jerkiewicz, L. Adamczyk, K. Miecznikowski, I.A. Rutkowska)</i> <i>(III Floor, Conference Room I)</i>		
16.40 – 17.20	Piotr Zelenay “Recent Advances in PGM-free Electrocatalysis of Oxygen Reduction” <i>Chair: P.J. Kulesza, G. Jerkiewicz</i> <i>(III Floor, Conference Room I)</i>	
	I session <i>Chair: P.J. Kulesza, I.A. Rutkowska</i> <i>(III Floor, Conference Room I)</i>	II session <i>Chair: J.A. Cox, K. Miecznikowski</i> <i>(III Floor, Conference Room II)</i>
17.30 – 17.55	Gregory Jerkiewicz “Structural Changes of Monocrystalline Platinum Electrodes upon Electro-oxidation and Electro-dissolution”	Germano Tremiliosi-Filho “Development of Electrocatalyst for Photo-assisted Direct Alcohol Fuel Cells: (Photo)electrochemical Properties of Self-doped TiO ₂ Nanotube Decorated with Pt Nanoparticles”
17.55 – 18.20	Hasuck Kim “Electrochemical Preparation of Catalysts for PEMFCs and Electrolyzers”	Alexandr G. Oshchepkov “The Influence of Surface State on the Electrocatalytic Activity of Ni in Alkaline Media”
18.20 – 18.40	Silver Sepp “Performance of Carbide Derived Carbons as Fuel Cell Catalyst Supports”	Yaoyin Lou “Preparation of Ni Coated Graphite Felt Modified Ag Nanoparticles for Dechlorination of Chlorinated Compounds”
18.40 – 19.00	Iwona A. Rutkowska “Electrocatalytic Reduction of Oxygen and Carbon Dioxide at Mixed-Metal-Oxides as Active Supports in for Dispersed Metal Centers: Development of Electroanalytical Methodology”	Beata Krasnodebska-Ostrega “Arsenic, thallium and chromium speciation equilibrium in water in the presence of surfactants”
19.30 Welcome reception <i>(Main Floor, Highlander Club)</i>		

Thursday 30.08.2018

08.00- 08.40	<p>Ralph G. Nuzzo “New Spinel Materials for Use as High-voltage and High-capacity Divalent Intercalation Cathodes for Non-aqueous Zn-ion Batteries”</p> <p><i>Chair: P.J. Kulesza, G. Jerkiewicz (III Floor, Conference Room I)</i></p>		
	<p><i>I session</i> <i>Chair: P. Krtil, S. Fiechter (III Floor, Conference Room I)</i></p>	<p><i>II session</i> <i>Chair: P. Zelenay, E. Negro (III Floor, Conference Room II)</i></p>	<p><i>III session</i> <i>Chair: G. Jerkiewicz, M. Eikerling (V Floor, Conference Room III)</i></p>
08.50 - 09.15	<p>Csaba Janáky “Opportunities Beyond Conventional Photoelectrodes: from 2D Transitional Metal Chalcogenides to Lead-halide Perovskites”</p>	<p>Vito Di Noto “Electrocatalysts for the ORR including Hierarchical Graphene-based Supports and Comprising a Low Loading of Pt”</p>	<p>Germano Tremiliosi-Filho “Electrochemical and FTIR Studies of Glycerol Electrooxidation onto Pt Stepped Surface”</p>
09.15 - 09.40	<p>Bruno Fabre “Silicon Photocathodes Derivatized with Polyoxothiometalate Electrocatalysts for Long Lifetime Sunlight-Driven HER”</p>	<p>Constantinos G. Vayenas “Electrochemical Promotion of nanodispersed catalysts”</p>	<p>Ludwig A. Kibler “Electrocatalytic Oxidation of Formic Acid on Au(111): Enhancement by Adsorption of Pyridine”</p>
09.40 - 10.00	<p>Encarnación Torralba “Copper-Palladium Nanoelectrocatalysts for Carbon Dioxide Reduction”</p>	<p>Mihalis N. Tsampas “New class of photoelectrochemical cells based on polymeric membrane electrolytes: Opportunities and challenges”</p>	<p>Christine Cachet-Vivier “Ni and Ni-Rh nanoparticles/graphite composites for urea oxidation”</p>
<p>10.00 -10.30 Coffee break</p>			
	<p><i>I session</i> <i>Chair: C. Janáky, K.B. Kokoh (III Floor, Conference Room I)</i></p>	<p><i>II session</i> <i>Chair: V. Di Noto, A. Lisowska-Oleksiak (III Floor, Conference Room II)</i></p>	<p><i>III session</i> <i>Chair: L.A. Kibler, P. Strasser (V Floor, Conference Room III)</i></p>
10.30 - 10.55	<p>Maria Valnice Boldrin-Zanoni “The Challenge to Use Modified Ti/TiO₂ to Improve the Photoelectrocatalytic Reduction of CO₂ in aqueous medium”</p>	<p>Enn Lust “Development of solid oxide fuel cells and co-electrolysis cells materials based on the data of modern operando analysis methods”</p>	<p>Yan-Xia Jiang “PtRh/rGN Catalysts with High CO₂ Selectivity at Low Potentials for Ethanol Electrooxidation”</p>
10.55 - 11.20	<p>Lo Gorton “Electrochemical</p>	<p>Aaron T. Marshall “Evaluating the kinetics of redox</p>	<p>Svitlana Pylypenko “Adsorption Behavior of</p>

	Communication between Photosynthetic Cells/Thylakoid Membranes and Electrodes for Harvesting Solar Energy”	flow battery reaction on single carbon fiber microcylinder electrodes”	N-containing Carbon-based Catalysts: Implications for Electrocatalysis”
11.20 - 11.45	Boon Siang Yeo “Electrochemical Activation of Carbon Dioxide”	Enrico Negro “Platinum-Free” ORR Electrocatalysts based on Hierarchical Graphene Supports: Interplay between Physicochemical Features and Electrochemical Performance”	Byron D. Gates “The Development of Porous Catalyst Materials by Design”
11.45 - 12.05	Dorottya Hursán “Mechanistic and Morphological Insights into the CO ₂ Electroreduction on N-doped Carbon Electrodes”	Ivan S. Filimonenkov “Rotating ring-disk electrode as a quantitative tool for the investigation of the oxygen evolution reaction”	Johannes M. Hermann “Electrocatalytic Oxidation of Formic Acid on Au(111): Unique behavior of 4-Mercaptopyrindine SAM”
12.05 - 12.25	Peeter Valk “Synthesis and Characterization of Platinum-Praseodymium Oxide Nanocatalysts for Methanol Oxidation”	Theresa Haisch “Application of Nash’s reagent in electrochemistry – formaldehyde determination during alkaline methanol oxidation”	Hoydoo You “X-ray Study of Electrochemical Stern Layer: Ordering and Layering”
12.30 – 14.00 Lunch <i>(I Floor, Restaurant “Impresja”)</i>			
14.00 -14.40	Vojislav Stamenkovic “Electrochemical Interfaces for Energy Conversion and Storage” <i>Chair: P.J. Kulesza, P. Zelenay</i> <i>(III Floor, Conference Room I)</i>		
	<i>I session</i> <i>Chair: H. Kim, G. Tremiliosi-Filho</i> <i>(III Floor, Conference Room I)</i>	<i>II session</i> <i>Chair: E. Lust, C.G. Vayenas</i> <i>(III Floor, Conference Room II)</i>	
14.50 -15.15	Peter Strasser “Materials and Electrocatalysis for Electrochemical Energy Storage and Conversion”	Petr Krtil “Local Structure Control Towards Efficient Oxide Based Catalysts for OER”	
15.15 -15.40	Shi-Gang Sun “Rational Design and Controlled Synthesis of Fuel Cell Catalysts”	Pawel Nowak “Surface doping of TiO ₂ by transition metals and its influence on the behavior of TiO ₂ in photocatalysis and on the performance of TiO ₂ electrodes in electrochemical reactions”	
15.40 - 16.05	Pawel J. Kulesza “Electrochemical and Photoelectrochemical Generation of Fuels and Utility Chemicals During Reduction of Carbon Dioxide”	Frederic Maillard “Structural Disorder and Oxygen Reduction Reaction Electrocatalysis: Friends or Foes?”	
16.05 - 16.25	Ahmed M. Ismail “Electrochemical CO ₂ Reduction at Different Au-Sn Bimetallic Catalysts”	Soran Jahangiri “Computational Investigation of the Catalytic Behavior of Bi-modified Ni, Pd and Pt Electrodes”	

16.30 – 17.00 Coffee break

16.30 – 17.00 Coffee break		
	<i>I session</i> <i>Chair: P.J. Kulesza, A.R. Hillman (III Floor, Conference Room I)</i>	<i>II session</i> <i>Chair: L. Elbaz, E. Herrero (III Floor, Conference Room II)</i>
17.00 - 17.25	K. Boniface Kokoh “Active Electrode Materials Synthesized from a Surfactant-free Method for Electrochemical Energy Conversion”	Shigenori Mitsushima “Property of membrane and ionomer in electrocatalyst layer of toluene direct electro- hydrogenation electrolyzer”
17.25 - 17.50	José Ramón Galán-Mascarós “Composites of Co-containing Polyoxometalates for Water Oxidation Catalysis in Acidic Media”	RJ Kriek “Photo-charging” of Nickel- and Europium Tellurium Oxides”
17.50 - 18.15	Przemyslaw Data “Electrochemically driven synthesis of conjugated polymers for use as electrochromic materials and organic light-emitting diode emitters”	Krzysztof Kruczala “Effect of Various Carbon Supports on the Activity and Selectivity of Nanostructured Manganese–Cobalt Spinel in the Oxygen Reduction Reaction”
18.15 - 18.35	Yoshiyuki Kuroda “Preparation of Highly Durable Electrocatalyst for Alkaline Water Electrolysis via Self-Assembly of Hybrid Cobalt Hydroxide Nanosheets”	Nakkiran Arulmozhi “Cathodic Corrosion on Noble Metal Electrodes: A Spherical Single Crystal Perspective”
18.35 - 18.55	Mansour Rahsepar “Effective Treatment of N-doped Graphene as Electrocatalyst for Oxygen Reduction Reaction”	Jun Huang “A Theoretical Attempt to Understand Double Layer Effects in Electrocatalysis”
19.30 Banquet <i>(I Floor, Banquet Hall)</i>		

Friday 31.08.2018

08.00- 08.40	Krishnan Rajeshwar “Building the Perfect Beast: The Role of Electrocatalysis in the Solar Fuels Conundrum” <i>Chair: G. Jerkiewicz, R.G. Nuzzo</i> <i>(III Floor, Conference Room I)</i>	
	I session <i>Chair: S-G. Sun, P.J. Kulesza</i> <i>(III Floor, Conference Room I)</i>	II session <i>Chair: E. Negro, I.A. Rutkowska</i> <i>(III Floor, Conference Room II)</i>
08.50 - 09.15	Lior Elbaz “All-in-One Electrodes for Fuel Cells based on Aerogels”	James A. Cox “Adapting Electrocatalysis to Chemical Analysis of Complex Samples”
09.15 – 09.40	Michael H. Eikerling “First-Principles Studies of Nickel Oxides as Electrocatalysts for Alkaline Electrochemistry”	Olga Kasian “Dynamic Transformation of Iridium Surfaces under the Oxygen Evolution Conditions”
09.40 – 10.00	Elena S. Davydova “Can Ni overcome the HOR challenge in alkaline medium?”	Lokesh Kesavan “Electro-Oxidation & Sensing of Oxalic Acid Catalyzed by Supported Metal Nanoparticles”
10.00 – 10.30 Coffee break		
	I session <i>Chair: G. Jerkiewicz, L. Dubau</i> <i>(III Floor, Conference Room I)</i>	II session <i>Chair: F. Maillard, Z. Stojek</i> <i>(III Floor, Conference Room II)</i>
10.30 – 10.55	Vladimir Komanicky “Controlling of electrocatalytic activity of platinum thin films by mechanical stress”	Laetitia Dubau “Unveiling the degradation pathway of highly defective hollow PtNi/C in operando conditions”
10.55 – 11.20	Enrique Herrero “Active sites for the ORR in Nitrogen-Doped Graphitic Materials”	Donald W. Kirk “Electrochemical Coupling of Glycerol with Carbon Dioxide”
11.20 – 11.45	Viktor Hacker “Enhanced ethanol oxidation reaction in alkaline direct alcohol fuel cells”	Ana C. Tavares “Electroreduction of CO ₂ to Formate on Amine Modified Pb Electrodes”
11.45 - 12.05	Beata Dembinska “Electroreduction of Oxygen and Carbon Dioxide at Non Precious Metal Catalysts Studied by Rotating Ring-Disk Voltammetry”	Bartosz Hamankiewicz “Chemical Methods for Modification of Lithium-ion Battery’s Electrode Materials”
12.05 - 12.25	Vasileios Kyriakou “Co-electrolysis of CO ₂ and H ₂ O on Perovskite Fuel Electrodes with Exsolution of Transition Metal Nanoparticles”	P. B. J. Levecque “Metal-Support Interactions of Pt Nanoparticles supported on Boron Carbide Composites”
12.30 – 14.00 Lunch <i>(I Floor, Restaurant “Impesja”)</i>		
14.00 – 14.40	Beatriz Roldan Cuenya “Structure and electrolyte sensitivity in CO ₂ electroreduction”	

	<i>Chair: P.J. Kulesza, I.A. Rutkowska (III Floor, Conference Room I)</i>	
	<i>I session</i> <i>Chair: M.V. Boldrin-Zanoni, S. Pylypenko (III Floor, Conference Room I)</i>	<i>II session</i> <i>Chair: K. Kruczala, D. Kowalski (III Floor, Conference Room II)</i>
14.50 – 15.15	Sebastian Fiechter “On the role of oxygen evolving electrocatalysts deposited on photoelectrodes for light-driven water splitting”	A. Robert Hillman “Variation of film structure and its subsequent redox-driven evolution for conducting polymers deposited using different control functions”
15.15 – 15.40	Foteini M. Sapountzi “Analysis of acidic and alkaline alcohol electrolysis and development of optimized membrane-electrode assemblies”	Zbigniew Stojek “Environmentally Sensitive, Multifunctional Polymeric Materials for Loading of Inorganic- and Bio-catalysts”
15.40 – 16.05	Ioannis Spanos “Investigation of the Activation Behavior of a Ni-Co-Oxide Catalyst for the Oxygen Evolution Reaction in Fe-free KOH Solution”	Anna Lisowska-Oleksiak “The influence of photointercalation process onto photocatalytic and photoelectrochemical properties of MoO ₃ thin films”
16.05 – 16.25	Katarzyna Hubkowska “The electrochemical study of hydrogen sorption from non-aqueous medium of DEMA-TFO ionic liquid in a Pd-LVE electrode”	Ying Liu “CoO _x /CeO ₂ Hybrid Nanostructures with Improved Oxygen Deficiency Concentration and Conductivity for Enhanced Oxygen Evolution”
16.30 – 17.00 Coffee break		
	<i>I session</i> <i>Chair: C. Coutanceau, B. Fabre (III Floor, Conference Room I)</i>	<i>II session</i> <i>Chair: L. Gorton, A.T. Marshall (III Floor, Conference Room II)</i>
17.00 – 17.25	Barbara Palys “Electrochemically reduced graphene oxide – noble metal nanoparticles nanohybrids for sensitive enzyme-free detection of hydrogen peroxide”	YuYe J. Tong “A Water-Mediated Proton-Switch Reaction Step as the Linchpin for Understanding Formic Acid Electro-Oxidation on Platinum-Group Electrocatalysts”
17.25 – 17.50	Thibault Rafaïdeen “Impact of the composition and nanostructure of PdAu alloys on the activity and selectivity toward monosaccharide electro-conversion”	Fabrice Micoud “Local degradations induced in a PEMFC stack by start-up/shut-down cycles: investigations coupling in situ and ex situ analyses”
17.50 – 18.10	Michal Krajewski “Surface activation mechanism of electrode materials for lithium-ion batteries”	Mikhail Vagin “Proton and oxygen management in chemical-to-electrical energy interconversion on conducting polymers”
18.15 – 19.45 Poster Session Chair: P.J. Kulesza, G. Jerkiewicz, L. Adamczyk, K. Miecznikowski, I.A. Rutkowska		
20.00 Grill <i>(Shelter)</i>		

Saturday 01.09.2018

08.00- 08.40	<p>Daniel Scherson “Spatially-Resolved Electrochemistry”</p> <p>Chair: P.J. Kulesza, G. Jerkiewicz (III Floor, Conference Room I)</p>
	<p>I session Chair: Y-X Jiang, P. Data (III Floor, Conference Room I)</p>
08.50 - 09.15	<p>Marian Chatenet “Magnetic Heating of FeC Core Ni Shell Nanoparticles as an efficient means to enhance alkaline water electrolysis”</p>
09.15 – 09.40	<p>Christophe Coutanceau “Electrocatalysis for the selective conversion of biomass”</p>
<p>09.40 – 10.10 Coffee break</p>	
	<p>I session Chair: J.R. Galan-Mascaros, P. Zelenay (III Floor, Conference Room I)</p>
10.10 – 10.35	<p>Dominika A. Ziolkowska “New Liquid Synthesis Of Solid-State Electrolytes For The Next Generation Batteries”</p>
10.35 – 11.00	<p>Damian Kowalski “Pseudoporosity of anodic TiO₂ and Fe_xO_y – from nanopores to nanotubes”</p>
11.00 – 11.20	<p>Sylwia Zoladek “Development of Nanostructured-Carbon-Supported Silver Nanoparticles and Reduced-Graphene-Oxide-Based Hybrid Supports for Gold and Platinum Catalysts Active at Low Loadings during Oxygen Reduction”</p>
11.20 – 11.40	<p>Huseyin Bekir Yildiz “A Photoelectrochemical Device for Water Splitting Using Oligoaniline-Crosslinked [Ru(bpy)₂(bpyCONHArNH₂)]⁺² Dye/IrO₂ Nanoparticle Array on TiO₂ Photonic Crystal Modified Electrode”</p>
<p>11.40 – 12.00 Closing Conference (P.J. Kulesza, G. Jerkiewicz, L. Adamczyk, K. Miecznikowski, I.A. Rutkowska) (III Floor, Conference Room I)</p>	
<p>12.30 – 14.00 Lunch (I Floor Restaurant “Impresja”)</p>	

Poster Presentations

Friday 31.08.2018 (18.15-19.45)

1. **Nakkiran Arulmozhi** “Electrosorption of Hydrogen and Oxygen at Graphene/Pt(111) – Solution Interface”
2. **Maciej Boczar** “The influence of solvothermal synthesis parameters on morphology and electrochemical properties of lithium-manganese orthosilicate”
3. **Kamila Brzozowska** “Hybrid Cyanometallates of Cobalt, Ruthenium and Iron as Electrocatalytic Systems for Water Oxidation in Acid and Neutral Media”
4. **Christine Cachet-Vivier** “FTO/Fe₂O₃/Ni materials for the photo-electrochemical conversion of urea with H₂ production”
5. **Kamil Czarniecki** “Evaluation of Reduced-Graphene-Oxide Aligned with WO₃-Nanorods as Support for Pt Nanoparticles during O₂-Electroreduction in Acid Medium”
6. **Derek Esau** “Influence of Scan Rate and Temperature Variation on Rhodium Spherical Single Crystal Electrodes in Aqueous Acidic Media”
7. **Eduardo B. Ferreira** “Polarization Behaviour of Bulk Nickel Materials in Aqueous Alkaline Medium”
8. **Soki Hino** “Analysis of reverse current using Ni electrode”
9. **S. Kochrekar** “Electro-catalytic reduction of CO₂ using polymerized porphyrin (Zn and Ni) modified electrodes”
10. **Junpei Koike** “Electrochemical property for PtRu/C, Pt/C and IrRu/C cathode catalysts in toluene direct electro-hydrogenation”
11. **Kacper Kopczynski** “Electrocatalytic Properties of Nickel Coatings Deposited From Deep Eutectic Solvent”
12. **Paulina Krakowka** “Development of Supports for Palladium Nanoparticles Active during Electrooxidation of Formic Acid”
13. **Pawel Kulboka** “High frequency measurements of Pt(111) in sulfuric acid solutions”
14. **Yongbing Ma** “Morphology-Controlled High Durability Titanium Oxide Nanoparticles as Supports of Cathode Catalysts for Polymer Electrolyte Fuel Cells”
15. **Justyna Orłowska** “Development of Efficient Semi-Solid Redox Electrolytes Utilizing Nobel Metal Nanoparticles and Iodine/Iodide Ionic Liquids”
16. **Malgorzata Pajak** “Hydrogen Electrosorption In Pd-LVE from Nitrate Ionic Liquids”
17. **Elitsa Petkucheva** “Effect of the transition metal chlorides (Ni, Fe, Co) to the electrocatalytic properties of the Ni-foam modified by „ Deep and Drying” method in 1M KOH”
18. **Boguslaw Pirozynski** “Enhancement of Ethanol Oxidation Reaction on Pt (PtSn)-Activated Nickel Foam Through In-situ Formation of Nickel Oxy-Hydroxide Layer”
19. **Justyna Piwowar** “Experimentally Determined Catalytic and Electronic Properties of Vacuum Deposited Pt-Au Systems”

20. **Weronika Postek** “Electroanalysis and Electrocatalytic Behavior of Arsenates at Platinum Nanoparticles”
21. **Maciej Ratynski** “Determination of electrochemical parameters of silicon-graphite composite electrodes by electrochemical impedance spectroscopy”
22. **Ewelina Seta** “Utilization of Bacterial Biofilms in Catalytic Systems Toward the Reduction of Carbon Dioxide”
23. **Michal Symonowicz** “Electrochemical behavior of a Pd-Rh and Pd-Ru thin film electrodes in concentrated alkaline media”
24. **Ewelina Szaniawska** “A photoelectrochemical device for carbon dioxide reduction to alternative fuels utilizing copper(I) oxide modified with oligoaniline or carbon materials”
25. **Mariusz Szkoda** “Electrochemical, optical and fotoelectrocatalytical properties of transparent α -MoO₃ microstructures prepared by thermal annealing Mo thin films deposited onto the FTO substrate”
26. **Konrad Trzcinski** “Thin layers of BiVO₄/V₂O₅ modified by cobalt hexacyanocobaltate as electrodes for photoelectrochemical water splitting”
27. **Anna Wadas** “Electrocatalytic Reduction of Carbon Dioxide by Using Transition Metal Complex”
28. **Pawel Wnuk** “*In Situ* Electrochemical Characterization of Low-temperature PEM Direct Ethanol Fuel Cells using DC and AC methods”
29. **Xu Yao** “The effect of preparation conditions of Li_xNi_{2-x}O₂/Ni on electrochemical performance for alkaline water electrolysis”
30. **Barbara Zakrzewska** “Reduced-Graphene-Oxide with Transition Metal Hexacyanoferrates as an efficient Electrocatalysts for Oxygen reduction reaction in low temperature fuel cells”