



**Jerzy Haber Institute of Catalysis and Surface Chemistry  
Polish Academy of Sciences, Cracow, Poland**

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**Department of Chemistry, University of Warsaw, Poland**

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**Foundation „Pro Kataliza”, Cracow, Poland**

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**Under the auspices of the International Society  
of Electrochemistry**

# **3<sup>rd</sup> International Symposium on Surface Imaging/Spectroscopy at the Solid/Liquid Interface**

## **ISSIS 2012**

**May 27<sup>th</sup> – June 1<sup>st</sup>, 2012, Cracow, Poland**

**Andrzej Kowal, symposium chair, co-organizer**

**Paweł Nowak, organizer, co-chair**

**Magdalena Skompska, co-organizer, co-chair**



<http://www.ik-pan.krakow.pl/issis2012/>

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K. Wieczorek-Ciurowa, Cracow University of Technology, Poland

### **Main topics of the Conference:**

1. Application of SPM techniques in studies of surfaces modified by metal oxides, semiconductors, polymers, colloids, hybrid materials and nano-sized catalysts
2. High resolution imaging of clusters, biomolecules and biological systems
3. Advanced experimental techniques for in-situ characterization of electrochemical nano-sized materials
4. Fundamentals of surface structure, reactivity and electron transfer – comparison of experimental and theoretical results

### **Plenary lectures**

R. Schlögl, FHI, Germany

A. Więckowski, University of Illinois, USA

**The titles of the plenary lectures and the invited oral presentations are appended at the end of the circular**

### **The conference venue:**

Building of the J. Haber Institute of Catalysis and Surface Chemistry

Polish Academy of Sciences

ul. Niezapominajek 8, Kraków, Poland

### **Conference fee:**

Regular participants                      250 Euro (1030 PLN)

Students                                        120 Euro (495 PLN)

Fee covers: Participation in the conference, book of abstracts, 3 lunches, social meetings and refreshments during the poster sessions and coffee breaks.

### **Commercial participants**

Commercial enterprises are invited to present their products during the conference. Cost of participation 365 Euro, VAT not included (1500 PLN netto).

The fee covers: stand and poster table close to the conference room for presenting the products during the whole conference and one page in the book of abstracts for advertisements.

### **Forms of participation:**

Oral presentation on invitation of the organizers or selected from among submitted abstracts. All participants will have also an opportunity to present their achievements in the form of posters.

Two workshops: *Future of fuel cells* (keynote lecture: **R. Adzic, BNL, USA**) and *Nanoparticles at surfaces* (key-note lecture: **Z. Adameczyk, ICSC, Poland**) as well as two poster sessions are planned.

A special Issue of *Electrochimica Acta*, open to all participants, will be published after the conference.

**Abstract and registration form available at: <http://www.ik-pan.krakow.pl/issis2012/>**

Please, submit the abstracts and registration form before March, 15<sup>th</sup> to [ncissis@cyf-kr.edu.pl](mailto:ncissis@cyf-kr.edu.pl)  
The length of the abstract should not exceed 2 pages.

**Accommodation:**

Cracow, being a city of tourism offers plenty of possibilities for accommodation, ranging from inexpensive pensions (guest rooms) to five-star luxury hotels. Please, make your reservation by your travel agency or by yourself via internet, using (for instance):

<http://www.booking.com/city/pl/krakow.html>

<http://www.nawojka.bratniak.krakow.pl/>

Organizers will be also pleased to help you to find an inexpensive logging. Please, send us an e-mail with your request.

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**Plenary lectures, keynote lectures and invited oral presentations****Plenary lectures**

Schlögl, R.

*Structure of interfaces relevant in chemical energy conversion*

Więckowski, A.

*Oxygen Reduction Reaction by Porphyrin-Based (N4 macrocycles) Catalysts for Fuel Cells*

**Keynote lectures**

Adamczyk, Z.

*Biomolecule and Nanoparticle Adsorption Kinetics Derived from Microscopic Studies*

Adzic, R.

*Future of fuel cells*

## **Invited lectures**

Wezislá S., Podgaynyy N., Baltruschat, H.

*Molecular friction at electrodes: organic adsorbates*

Baranova, E.

*Electrochemical promotion of Au and Pt nanoparticles for oxidation of volatile organic compounds (VOCs) at low temperatures*

Bratek-Skicki, A.

*Determining mechanisms of fibrinogen adsorption at solid/liquid interfaces*

Cuesta, A.

*Combined ATR-SEIRAS and EC-STM Study of the Immobilization of Laccase on Chemically-Modified Gold Electrodes*

Dąbkowska, M. , Adamczyk, Z.

*Mechanisms of protein adsorption determined by AFM, XPS and streaming potential measurements*

Désilets, C., Lasia, A.

*Study of ethanol and acetaldehyde oxidation at Pt using Dynamic Electrochemical Impedance Spectroscopy (DEIS)*

Dudek, M.

*Composite solid fuels for solid oxide fuel cells*

Feliu, J.M.

*Reactivity of the different Pt sites*

Gasparotto, L. H. S., Gomes J. F., Ciapina E. Tremiliosi-Filho G.

*Influence of adsorbed polymers on electrocatalytic reactions*

Janowska, I.

*2D and 3D TEM investigations of carbon nanomaterials for catalysis*

Kamanina, N.

*Photophysics of nanostructured materials: photorefractive, photoconductive, dynamic features and interfaces*

Krawiec H., Vignal V., Schwarzenboeck E., Banas J.

*Role of alloying elements and plastic deformation in the passivity and electrochemical behaviour of Ti-6Al-4V in the ringer's solution at the microscale*

Lucas, C.

*In-situ studies linking the atomic structure to reactivity at the electrochemical interface*

Majchrzycki, Ł.

*AFM investigation of the lithium intercalation process into graphene oxide (GO) and reduced graphene oxide (rGO)*

Michna A., Adamczyk Z., Jamróży K.

*Kinetics of particle deposition studied by fluorescent imaging and streaming potential measurements*

Molenda, J.

*Functional materials for IT-SOFC*

Nichols, R. J.

*Single Molecule Electrical Measurements*

Pastor, E.

*New DEMS approaches for the study of fuel cell electrocatalysts*

Savinova, E.

*In situ spectroscopic monitoring of Platinum/ polymer electrolyte interface under controlled polarization*

Sulka, G.

*Anodization of metals for applications in nanotechnology*

Szklarczyk, M.

*Determination of oxidation charge and thickness of electrodeposited polymeric film on an example of electrodeposition of o-alkoxyanilines*

Uosaki, K.

*In situ XAFS studies on electrocatalytic reactions*

Vorotyntsev, M.

*AFM study of the growth of conducting polymer film on the electrode's edge and microband electrodes*

Warszyński, P.

*Electrochemical probing of multilayer films*

Żabiński, P.

*Hydrogen evolution on binary and ternary cobalt alloys deposited with superimposed magnetic field*