

ISE Division IV – Electrochemical Material Science

Division IV 2016 Final Report

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Meeting Sponsorship:

67th Annual Meeting ISE Meeting, 21-16 August, Den Hague, the Netherlands (2016)

- Division IV has organized and sponsored directly 3 symposia, and co-sponsored 2 more.
- Division IV has sponsored student poster awards in each of the symposia. (Total **830 Euro**).

Symposium 10: (Electroactive, Functionalized and Nanostructured Materials and Composites: Modern Trends in Synthesis and Applications)

Co-sponsored with Division 6.

The symposium is designed to cover an extensive area of various materials and composites of electrochemical interest, including electroactive/conjugated polymers, mixed electron-ion inorganic conductors, lithium-ion intercalation materials, various electrochemistry-related composite materials. Both their synthesis and applications will be among topics of this symposium. Especial accent will be made on original routes to synthesis of such materials and their composites, on systems possessing unusual properties, on their advanced applications in molecular electrochemistry, electroanalysis, (electro)catalysis and (bio)sensors, actuators, electrochemical energy and electrochromic devices, solar energy conversion, micro- and nanoelectronics.

Symposium Organizers

- Magdalena Skompska (Coordinator), University of Warsaw, Poland
- Peter Bressers, TNO, the Netherlands
- Marilia O.F. Goulart, Universidade Federal de Alagoas, Brazil
- Francesco Paolucci, Università di Bologna, Italy
- Philippe Vereecken, IMEC, Belgium
- Mikhail Vorotyntsev, M.V. Lomonosov Moscow State University, Russia

Symposium 13: (Corrosion: The Electrochemistry of Corrosion and Approaches to Corrosion Protection)

The symposium will cover all aspects of the corrosion behaviour from fundamental studies of passivity and its breakdown to industrial corrosion and protection. Of particular interest are in operando studies of the local electrochemistry of corrosion processes and electrochemical approaches to corrosion protection, including coatings and inhibitor technology. Papers which provide new insights or methods for understanding corrosion mechanisms will be particularly welcome.

Symposium Organizers

- Mary P. Ryan (Coordinator), Imperial College London, UK (m.p.ryan@imperial.ac.uk)
- Nick Birbilis, Monash University, Australia
- Shinji Fujimoto, Osaka University, Japan
- Santiago Garcia, Delft University of Technology, the Netherlands
- Wouter Hamer, Shell, the Netherlands
- Herman Terryn, Vrije Universiteit Brussel, Belgium

Symposium 14: (Combined Electro and Electrophoretic Deposition for Advanced Materials Synthesis)

The symposium is designed to cover the area of electrochemical technology involving electroplating, electrophoretic deposition (EPD) and their combinations. Contributions covering the synergistic use of electrodeposition (ED) and EPD are particularly encouraged.

Symposium Organizers

- Aldo R. Boccaccini (Coordinator), University of Erlangen-Nuremberg, Germany (aldo.boccaccini@ww.uni-erlangen.de)
- Begona Ferrari, CSIS Madrid, Spain
- Arjan Mol, Delft University of Technology, the Netherlands
- Marcel J. Rost, Leiden University, the Netherlands
- Mary P. Ryan, Imperial College London, UK
- Giovanni Zangari, University of Virginia, USA

Symposium 19: (Electrochemistry in Action) Sponsored by all divisions

This symposium will feature invited lectures from electrochemistry experts from industry and public organizations and will highlight applications of electrochemistry in a variety of fields.

Symposium Organizers

- Marc Koper (Coordinator), Leiden University, the Netherlands (m.koper@chem.leidenuniv.nl)
- Plamen Atanassov, University of New Mexico, USA
- Maarten Van Brussel, Metrohm Autolab, the Netherlands

19th ISE Topical Meeting, Auckland, New Zealand, April 17th-20th 2016.

- Division IV and Division I have co-organized and co-sponsored 19th ISE Topical Meeting: Electrochemistry at Modified Interfaces. Total number of participants was 220 from 35 countries.
- Division IV has sponsored student poster awards in each of the symposia. (Total **500 Euro**).

20th ISE Topical Meeting, Buenos Aires, Argentina, 19-22 March, 2017

- Division IV has approved additional funds to sponsor ISE topical meeting in Argentina in 2017 (Total **1000 Euro**). Funds can be used only to increase the participation of students.

Division IV Sponsored External Meetings in 2016

- *2016 Fall European Materials Research Society Meeting, (500 Euro)*
19-22 September 2016, Warsaw, Poland,
(General Requirement was to use funds of division 4 can be only to increase participation of the students to the meeting)
- *2nd African conference/workshop an international conference on all aspects of nanotechnology*
4-7th July, 2016, Nsukka, Nigeria (**350 Euro**)

Division IV chaired and sponsored ISE prizes in 2016

- *ISE-Prize for Electrochemical Material Science (Total 1000 Euro)*

The prize is awarded annually to a young electrochemistry on the basis of published work in the field of corrosion, electrodeposition or surface treatment.

Winner for 2016: Dr. [Claire Villevieille](#)