

Venue

The symposium will be held in the Auditorium of the Paul Scherrer Institut in Villigen. The location (bus stop Villigen PSI West) can be reached by public transport or by car via Baden or Brugg. Details may be found on the PSI website www.psi.ch.

Registration

Please use the online registration form on www.psi.ch/ec16.The registration fee can be paid by Visa or Master card. For other options contact us (electrochem@psi.ch). The package includes the book of abstracts, lunch and beverages during the coffee breaks. The registration expires if the registration fee is not paid by April 16.

Registration fee

Regular CHF 100 EUR 100

Reduced* CHF 50 EUR 50

* SCCER affiliate or student (please pro-

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Abstracts for Poster Contributions

Abstracts must be submitted electronically using the Microsoft Word template provided on the internet site: www.psi.ch/ec16.

The deadline for abstract submission is April 8, 2016.

Student Poster Prize: sponsored by the International Society of Electrochemistry.

The Symposium on the Internet

www.psi.ch/ec16

Accommodation

For the night of April 26/27, 2016, a set of rooms has been reserved at the following hotels:

Hotel Schloss Böttstein

5315 Böttstein

Phone: +41 56 269 16 16

Fax: +41 56 269 16 66

info@schlossboettstein.ch

www.schlossboettstein.ch

at a rate of CHF 110, incl. breakfast.

Best Western Hotel Du Parc

Römerstrasse 24, 5000 Baden

Phone: +41 56 203 15 15
Fax: +41 56 222 07 93
duparc@welcomehotels.ch
www.duparc.ch
rates starting at CHF 190, incl. breakfast.

Please make your reservation before April 15 directly with the hotel, mentioning the symposium and the code "ec16".

Contact Addresses

Conference secretary:

Paul Scherrer Institut Mrs. Cordelia Gloor 5232 Villigen PSI, Switzerland Phone: +41 56 310 29 19 E-Mail: ec16@psi.ch

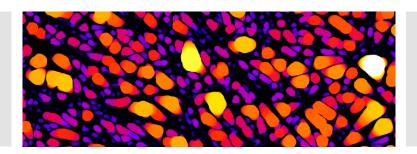
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Electrolytes

The Underestimated Player in Electrochemical Processes



32nd PSI Electrochemistry Symposium

April 27, 2016

Paul Scherrer Institut Auditorium West 5232 Villigen PSI, Switzerland

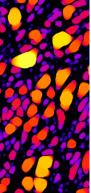
www.psi.ch/ec16

This Symposium is sponsored by:









Electrolytes – The Underestimated Player in Electrochemical Processes

Dear Guests

It has been a long way from the electrolyte used by Volta in his famous Zn/Cu pile, brine-soaked cloth or cardboard, to the highly specialized electrolytes in many of today's electrochemical devices, ranging from small batteries for hearing aids and ubiquitous mobile phone batteries to industrial scale electrolysis cells for aluminium or chlorine production.

Electrolytes in technical cells are designed and engineered to meet the specific requirements of the device, its application and the associated operating environment. The desired reactions take place at one or both of the electrodes, thus the importance of the electrolyte, providing selective transport for specific ions while blocking the passage of unwanted species, may be overlooked rather too easily.

The five distinguished speakers of this year's Electrochemistry Symposium will take us on a journey to the science, engineering and technology of selected classes of electrolytes in technically relevant and emerging electrochemical devices, such as lithium-ion batteries, high and low temperature fuel cells.

We look forward to welcoming you to the 32nd PSI Electrochemistry Symposium on April 27th, 2016, for inspiring discussions, a fruitful exchange of ideas and stimulating get-together.

Program

09:15 Welcome Coffee

- 09:30 Thomas J. Schmidt, PSI Villigen Welcome & Introduction
- 09:45 Truls Norby, University of Oslo, Oslo, Norway Inorganic protonic conductors
- 10:45 Klaus-Dieter Kreuer, Max-Planck-Institut für Festkörperforschung, Stuttgart, Germany Ion conducting polymers for fuel cells and batteries: Where polymer chemistry meets electrochemistry

11:45 Buffet-Lunch and Poster Session

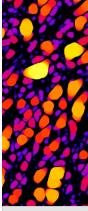
- 13:15 Wladyslaw Wieczorek, Politechnika Warszawska, Warszawa, Poland Designing new electrolytes for ambient temperature batteries
- 14:15 Takeshi Abe, Kyoto University, Japan Role of electrolyte solutions on rate capabilities for lithium-ion batteries
- 15:15 Thomas A. Zawodzinski, University of Tennessee, Knoxville, USA Energetics and transport of species in membranes exposed to concentrated solutions
- 16:15 Thomas J. Schmidt, PSI Villigen Summary & Farewell

Farewell Coffee

Photograph on front page

X-ray tomography image of gas diffusion layer for fuel cells with color coded pore size distribution.

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^{*}Paul Scherrer Institut's Electrochemistry Laboratory is the major institution of its kind in Switzerland. Our main research and development interests are directed towards energy conversion and storage at a technical scale (mobile, stationary, and portable applications of electrochemical systems), including many fundamental aspects of atomic and molecular electrochemistry.