### 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/ec18.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**

RegularCHF 100EUR 100Reduced\*CHF 50EUR 50\* SCCER affiliate or student (please pro-<br/>duce student ID at the registration desk)

## **Abstracts for Poster Contributions**

Abstracts must be submitted electronically using the Microsoft Word template provided on the internet site: www.psi.ch/ec18.

The deadline for abstract submission is April 6, 2018.

## The Symposium on the Internet www.psi.ch/ec18

### Accommodation

For the night of April 24/25, 2018, a set of rooms has been reserved at the following hotels:

Hotel Du Parc – Welcome Hotels Römerstrasse 24, 5400 Baden Phone: +41 56 203 1515 Fax: +41 56 222 0793 duparc@welcomehotels.ch www.duparc.ch CHF 199.00/night including breakfast, excl. CHF 2.50 City Tax/person/night. Deadline: April 13, 2018

### Trafo Hotel Baden

Bruggerstrasse 56, 5400 Baden Phone: +41 56 203 8080 Fax: +41 56 203 8081 home@trafohotel.ch www.trafohotel.ch CHF 179.00/night including breakfast, excl. CHF 2.50 City Tax/person/night Deadline: March 23, 2018

Please make your reservation directly with the hotel, mentioning the symposium and the code "EC18".

### **Contact Addresses**

### Conference secretary:

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# Pushing Limits of Characterization in Electrochemistry



# 34<sup>th</sup> PSI Electrochemistry Symposium

April 25, 2018

Paul Scherrer Institut Auditorium West 232 Villigen PSI, Switzerland

www.psi.ch/ec18

This Symposium is sponsored by:









# **Pushing Limits of Characterization in Electrochemistry**

## **Dear Guests**

In-depth characterization is a core competence required when developing novel electrochemically active materials and catalysts. In past years significant development has been made with diffraction, spectroscopic and microscopic methods to elucidate electronic and structural materials properties, often under operando conditions, in particular also with the availability of synchrotron or even free electron laser sources.

The six distinguished speakers of this year's Electrochemistry Symposium will take us on a journey to the science of selected methods applied to relevant problems of electrochemical storage and conversion materials.

We look forward to welcoming you to the 34<sup>th</sup> PSI Electrochemistry Symposium on April 25, 2018, for inspiring discussions, a fruitful exchange of ideas and a stimulating get-together.

### \*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.

# Program

# 09:30 Welcome Coffee

- 10:00 Felix N. Büchi, PSI Villigen Welcome & Introduction
- 10:15 Anders Nilsson, Stockholm University, Stockholm, Sweden X-ray operandi and ultrafast probing catalytic processes
- 10:45 Henrik Lemke, PSI Villigen Insights in molecular transitions by Free Electron Lasers

## 11:15 Coffee Break

11:45 Andrea E. Russell, University of Southampton, United Kingdom Operando XAS studies of oxygen reduction electrocatalysts

## 12:15 Buffet-Lunch and Poster Session

- 13:45 Vasiliki Tileli, École Polytechnique de Lausanne (EPFL) Electron microscopy diagnostics for oxygen electrocatalysis
- 14:15 Christian Masquelier, Université de Picardie Jules Verne, Amiens, France Crystallography of important materials for Li-ion and Na-ion batteries
- 14:45 Elena Savinova, Université de Strasbourg, France Near-Ambient Pressure Photoelectron Spectroscopy: a tool or a trap for electrochemists?
- 15:15 Felix N. Büchi, PSI Villigen

Summary

# 15:30 Farewell Coffee

## Photograph on front page

Neutron imaging at the NEUTRA beam line of the water distribution in a commercialsize fuel cell for the AutoStack CORE project (http://autostack.zsw-bw.de).

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