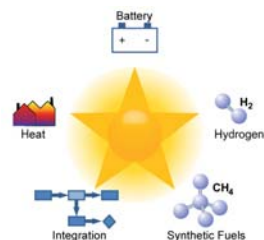


Heat & Electricity Storage

2nd Symposium



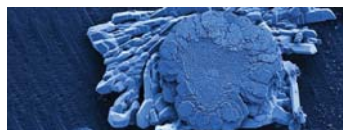
May 5, 2015
Paul Scherrer Institut

Room: Auditorium WHGA/001
5232 Villigen PSI (West)

Registration deadline: April 19, 2015

Electrochemical Energy Storage:

A Key for Future Energy Systems



May 6, 2015
Paul Scherrer Institut

Room: Auditorium WHGA/001
5232 Villigen PSI (West)

31st PSI Electrochemistry Symposium

Heat and Electricity Storage 2nd Symposium of the SCCER

May 5, 2015

- | | |
|-------|---|
| 9:00 | Registration and Coffee |
| 9:30 | Welcome and Introduction
Prof. Dr. Thomas J. Schmidt |
| 9:45 | An Overview of the UK Energy Storage Research Network and SuperGen Energy Storage Hub
Prof. Dr. Nigel Brandon , Imperial College, UK |
| 10:15 | A Combined Experimental and Theoretical Study of Sodiation and Desodiation Reactions of Tin and Tin Alloys: Interface and Bulk Processes
Dr. Claire Villevieille , Paul Scherrer Institut, CH |
| 10:45 | Li-ion Batteries for use in Public Transportation Infrastructure
Dr. Dipl.-Ing. Timothy Patey , ABB Schweiz AG |
| 11:15 | Coffee Break |
| 11:45 | Modelling and Simulation of High-Temperature TES Systems
Dr. Maurizio Barbato , SUPSI, CH |
| 12:15 | Adiabatic CAES: The ADELE-ING project
Dr.-Ing. Stefan Zunft , DLR, D |
| 12:45 | Meet and Eat: Poster Session |
| 14:15 | Catalysts for Water Splitting using Renewable Energy
Prof. Dr. Kevin Sivula , EPFL, CH |
| 14:45 | (Electro) reduction of CO ₂ : From Fundamentals Towards Applications
Dr. Peter Broekmann , Uni Bern, CH |
| 15:15 | sunfire Power-to-Liquids: Fuels and Chemicals from CO ₂ , Water and Renewable Energy
Christian von Olshausen , Sunfire, D |
| 15:45 | Coffee Break |
| 16:15 | Development and First Application of an Assessment Method for Energy Storage
Dr. Christian Bauer , Paul Scherrer Institut, CH
Dr. David Parra , Uni Genf, CH |
| 16:45 | The Energy Systems Integration Platform at PSI
Dr. Peter Jansohn , Paul Scherrer Institut, CH |
| 17:15 | Wrap-up |

Registration: Compulsory, Free of Charge

Electrochemical Energy Storage: A Key for Future Energy Systems

May 6, 2015

- | | |
|-------|---|
| 9:00 | Registration and Coffee |
| 9:30 | Welcome and Introduction
Prof. Dr. Thomas J. Schmidt |
| 9:45 | Sunlight-Driven Hydrogen Formation by Membrane Supported Photoelectrochemical Water Splitting
Prof. Dr. Nate Lewis
California Institute of Technology, USA |
| 10:45 | Electrolyte-less Design of PEC Cells for Solar Fuels
Prof. Gabriele Centi
University of Messina, Italy |
| 11:45 | Meet and Eat: Poster Session |
| 13:00 | The Potential of Hydrogen for Future Energy Systems
Prof. Dr. Detlef Stolten
Research Center Jülich, Germany |
| 14:00 | Electrolytes as Key to New Battery Technologies
Prof. Dr. Martin Winter
University of Münster, Germany |
| 15:00 | Recent Advances on Li-batteries and Beyond
Prof. Dr. Jean-Marie Tarascon
Collège de France, Paris, France |
| 16:00 | Summary
Prof. Dr. Thomas J. Schmidt |

Farewell Coffee

Registration Fees

Regular CHF 100 EUR 100

Student* CHF 50 EUR 50

* please produce student ID at the registration desk



In cooperation with the CTI

Energy funding programme
Swiss Competence Centers for Energy Research

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation

Commission for Technology and Innovation CTI



The SCCER

Within the framework of the seven SCCER (Swiss Competence Centers for Energy Research) we do active research on:

Advanced battery and battery materials with focus on lithium- and sodium ion type batteries. In terms of energy density, cost and the high explorative area of beyond li-ion technologies.

The heat storage focuses on building applications, advanced adiabatic compressed air storage (AA-CAES), pumped heat electric storage (PHES), high-temperature process heat.

The emerging technologies in the field including redox flow batteries, radically lower cost catalysts, and high energy density liquid storage routes are the main focus of the topic storage and production of hydrogen.

The development of advanced catalysts for CO₂ reduction (catalytic and electro catalytic) aiming at an efficiency of >30% and with a selectivity of >60% for syngas/hydro-carbons is planned.

The different sections of the SCCER Heat and Electricity Storage need to be integrated in a wider context to become powerful. Questions of technology interaction is part of the research, covering a wide range of aspects from socio-economical questions to system integration and modeling are also addressed.

We are a virtual center, hosted at Paul Scherrer Institut. The consortia has more than 25 academic and industrial partners across Switzerland. For more information see the web page www.sccer-hae.ch

SCCER Heat and Electricity Storage
c/o Paul Scherrer Institut
OVGA 05
5232 Villigen PSI
info@sccer-hae.ch



Registration/Travel

Please use the online registration form at:
<http://www.psi.ch/ec15>.

The registration deadline is April 19, 2015. 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 24.

Registration fee:

SCCER Heat and Electricity 2nd Symposium on May 5, 2015 compulsory but free of charge.

31st PSI Electrochemistry Symposium

Electrochemical Energy Storage:

A Key for Future Energy Systems on May 6, 2015:

Regular CHF 100 EUR 100

Student* CHF 50 EUR 50

*please produce student ID at the registration desk

The ECL

The Electrochemistry Laboratory (ECL), established 1988, is part of the General Energy Research Department (ENE) at the Paul Scherrer Institut. The laboratory comprises two sections and five interacting groups dealing with:

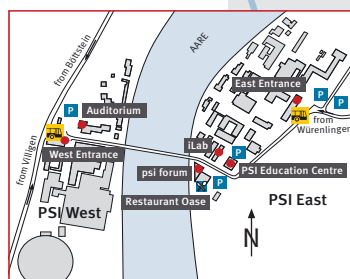
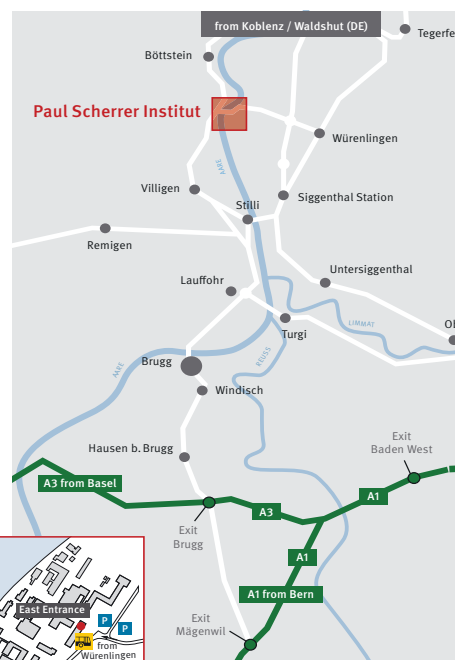
- Electrochemical Energy Storage (Batteries)
- Membranes and Electrochemical Cells
- Fuel Cell Systems
- Advanced Diagnostics (Neutron and Synchrotron Imaging).

PSI's Electrochemistry Laboratory is Switzerland's largest center for electrochemical research.

Abstracts for Poster Contributions

Abstracts must be submitted electronically using the template provided on the internet site <http://www.psi.ch/ec15>.

For accommodation and further information see the conference web page: www.psi.ch/ec15.



Conference Webpage:

www.psi.ch/ec15

Contact Addresses:

Conference secretary:

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Prof. Dr. Thomas J. Schmidt
5232 Villigen PSI, Switzerland