



Lithium
Sulphur
Superbattery
Exploiting
Nanotechnology

LISSEN is a large scale collaborative project within the European Union Seventh Framework Programme, which aims to identify and develop nanostructured electrode and electrolyte materials to promote practical implementation of the high energy lithium-sulphur battery.

The key objectives of **LISSEN** include:

- ⇒ Development and testing of new lithium metal-free battery configurations based on the use of lithiated silicon anode and nanostructured sulphur-carbon cathode
- ⇒ Development and optimization of the electrolyte solutions and nanostructured polymer membranes
- ⇒ Modelling and simulations of the performance and lifetime of the batteries for the further materials optimization
- ⇒ Scaling-up processes of electrode and electrolyte materials preparation
- ⇒ Evaluation of the performance and safety of the batteries
- ⇒ Development of a recycling process for future Li-S batteries to recover high purity lithium salts

ORGANIZING COMMITTEE:

Dr. Margret Wohlfahrt-Mehrens (ZSW), Prof. Dr. Bruno Scrosati (Sapienza Innovazione), Prof. Dr. Arnulf Latz (DLR), Riccardo Carelli (Sapienza Innovazione), Prof. Dr. Stefano Passerini (HIU)

HIU organizers: Varvara Sharova, Henrik de Vries

REGISTRATION:

Please return the registration form to Varvara Sharova (HIU) varvara.sharova@kit.edu by latest **July 10th, 2015** or earlier if the maximum room attendance (80) is reached

PROJECT PARTNERS:



SAPIENZA INNOVAZIONE

VOLKSWAGEN

AKTIENGESELLSCHAFT



CHALMERS



Johnson Matthey



STENA

Innovative recycling



International Workshop 2015

**„TOWARDS NEXT
GENERATION LITHIUM-ION
BATTERIES“**

27th July 2015

Ulm, Germany

Organizers:



ulm university

universität
uulm



This project has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 314282

Helmholtz Institute Ulm (HIU) was founded in 2011 by Karlsruhe Institute of Technology (KIT) in cooperation with the German Aerospace Center (DLR) and the Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW).

Different working groups combine their profound expertise in fundamental and practical research for the next generation of electrochemical energy storage.



Ulm is the university city in the south of Germany (Baden-Württemberg) with the picturesque city center, located directly at the river Danube. Ulm is not only famous for the tallest church steeple in the world, but also as a home city of Albert Einstein, born here in 1879.

The university of Ulm was founded in 1961. More than 10,000 students are educated there in the fields of medical and natural sciences.

INVITED SPEAKERS:

- ◆ Prof. Dr. Maximilian Fichtner (Helmholtz Institute Ulm/Karlsruhe Institute of Technology, Germany)
„Recent progress in the development of Mg-S and Li-S cells“
- ◆ Dr. Holger Althues (Fraunhofer IWS, Germany)
„Carbon materials for enhanced sulfur cathodes“
- ◆ Prof. Dr. Diana Golodnitsky (Tel-Aviv University, Israel)
„Facile synthesis and characterization of novel solid polymer-in-ceramic electrolyte“
- ◆ Dr. Klaus Leitner (BASF, Germany)
„What is the Future of Lithium-Sulfur Batteries? A Brief Discussion of Potential Issues and Hurdles“
- ◆ Dr. Stefan Koller (VARTA, Austria)
„Si anodes for Li-ion batteries“
- ◆ Dr. Yuichi Aihara (Samsung R&D Institute, Japan)
„All Solid State Li-Sulfur Battery using a Li_3PS_4 Ionic Conductor“

FOCUS OF THE WORKSHOP

- ◆ Battery components
- ◆ Electrode materials and up-scaling
- ◆ Battery assembly

LOCATION:

Helmholtz Institute Ulm
Helmholtzstrasse 11 89081 Ulm
Germany

LANGUAGE: English

NO PARTICIPATION FEE

CONTACT

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FURTHER INFORMATION

www.hiu-batteries.de/en/news/spalte-1/events