

Symposium on Electrochemical Energy Conversion and Storage

On the occasion of the 70th birthday of Prof. Ulrich Stimming

October 20, 2016, Institute for Advanced Study, TUM

Scope

The increasing worldwide demand in energy and individual mobility can only be met if electricity is generated from renewable sources, and if a complete transition in transportation to electric drivetrains is taking place. Electrochemical Energy Conversion and Storage is a key technology for both fields of application. Intermittent renewable energy sources like wind and solar require large capacities of energy storage, and therefore affordable and green battery technology. The widespread deployment of electric mobility depends on the development of batteries with better energy density, lower cost and improved safety, or on fuel cells with more active catalysts, reduced cost and enhanced lifetime. Tremendous progress has been made in these areas in the past years. At TUM, several faculties are working on electrochemical fundamentals of these technologies and electric mobility in national and international Projects.

The scope of this one day symposium is to review most recent developments in the areas of fuel cells and battery technologies, including redox flow batteries and aqueous metal ion batteries. Several internationally renowned speakers have been invited to give plenary presentations. In addition a poster session is planned. The symposium is jointly organized by several TUM Faculties and TUM-IAS.

Prof. Dr. Ulrich Stimming

Prof. Stimming's main research interests comprise electrified interfaces, electrochemistry, nanoscience and energy conversion and storage. He was Professor of Physics at the TUM Department of Physics E19 between 1997 and 2011 and also a member of the Department of Chemistry. At the same time, he was on the board of directors at the Bavarian Center for Applied Energy Research (ZAE).

During this time, he founded the scientific journal „Fuel Cells-From Fundamentals to Systems”, published by VCH-Wiley where he is still Editor-in-Chief. He coordinated the Sino-German Network on Electric Mobility, was a Carl v. Linde Senior Fellow of the TUM Institute for Advanced Study and was very active in TUM CREATE Singapore as PI, Scientific Advisor, and 2011-2012 as CEO. Since 2014, he is Professor in the School of Chemistry at Newcastle University, United Kingdom.



Prof. Ulrich Stimming

Preliminary Program

09:00 – 11:00	Plenary Session
11:15 – 13:00	Keynote Lectures
13:00 – 14:00	Lunch Break, Posters
14:00 – 16:20	Keynote Lectures
16:40 – 18:20	Short Presentations
18:30 – 19:30	Poster Session
19:30 – 22:00	Bavarian Dinner

Speakers

Prof. M. Watanabe, Yamanashi University, Japan
 Prof. A. Friedrich, DLR, Germany
 Prof. D. Jones, CNRS, France
 Prof. P. Holtappels, DTU, Denmark
 Prof. N. Alonso-Vante, Université de Poitiers, France
 Prof. A. Groß, Universität Ulm, Germany
 Prof. U. Kortz, Jacobs University Bremen, Germany
 Prof. M. Eikerling, Simon Frazer University, Canada
 Prof. A. Bandarenka, TUM, Germany
 PD Dr. F. Esch, TUM, Germany
 Dr. J. Friedl, Newcastle University, UK
 PD Dr. O. Schneider, TUM, Germany

Registration and Poster Session

Poster Presentations in all areas of Electrochemical Energy Conversion and Storage will be welcome. Please submit a short abstract not exceeding 1 page by October 10 via email to PD Dr. Oliver Schneider at oliver_m.schneider@tum.de. Please register for the meeting by October 7 to the same email address (no fees).

