



FRIEDRICH-SCHILLER-  
UNIVERSITÄT  
JENA



Chemisch-Geowissenschaftliche Fakultät

Center for Energy and Environmental  
Chemistry Jena (CEEC Jena)

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Chemisch-Geowissenschaftliche Fakultät

Institut für Organische  
Chemie und Makro-  
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Laboratory for Organic and  
Macromolecular Chemistry  
(Lehrstuhl II)

<http://www.ceec.uni-jena.de/>

Jena, 24. April 2018

## EINLADUNG

Am Mittwoch, **16. Mai 2018**, spricht um **10:00 Uhr**  
im Hörsaal des ZAF, Philosophenweg 7, 07743 Jena

***Herr Prof. Dr. Maximilian Fichtner***

Direktor des Helmholtz-Instituts Ulm für Elektrochemische  
Energiespeicherung (HIU)

zum Thema

***“Alternative battery chemistries – developments and challenges”***

Alle Interessenten sind herzlich eingeladen.

gez. Prof. Dr. Ulrich S. Schubert

Es handelt sich um eine Veranstaltung des Center for Energy and Environmental Chemistry Jena, (CEEC).

## CV

Maximilian Fichtner received his Ph.D. in Chemistry / Surface Science at the Karlsruhe University. He had a position as officer to the Board of Directors at the Karlsruhe Research Center, started a new working group on *Microprocess Engineering* in 1997, and founded the *Energy Storage Materials* group at the Karlsruhe Institute of Technology/Institute of Nanotechnology in 2001, which he is still leading. He has been active in a number of functions such as Chairman of the *GORDON Research Conference on Metal Hydrogen Systems* (2013), Chairman of the *1<sup>st</sup> and 2<sup>nd</sup> International Symposium of Magnesium Batteries (MagBatt)* in 2016 and 2018, and member of various Advisory Boards. He has been co-ordinator of several EU projects and projects of the German Federal Government (BMBF and BMWi).

In 2013 he accepted a call by the Ulm University as a full professor (W3) for Solid State Chemistry in conjunction with the head of the Materials Department at the new Helmholtz-Institute Ulm for Electrochemical Storage (HIU). Since July 2015 he is Executive Director of the institute.

His current research interest is on novel principles for energy storage and related materials in insertion and conversion-type battery systems. Recent work has been focused on Li-rich FCC materials, Li-S batteries, chloride ion batteries, fluoride ion batteries, and magnesium batteries.

He has published more than 250 research and conference papers and is (co-)author of 20 patent applications. His h index is 42. More details at [https://de.wikipedia.org/wiki/Maximilian\\_Fichtner](https://de.wikipedia.org/wiki/Maximilian_Fichtner)

### **Abstract:**

The presentation will discuss current motivation and results of recent work on Li-free systems for electrochemical storage. While Na ion batteries are regarded as a “drop-in” technology and first comparably mature systems have already reached cell level, new ways to enabling Mg- and Al-batteries are under investigation at the moment. Results from inorganic and organic electrode materials will be shown and challenges will be outlined that must be overcome to eventually enable powerful, sustainable and safe systems based on post-Li technology.