Conference Venue

Magdeburg is the capital city of the federal state of Saxony-Anhalt, Germany situated on the Elbe River. The more than 1200 years long history of Magdeburg is strongly related to Otto I, the first Holy Roman Emperor and founder of the archbishopric of Magdeburg and Otto von Guericke, a scientist, inventor, politician and the name patron of Otto von Guericke University in Magdeburg. Magdeburg was destroyed twice in its history. After the first destruction, the Magdeburg was rebuilt like a large Prussian fortress Magdeburg. Most remains of this fortress disappeared over the time. One of the last witnesses of that fortress is the fortress Mark (See picture on the back, inside Festung Mark), our conference venue.

Travel

By Plane

The nearest airports are Hanover (140 km), Leipzig (150 km) or Berlin (150 km). From there take the train to Magdeburg.

By Train

With the Deutsche Bahn (DB) to the main station Magdeburg-Hauptbahnhof (www.bahn.de).

By Car

By car, take the B1 to the Festung Mark. Sufficient parking spaces are located in the immediate vicinity of the Employment Agency or on the large parking lots Listemannstraße and Schleinufer.

Contact Details

Scientific Issues

Thomas Turek Phone: +49 5323 722 184 Fax : +49 5323 729 92 184 E-mail : turek@icvt.tu-clausthal.de

Registration Issues/Conference Secretariat

Susanne Wandenälis Phone: +49 391 6110-317 Fax : +49 391 6110-353 E-mail : gde2019@mpi-magdeburg.mpg.de

Max Planck Institute for Dynamics of Complex Technical Systems Magdeburg Sandtorstrasse 1 D-39106 Magdeburg Germany



MAX PLANCK INSTITUTE FOR DYNAMICS OF COMPLEX TECHNICAL SYSTEMS MAGDEBURG



Symposium on Insights into Gas Diffusion Electrodes

From Fundamentals to Industrial Applications

Magdeburg, Germany, September 23 – 25, 2019



www.mpi-magdeburg.mpg.de/gde-symposium-2019

Organizing Committee

Thomas Turek (TU Clausthal) Tanja Vidaković-Koch (MPI Magdeburg) Kai Sundmacher (OvGU and MPI Magdeburg)







... Universität Stuttgart

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Scientific Scope

The Symposium on "Insights into Gas Diffusion Electrodes: From Fundamentals to Industrial Applications" is an initiative of the Research Unit 2397 approved by German Research Foundation (DFG) in July 2016. The main research focus of the project "Multiscale Analysis of Complex Three-Phase Systems: Oxygen Reduction at Gas Diffusion Electrodes in Aqueous Electrolyte" are the complex processes within gas diffusion electrodes (GDEs).

GDEs have broad applications in different electrochemical devices such as (bio)-fuel cells, (bio)-electrolyzers, and batteries for energy as well as inorganic and organic synthesis applications. Although very different chemistries and materials are involved, all of these examples share some similarities related to so-called "three phase boundaries" as well as pronounced mass transfer resistances related to slow diffusivity and/or low solubility of gases.

Main Topics

- Advanced methods for GDE preparation (devoted to control of local arrangement of GDE materials and porosity) and simulation driven methods for GDE structure optimization.
- Study of reaction kinetics and reaction mechanisms involving gaseous products or reactants.
- Advanced characterization methods for GDEs (dynamic, in-situ, and operando studies).
- Multiscale modeling of GDE operation including reaction and transport resistances.

Plenary Speakers

Aimy Bazylak, Mechanical & Industrial Engineering, University of Toronto, Canada

Elisabeth Lojou, CNRS Marseille, France

Marian Chatenet, Grenoble Institute of Technology, France

Felix N. Büchi, Paul Scherrer Institute, Switzerland

Abstracts

The abstracts should be written in English and limited to a single page. Please download and use the abstract template in Microsoft Word on our website for abstract preparation. Abstracts can be uploaded at the website:

www2.mpi-magdeburg.mpg.de/reg/gde2019/submission _form.html

Additional Information

www.mpi-magdeburg.mpg.de/gde-symposium-2019 www.for2397.tu-clausthal.de

Important Dates (Deadlines)

Abstract submission opening: March 1, 2019 Abstract submission deadline: June 1, 2019 Notification of acceptance for oral and poster contributions: July 1, 2019 Early bird registration: July 15, 2019 Deadline for oral presentations: August 31, 2019

Registration & Fees

| Symposium Fee * | Before July 15th / € | After July 15th / € |
|-----------------|----------------------|---------------------|
| Regular | 350 | 400 |
| Student | 200 | 250 |

* The symposium fee includes lunches, coffee breaks and conference dinner.

Scientific Committee

Ulrike Krewer (TU Braunschweig) Ingo Manke (Helmholtz Zentrum Berlin) Ulrich Nieken (University Stuttgart) Christina Roth (FU Berlin) Wolfgang Schuhmann (RBU Bochum) Thomas Turek (TU Clausthal) Tanja Vidaković-Koch (MPI Magdeburg)

