**Report on the ISE sponsored “2nd Symposium on Insights into Gas Diffusion Electrodes: From Fundamentals to Industrial Applications” from 5th – 7th September 2022 in the Johanniskirche in Magdeburg, Germany**

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This second symposium took place three years after the first meeting in 2019 and had again about 100 participants from 10 countries, who presented and discussed various aspects of gas diffusion electrodes in different electrochemical devices such as (bio)-fuel cells, electrolyzers, and batteries for energy as well as synthesis processes. Overall, 29 oral presentations including three plenary lectures and eight invited lectures were given and 32 posters were presented. For the best posters, three prizes were awarded. On behalf of the International Electrochemical Society, the German Regional Representative Prof. Ulrike Krewer welcomed the conference participants. Members of the scientific committee were Ulrike Krewer (Karlsruhe), Ingo Manke (Berlin), Ulrich Nieken (Stuttgart), Christina Roth (Bayreuth), Wolfgang Schuhmann (Bochum), Thomas Turek (Clausthal-Zellerfeld) and Tanja Vidaković-Koch (Magdeburg). The three plenary talks represented important aspects of modern developments in gas diffusion electrodes:

* Prof. Doris Segets, University of Duisburg-Essen, Germany “Hierarchically Structured Electrodes: Their Design, Implementation and Characterization to Make Academic Developments Relevant”
* Dr. Adam Z. Weber, Lawrence Berkeley National Laboratory, USA “Importance of Transport in Electrochemical Energy-Conversion Technologies”
* Prof. Eileen Yu, Newcastle University, UK “Gas Diffusion Electrodes for CO2 Electrochemical Reduction”

Key topics of the symposium such as preparation, characterization, mathematical modeling, and industrial uses of gas diffusion electrodes were introduced by 8 keynote speakers: Martin Oschatz (Jena, Germany), Mehtap Özaslan (Braunschweig, Germany), Ulf-Peter Apfel (Bochum, Germany), Wolfgang Schuhmann (Bochum, Germany), Luis Fernando León Fernández (VITO, Belgium), Jasna Jankovic (Conneticut, USA), and Praveen Narangoda (DeNora, Italy). Since we received financial support by ISE Division 3, the German Research Foundation (DFG), the Gesellschaft Deutscher Chemiker (GDCh), and Covestro AG, the conference fee was relatively low and included free refreshments, snacks, lunch, and the conference dinner at the Millenium Tower in Magdeburg. The next symposium of this series is planned to be hosted in 2025. Further details of the meeting can be found on the website: https://www.mpi-magdeburg.mpg.de/gde2022.

