

Report on travel grant no. 3896 of the Max Buchner Research Foundation

„ Understanding CO₂ Reduction in Organic Electrolytes: the Role of α -Brass Catalysts and Water Content “

*75th Annual Meeting of the International Society of Electrochemistry
August 18th to 23rd, 2024*

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From August 18th to 23rd, 2024, the Annual Meeting of the International Society of Electrochemistry took place in Montreal, one of the largest scientific communities in the field of electrochemistry, with more than 900 researchers from different countries.

I had the opportunity to give a presentation on the topic of electrochemical CO₂ reduction, a highly relevant topic that is directly related to climate change. I was able to present the research results of my habilitation. In detail, the lecture dealt with the conversion of CO₂ on copper and brass electrodes in organic electrolytes to chemical products using electricity. Using experimental and model-based approaches, I highlighted the bottleneck of the process and presented suggestions for overcoming this bottleneck by new catalyst designs and process optimization.

The lecture gave me great visibility and resulted in many discussions and new contacts with scientists. I would therefore like to thank the Max Buchner Travel Grant for the financial support!