

Reducing CO₂ electrochemically to Ethene

Andreas Engelbrecht defended his doctoral thesis



Congratulations!

Andreas Engelbrecht defended his doctoral thesis about “Materials and methods for the electrochemical reduction of CO₂” (German original title “Ausgewählte Materialien und Methoden für die elektrochemische Reduktion von CO₂”) on July 10th, 2019.

Special thanks to Prof. Maximilian Fleischer for his support as the second examiner!

The research work for his dissertation was conducted at the Department of Functional Materials, a member of the Center for Energy Technology (ZET) in a joint cooperation with an industrial partner.

Dr. Engelbrecht already published parts of his thesis in peer-reviewed journals. Examples are:

A. Engelbrecht, C. Uhlig, O. Stark, M. Hämmerle, G. Schmid, E. Magori, K. Wiesner-Fleischer, M. Fleischer, R. Moos, On the Electrochemical CO₂ Reduction at Copper Sheet Electrodes with Enhanced Long-Term Stability by Pulsed Electrolysis, *Journal of the Electrochemical Society*, **165**, J3059-J3068 (2018), doi: 10.1149/2.0091815jes

A. Engelbrecht, M. Hämmerle, R. Moos, M. Fleischer, G. Schmid, Improvement of the selectivity of the electrochemical conversion of CO₂ to hydrocarbons using cupreous electrodes with in-situ oxidation by oxygen, *Electrochimica Acta*, **224**, 642-648 (2017), doi: 10.1016/j.electacta.2016.12.059



From left to right: Prof. Döpfer, Prof. Moos, Dr. Engelbrecht, Prof. Roth, and Prof. Fleischer