Modelling Mixed Potential Gas Sensors

Thomas Ritter defended his doctoral thesis

BERC Bayreuth Engine Research Center

Congratulations!

Thomas Ritter defended his doctoral thesis about “Investigation and modelling of electrochemical processes of electrodes for mixed potential sensors” (German original title “Untersuchung und Modellierung der elektrochemischen Vorgänge von Elektroden für Mischpotential-Sensoren”) on July 18th, 2019.

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

T. Ritter, J. Lattus, G. Hagen, R. Moos, A finite element model for mixed potential sensors, *Sensors and Actuators B: Chemical*, **287**, 476-485 (2019), doi: 10.1016/j.snb.2019.02.052

T. Ritter, J. Lattus, G. Hagen, R. Moos, Effect of the Heterogeneous Catalytic Activity of Electrodes for Mixed Potential Sensors, *Journal of the Electrochemical Society*, **165**, B795-B803 (2018), doi: 10.1149/2.0181816jes

T. Ritter, G. Hagen, J. Lattus, R. Moos, Solid state mixed potential sensors as direct conversion sensors for automotive catalysts, *Sensors and Actuators B: Chemical*, **255**, 3025-3032 (2018), doi: 10.1016/j.snb.2017.09.126

T. Ritter, G. Hagen, J. Kita, S. Wiegärtner, F. Schubert, R. Moos, Self-Heated HTCC-based Ceramic Disc for Mixed Potential Sensors and for Direct Conversion Sensors for Automotive Catalysts, *Sensors and Actuators B: Chemical*, **248**, 793-802 (2017), doi: 10.1016/j.snb.2016.11.079

From left to right: Prof. Altstädt, Prof. Moos, Dr. Ritter, Prof. Roth, and Prof. Guth