

Development of glass-based separators for lithium-ion batteries Ulrich Schadeck defended his doctoral thesis



Congratulations!

Ulrich Schadeck defended his doctoral thesis about “Development of glass-based separators for lithium-ion batteries” (German original title “Entwicklung glasbasierter Separatoren für Lithium-Ionen-Batterien”) on December 5th, 2019.

Initially, the research work for his dissertation was conducted at the laboratory of the late colleague Prof. Willert-Porada. After she passed away, research was continued at the Keylab Glass Technology at the Faculty of Engineering Science in strong collaboration with the Bavarian Center for Battery Technology (Bayerisches Zentrum für Batterietechnik, BayBatt).

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

U. Schadeck, M. Hahn, T. Gerdes, W. Krenkel, M.A. Danzer, R. Moos, Sodium Borosilicate Glass Separators as an Electrolyte Additive Donor for Improving the Electrochemical Performance of Lithium-Ion Batteries, *Journal of the Electrochemical Society*, **166**, A3416-A3424 (2019), doi: 10.1149/2.1011914jes

U. Schadeck, K. Kyrgyzbaev, H. Zettl, T. Gerdes, R. Moos, Flexible, Heat-Resistant, and Flame-Retardant Glass Fiber Nonwoven/Glass Platelet Composite Separator for Lithium-Ion Batteries, *Energies*, **11**, 999 (2018), doi: 10.3390/en11040999

U. Schadeck, K. Kyrgyzbaev, T. Gerdes, M. Willert-Porada, R. Moos, Porous and non-porous micrometer-sized glass platelets as separators for lithium-ion batteries, *Journal of Membrane Science*, **550**, 518-525 (2018), doi: 10.1016/j.memsci.2017.10.061



From left to right: Prof. Brüggemann, Prof. Roth, Dr. Schadeck, Prof. Moos, and Prof. Danzer