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As the state of the art in battery technology still contains organic based and therefore flammable electrolyte materials new electrolyte materials need to be investigated. As one of the possible approaches ceramic electrolyte materials which do not contain the risk of thermal runaway are in the focus of our research. I will present a glimpse of the work we have done during the last years in our group on solid state electrolyte materials. For using these materials in future applications various issues like processing, optimizing the battery chemistry and packaging have to be taken into account. In my talk I will present an approach for solving an issue of the interfacial stability between the solid state electrolyte and the electrode materials, which enables comparably high charge and discharge rates.

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| 2013 – 2015 | Postdoctoral researcher, Research center Jülich, Germany |
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