



## Seminar im Rahmen des GRK 2078

Referee: **Prof. Dr.-Ing. Stefan Hartmann** 

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Date: Tuesday, February 9, 2021

Time: 14:00 h

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Title: Problems in Curing of Epoxy Resins. From Experiments to Simulations

## Abstract

Problems in Curing of Epoxy Resins. From Experiments to Simulations Stefan Hartmann, Chris Leistner

Curing processes of epoxy resins imply an exothermic reaction, which can lead to a strong increase in temperature. In addition, this is associated with shrinkage of the material, which can lead to unwanted residual stresses. The aim is to be able to describe such chemothermomechanical processes, as they can lead to damage in the material in many applications. This reveals the question of conducting suitable experiments, the development of a thermomechanically consistent constitutive model, the unambiguous or reliable determination of the material parameters from the measurement data, and the numerical treatment, here within the framework of the finite element method.

Alle Interessenten sind herzlich eingeladen.

Prof. Dr.-Ing. Thomas Böhlke (Sprecher des GRK 2078)