

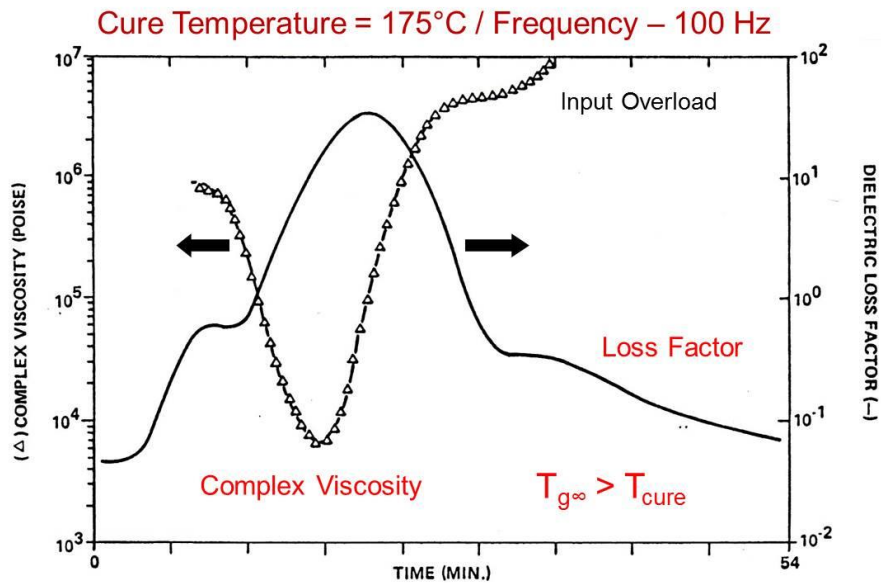
Dielectric Cure Monitoring of Thermosets

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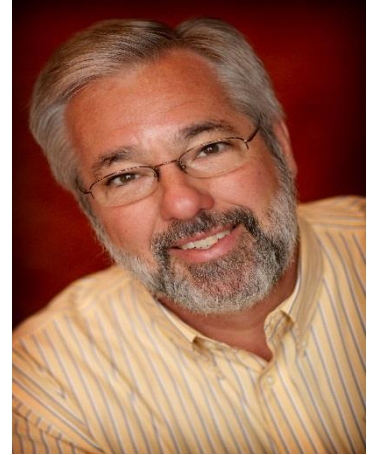


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Dielectric Cure Monitoring of Thermosets

This eBook will cover my extended series of posts covering the dielectric cure monitoring of thermosets. In previous posts I discussed thermoset chemistry and curing. A key aspect of understanding thermosets and their applications is to have a basic knowledge of some of the key testing methods used to characterize both the curing and final properties. In our previous eBook, *Characterization of Thermosets*, we covered the most common thermal analysis methods including an introduction to curing kinetics. In our recent eBook on *Rheology of Thermosets* we provided a comprehensive treatment of rheological methods used in the processing of thermosets. In this eBook, we will provide a solid background in the basics of dielectric methods and provide numerous examples of practical application of dielectric cure monitoring



In this eBook, the following topics will be covered:

- Introduction to dielectric measurements
- Dielectric cure monitoring during isothermal and non-isothermal curing
- Simultaneous measurement of the viscosity and the dielectric loss factor
- How dipoles contribute to the dielectric signal
- Lamination process monitoring case study
- Types of dielectric sensors
- Equipment used for dielectric cure monitoring
- Practical examples of using dielectric cure monitoring
- Do's and Don'ts for dielectric cure monitoring