NANOHOUR

Wednesday, May 2, 2007
3:00 PM
Beckman Institute - Room 3269

Survey of Ruthenium Metathesis Catalysts for Ring Opening Metathesis Polymerization-Based Self-Healing Applications

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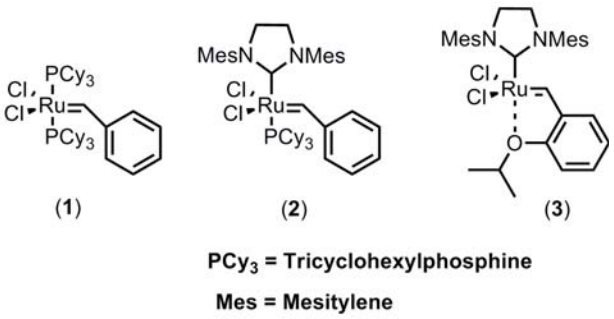
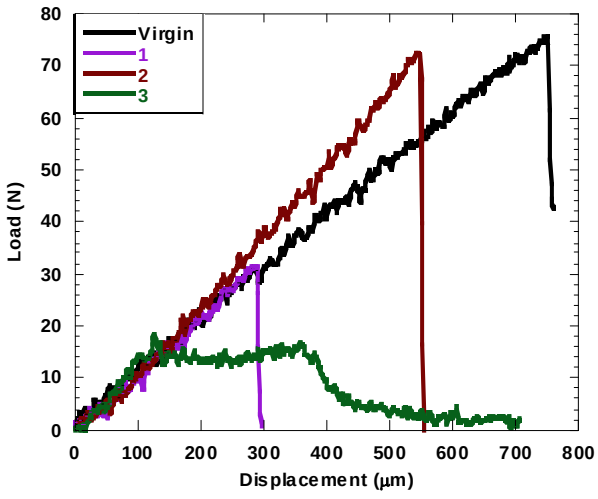
Existing Ring Opening Metathesis Polymerization (ROMP)-based self-healing polymers are based on 1st generation Grubbs' catalyst. However, the use of this catalyst in self-healing polymers results in a system with processing and application limitations due to the catalyst's chemical and thermal instability. The present work entails a comparison of 1st generation Grubbs' catalyst, 2nd generation Grubbs' catalyst and Hoveyda-Grubbs' 2nd generation catalyst within the context of preparation, testing and application in self-healing polymers with a variety of functional properties. Grubbs' 2nd generation catalyst emerges as the most versatile catalyst for a variety of self-healing polymer applications.





Coffee and cookies will be served.
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