

Abstract Submitted
for the MAR11 Meeting of
The American Physical Society

Memory Effects in Strained Polymer Networks Caused By Multiple Stages of Crosslinking JOANNE BUDZIEN, Frostburg State University — Polymer networks crosslinked in multiple strain states usually are analyzed with the independent network model. For networks that undergo scission in addition to crosslinking, however, the networks have been shown not to be completely independent. Even with complete removal of all crosslinks from a given network reacted in a particular strain state, the system still responds as though a portion of the original network remains. This talk will present simulation results of a coarse-grained model that has multiple networks with crosslinking and scission occurring in stages.

Joanne Budzien
Frostburg State University

Date submitted: 19 Nov 2010

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