

Abstract Submitted
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Dynamics in Polymer-Clay Gels as studied by Rheology and Scattering GUDRUN SCHMIDT, Louisiana State University, ELENA LOIZOU, Louisiana State University, LIONEL PORCAR, NIST, PAUL BUTLER, NIST, LOUISIANA STATE UNIVERSITY TEAM, NIST COLLABORATION — We discuss the shear orientation and relaxation of network like polymer-clay gels and solutions using rheology and small angle scattering. The orientation of synthetic Laponite clay particles under shear is compared to the shear orientation of natural Montmorillonite particles under similar conditions. After cessation of shear, the relaxation of Laponite particles within a polymer clay network is found to occur within few seconds while large montmorillonite particles relax within hours.

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