

Abstract Submitted  
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**Phase Separation Mechanism of Polybutadiene/Polyisoprene Blends Under Oscillatory Shear Flow**<sup>1</sup> CHARLES C. HAN, Dr., Prof., RUOYU ZHANG, HE CHENG, XIA DONG, Dr., Prof. — Viscoelastic polymer blends of polybutadiene (PB)/low vinyl content polyisoprene (LPI), with a lower critical solution temperature (LCST) has been studied under oscillatory flow conditions. The phase separation mechanism has been investigated with the consideration of the nucleation mechanism, spinodal fluctuations, and also the shear induced mixing. Frequency and temperature ramping rate dependence of the apparent binodal and spinodal points will be discussed.

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