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Light Scattering Studies of Dynamics of Soft Materials

ALEXEI SOKOLOV, University of Tennessee, Knoxville

Dynamics is the key to many unique properties of Soft Materials. However, its understanding remains a great challenge. In this talk, we overview applications of light scattering techniques (Raman, Brillouin and Photon-correlation spectroscopy) to studies of dynamics of glass forming systems and glass transition phenomenon, polymers and biological macromolecules. General picture of dynamics of soft materials on different time and length scales is presented. The role of light scattering studies in development of this general picture is emphasized.