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Study of secondary relaxation transitions in glassy polymers by FTIR spectroscopic method of conformational probes

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Abstract

Local molecular dynamics in a set of glassy polymers has been studied by the IR-spectroscopic method of conformationally-inhomogeneous probes. This method allows one to determine those macromolecules' fragments, of which the rotation is freezing at certain secondary relaxation transition in polymers. Relaxation transitions observed were assigned to certain types of molecular mobility of the side and lateral groups of polymers.

Keywords

Conformational probes, Glassy polymers, Relaxation transitions