

NMR Application for Polymers

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Abstract

High resolution NMR spectroscopy has proved to be the most powerful method available for characterizing the structures of polymers. The chemical shift, not only can reveal the structural information of the polymers but also its electronic structures. Therefore, polymers with *cis*- or *trans*- isomers and polymers which demonstrate different tacticities (isotactic, syndiotactic, and atactic) can be easily detected in the spectra. In addition, area of NMR signal, commonly referred as integral, provide the quantitative insight to the polymers which can be subsequently used in determining the polymer compositions.