Photochromic Properties of Poly(methacrylic acid) Having Spiroxazine Pendant Group

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Nowdays photochromic compound has gained much attention by its ability to undergo a reversible color change. Photochromic polymer with this property can be used various aspect by synthesis of another chemical compound. This is also one of the photochromic polymer that a synthetic product of spiroxazine compound and methacrylic acid. In this polymer photochromic reaction is caused by the reversible heterolytic cleavage of C-O bond under UV irradiation yielding the colored form that can return to colorless form by ring closure under visible light irradiation or in the dark. These materials with the property potential values and much interest because of applications in all kinds scope of this polymer and its properties.