

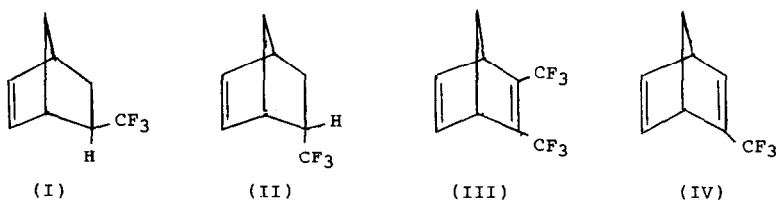
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STEREOREGULAR FLUOROPOLYMERS

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Stereoregulation can have a pronounced effect on polymer properties and in view of the wide technological importance of fluoropolymers it is surprising that there are so few literature citations concerning stereoregular fluoropolymers. The relatively new catalytically induced process of metathesis ring opening polymerization provides a route to stereoregular polymers, since different catalysts give rise to different microstructures. Our approach to obtain stereoregular fluoropolymers has been to ring open a series of fluorinated monomers and determine the microstructure of the polymer produced using ¹³C nmr and infrared spectroscopy. In particular the metathesis ring opening of exo (I) and endo (II) 5-trifluoromethylnorbornene, 2,3-bis-(trifluoromethyl)norbornadiene (III) and 2-trifluoromethylnorbornadiene (IV) is described in this poster.



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