30-64 Novel Preparations of Helical Polymer and Ionomer Networks

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Liquid crystalline mono-and diacrylate monomers which showed a nematic phase were synthesized. By doping small amounts of a chiral dopant in acrylate mixtures, a induced cholesteric phase was observed. The helical structure in the induced cholesteric phase was frozen in the polymeric films by photopolymerization. The helical polymer networks with an ionic species could be prepared by alkaline hydrolysis of the polymer films.

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