

## Abstract

This paper reports the synthesis of new copolyesters which incorporate pure isomer cis-1,3-indanediol as well as aliphatic diols HO-(CH<sub>2</sub>)<sub>n</sub>-OH. 1,3-propanediol, 1,4-butanediol, 1,7-heptanediol and 1,10-decanediol have been used with aromatic diacid terephthaloyl chloride. The stoichiometric proportion of aromatic-aliphatic diols and diacid used is 0.5/0.5/1. All polyesters have been obtained with yields varying from 60 to 84%. The polymers obtained were characterized by various techniques such as FTIR, viscosities, differential scanning calorimetry, thermogravimetric analysis, X-ray diffraction and scanning electron micrograph. All characterizations show that the polymers exhibit semi-crystalline property