

## Manufacture and Characterization of Poly (Tri Methylene Terephthalate) Nanofibers by Electrospinning

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**Abstract :** Poly (tri methylene terephthalate) (PTT) nanofibers were prepared by electrospinning, being directly deposited in the form of a random fibers web. The effect of changing processing parameters such as solution concentration and electrospinning voltage on the morphology of the electrospun PTT nanofibers was investigated with scanning electron microscopy (SEM). The electrospun fibers diameter increased with rising concentration and decreased by increasing the electrospinning voltage, thermal and mechanical properties of electrospun fibers were characterized by DSC and tensile testing, respectively.

**Keywords :** poly tri methylene terephthalate, electrospinning, morphology, thermal behavior, mechanical properties

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