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Chloroform-Formic Acid Solvent Systems for Nanofibrous Polycaprolactone Webs

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Abstract : In this study, polycaprolactone (PCL) was dissolved in chloroform: ethanol solvent system at a concentration of 18 w/v %. 1, 2, 4, and 6 droplets of formic acid were added to the prepared 10ml PCL-chloroform:ethanol solutions separately. Fibrous webs were produced by electrospinning technique. Morphology of the webs was investigated by using scanning electron microscopy (SEM) whereas fiber diameters were measured by Image J Software System. The effect of formic acid addition to the mostly used chloroform solvent on fiber morphology was examined.

Keywords: chloroform, electrospinning, formic acid polycaprolactone, fiber

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