Producing TPU/Propolis Nanofibrous Membrane as Wound Dressing

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Abstract : Wound dressings have strategically and economic importance considering increase of chronic wounds in the world. In this study, TPU nanofibrous membranes containing propolis as wound dressing are produced by two different methods. Firstly, TPU solution and propolis extract were mixed and this solution was electrospun. The other method is that TPU/propolis blend was centrifugally spun. Properties of nanofibrous membranes obtained by these methods were compared. While realizing the experiments, both systems were optimized to produce nanofibers with nearly same average fiber diameter.

Keywords: nanofiber, wound dressing, electrospinning, centrifugal spinning

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