MS13-2-14 Development and characterization of electrospun nanofibres based on PCL and 4-chlorochalcone #MS13-2-14

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Abstract
In this work, electrospun nanofibres mats based on poly caprolactone (PCL) and 3-(4-Chlorophenyl) -1-phenyl-2-propen-1-one (4-chlorochalcone) were developed. Chalcone family members, natural or synthetic, exhibit a wide variety of antibacterial, antiviral, anticancer and antidiabetic properties, among others [1]. 4-chlorochalcone is a chalcone derivative that is trans chalcone substituted by chloro group at position 4. The PCL nanofibrous mat containing 4-chlorochalcone was characterized using Scanning Electron Microscopy (SEM), Fourier Transform Infrared spectroscopy (FTIR), X-ray diffraction (XRD) and UV-visible spectroscopy (UV-vis). The results confirm the incorporation of 4-chlorochalcona into the matrix. The effect of 4-chlorochalcone concentration on the nanofibre mats morphology and crystallinity was studied.

References
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