

عنوان مقاله:

Fabrication and Study of Nigella sativa-Loaded Electrospun Nanofiber

محل انتشار:

بیست و ششمین سمینار شیمی آلی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

In this study, Zein and Nigella sativa solution was prepared with three different Nigella sativa concentrations of 5, 10, and 15 %w/v, and was electrospun. The voltage of electrospinning process at these three concentrations being 20kv; the distance between the tip of the needle and the collector in the three concentrations being 15cm; and the flow rate at the three levels being 4ml/h, were all constant. Results showed that changes in the concentration of Nigella sativa oil have a significant effect ($p \leq 0.05$) on fibre diameter; increasing the concentration of the Nigella sativa oil results into the increase of fibre diameter. Recently, biodegradable polymers have been widely used as drug carriers in the human body [1, 2]. These polymers have been used because they have very low, and near-to-zero, effects on human body; and one of their most important characteristics is that they are suitable carriers for drug delivery, and have direct response to physiological stimuli; and they are also non-official and economical [1, 3]. The purpose of this study is to produce microfibre of Zein protein and Nigella sativa oil with glacial acetic acid solvent. It will also investigate the effect of changing Nigella sativa oil concentration on the morphology and diameter of fibres.

کلمات کلیدی:

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