

Detection of currents during electrospinning on two collector systems with a gap

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Received March 11, 2022

A sensor has been developed that registers nanoampere currents from collecting electrodes in the process of changing the point of deposition of a polymer fiber. The current was measured on a system of two collectors separated by a gap, the correlation between the position of the fiber deposition point and the collector currents was shown by simultaneously recording the readings of the current sensor and video recording. Data were obtained, which coincide with the theoretical description of the process, on the time delay in the start of the electrospinning process depending on the supply voltage and solution concentration.

Keywords: electrospinning, current detection, polymers.

DOI: 10.51368/1996-0948-2022-2-56-61

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