Electrospun Nanofibres and Their Applications

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This Update covers all aspects of electrospinning as used to produce Nanofibres. It contains an array of colour diagrams, mathematical models, equations and detailed references. It will be invaluable to anyone who is interested in using this technique and also to those interested in finding out more about the subject.

Electrospinning is the cheapest and the most straightforward way to produce nanomaterials. Electrospun Nanofibres are very important for the scientific and economic revival of developing countries. Electrospinning was developed from electrostatic spraying and now represents an attractive approach for polymer biomaterials processing, with the opportunity for control over morphology, porosity and composition using simple equipment. Because electrospinning is one of the few techniques to prepare long fibres of nano- to micrometre diameter, great progress has been made in recent years.

It is now possible to produce a low-cost, high-value, high-strength fibre from a biodegradable and renewable waste product for easing environmental concerns. For example, electrospun nanofibres can be used in wound dressings, filtration applications, bone tissue engineering, catalyst supports, non-woven fabrics, reinforced fibres, support for enzymes, drug delivery systems, fuel cells, conducting polymers and composites, photonics, medicine, pharmacy, fibre mats serving as reinforcing component in composite systems, and fibre templates for the preparation of functional nanotubes.

If you have an ongoing interest in this area then why not consider also purchasing the Electrospinning and Nanofibres Bulletin? This current awareness service from the Polymer Library provides you with regular updates containing abstracts of new research from journals, conference proceedings, books and reports. It lets you know about all of the latest developments on both Electrospinning and Nanofibres, so you don't have to waste time, effort and money finding it all yourself. Combined with the 'Electrospun Nanofibres and Their Applications' Update, you'll have the complete package to introduce you to the topic, then keep you up-to-date with new developments.
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