

HIGHLIGHT

Jena,
February 15, 2013

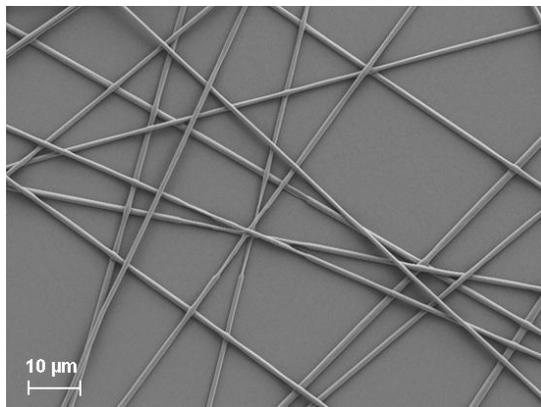


Figure 1: Scanning electron image of electrospun polylactide fibers.

Electrospun mats as cell scaffolds

Electrospinning is a process of forming fibers with diameters in the submicrometer range. Fiber fabrication occurs in a high-voltage electrical field using polymer solutions or melts. By this technology a broad variety of polymers can be converted into nanofiber mats. Advantageously, fiber diameters as well as surface morphology can be varied in a wide range by adjusting the electrospinning process parameters. Electrospun materials can be used for different technical and biomedical applications. Within the project electrospun mats will be used as scaffolds for different cell types and for mechanical stabilization of artificial skin.

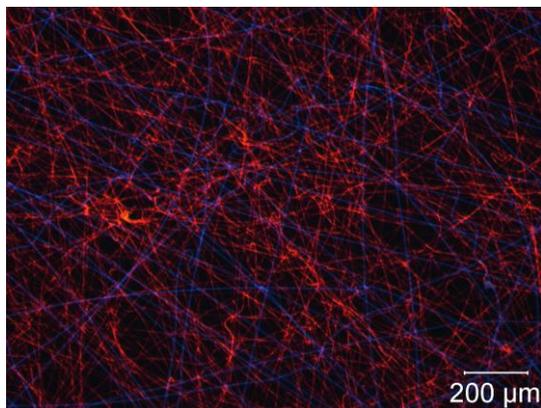


Figure 2: Fiber mat consisting of two different polymer fibers simultaneously electrospun and coloured with different fluorescent dyes.

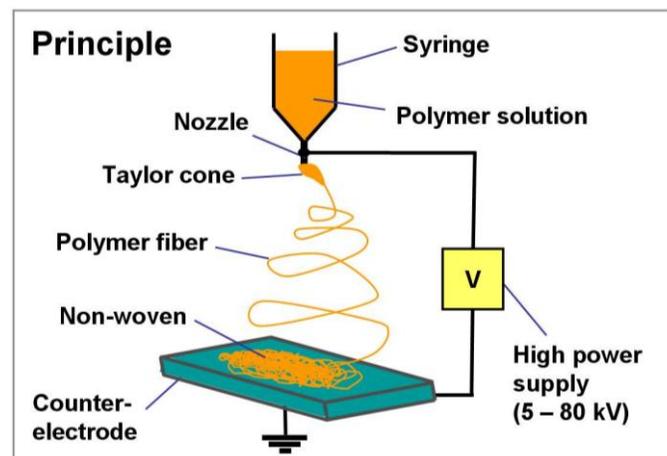


Figure 3: Principle of Electrospinning.



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http://www.innovent-jena.de/en/INNOVENT/Fachbereiche/Biomaterialien/Electrospinning_4645/

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