

Nanofiber Technology – Synthesis and Application

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Abstract: *Present era trying to use numerous ways for the development of technology. Nanoscience and nanotechnology are the most important field of technology. Nanoscience is the study of structure and materials on an ultra small scale or 1000 times smaller than the width of human hair. Nanotechnology is the best development for future, concerned with the behaviour of material at these small dimensions. It create new products which are highly porous and having large surface area. Nanotechnology protect and develop environment by detecting, preventing and removing pollution. It has potential to develop all sectors from disease diagnosis and treatment to environmental remediation. The paper based on the potential of nanotechnology for the preparation of nanofibers and its applications. Nanofibers can be prepared from different polymers hence posses different physical properties and application potentials. They create products with new properties via physical and chemical processes. All polymer nanofibers are unique to their surface area to volume ratio, high porosity, flexible in functionalization and mechanical strength. Nanofibers has application in various fields such as energy conservation, medical .They are prepared by so many techniques. Electrospinning is most widely used technique to produce nanofibers.*

Keywords: Nanotechnology, Nanofibers, Electrospinning Technology

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