Electrospun Materials and their Allied Applications

Application of electrospun materials in oil-water separations

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Abstract

There has been ever-increasing pressure to come up with novel strategies for oily wastewater treatment since it affect the available water sources, crop production, aquatic life and human health. Electrospun nanofibrous materials with attractive attributes, such as interconnected porous structure, large surface-to-area ratio, malleable mechanical properties, tuneable wettability, and porosity have a huge potential for oily wastewater treatment. In this chapter, the recent progress of oil/ water separation using electrospun nanofibrous materials is reviewed. The challenges and future prospects of this new field are also described.