

Bubble Launched Electrospinning Jets

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Abstract

The objective of this project is to launch thin electrified liquid jets from a polymeric liquid surface and to produce dry fiber. An electric field is applied to a liquid bubble to destabilize the force on the bubble and to cause a jet to emerge from an apex of the bubble. This jet dries and forms the fibers. Micron size fibers were collected on a grounded surface. This approach has potential for increased production rates of electrospun fibers.