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Electrospinning of Liquid Jets

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A very thin liquid jets can be obtained using electric fields. The electrically-driven bending instability of the jet enormously increases the jet elongation path and effectively leads to its tinning by very large ratios and can be used to produce nanofibres. The mechanism of electro-thinning of liquid jets, discovered almost one century ago, is yet not fully understood. In the following study detailed experimental data are collected for electrospinning of different liquids in the purpose to correlate these data with the existing models describing basic mechanisms responsible for the electrospinning.

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