In the FunTips project the electrospay process from nano-sized apertures is studied. Electrospraying is a process in which an electric field is used to disperse a liquid into droplets. Droplet size can range from hundred micrometers down to tens of nanometers. Goal of the project is to investigate this process and the role of the aperture.

Apertures for the experiments are fabricated using corner lithography. With this batch fabrication process it is possible to obtain nano-sized apertures without the need for nano-lithographic methods like e-beam and deep UV photolithography.

Applications of electrospay are numerous for example ionization for mass spectrometry, thin film deposition and nano particle production.

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Companies involved: SmartTip, IBM, Philips

People involved: TST: Niels Tas (Assoc. Prof.), Erwin Berenschot (engineer), Joël Geerlings
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Publications

{php}readfile("http://eprints.eemcs.utwente.nl/view/project/FunTips.include");{/php}