## LOTUS Sharp Singularity<sup>™</sup>

"Water surrounds the lotus flower, but does not wet its petals" -- Buddha --

## LOTUS

The meniscus is anchored at the inner diameter of the LOTUS emitter because its surface is hydrophobic. This produces less evaporation, lower voltages, better ionization efficiency, and a more consistent spray.

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## More Peptide & Protein IDs, more consistently

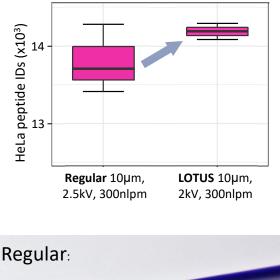
LOTUS vs Regular 10 µm Sharp Singularity Emitters comparison\*:

- 3.3% more peptide IDs,
- 5.5 fold reduction peptide ID variability

LOTUS:

\*Hela 50 ng consecutive injections, nLC-Orbitrap Exploris 480, all emitters were conditioned by flushing the two nLC HeLa runs.

The LOTUS emitters lock the nano-electrospray meniscus inside the ID of the emitter. For the same emitter geometry, this results in a smaller meniscus, with a more stable anchorage.



perfectly positioned droplet even with no voltage

Droplet wetting if no voltage applied.

The Sharp Singularity<sup>™</sup> nESI Emitters