

ASTRA

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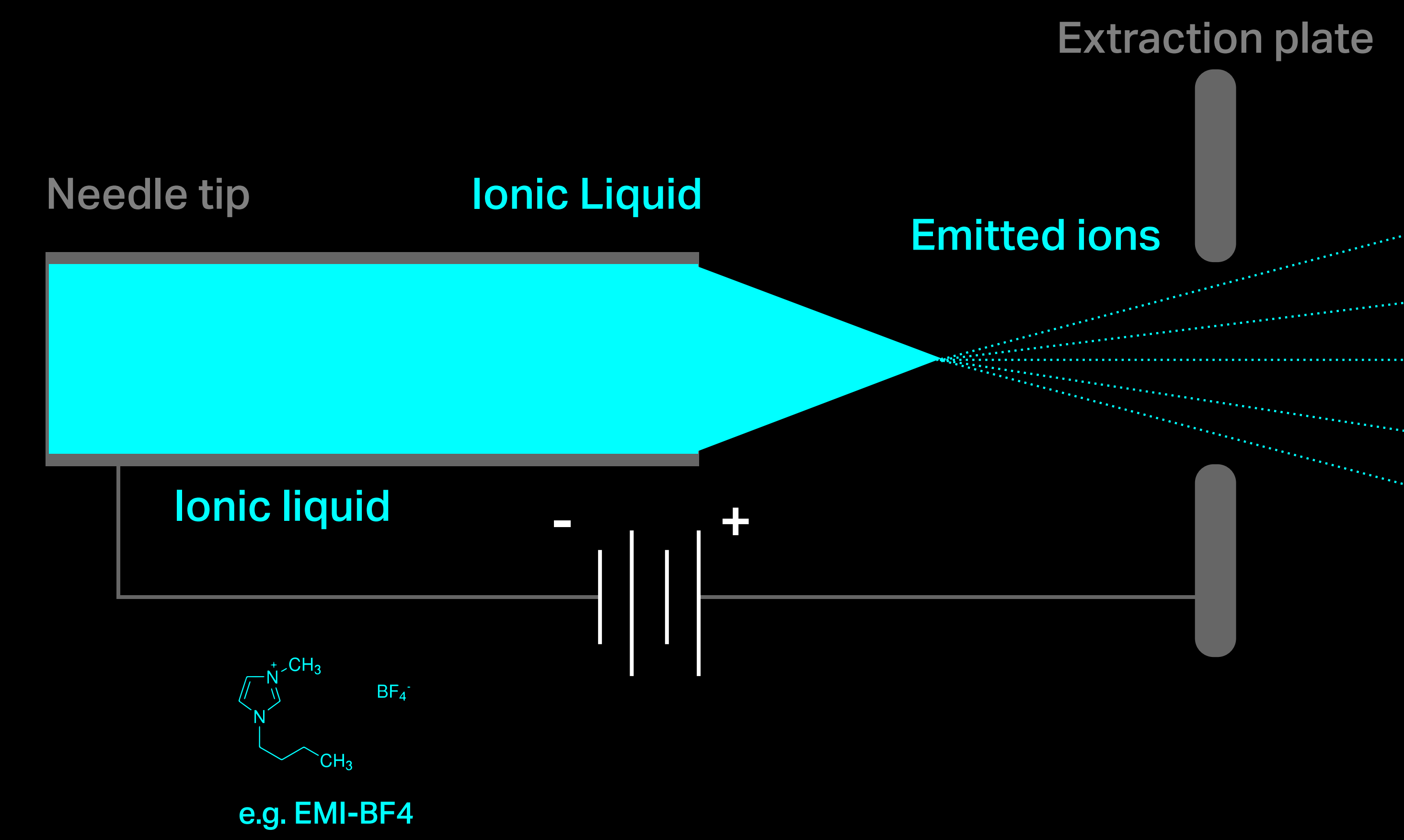
A gently ionizing electrospray ionization mass spectrometer for high mass organic and biomolecule detection

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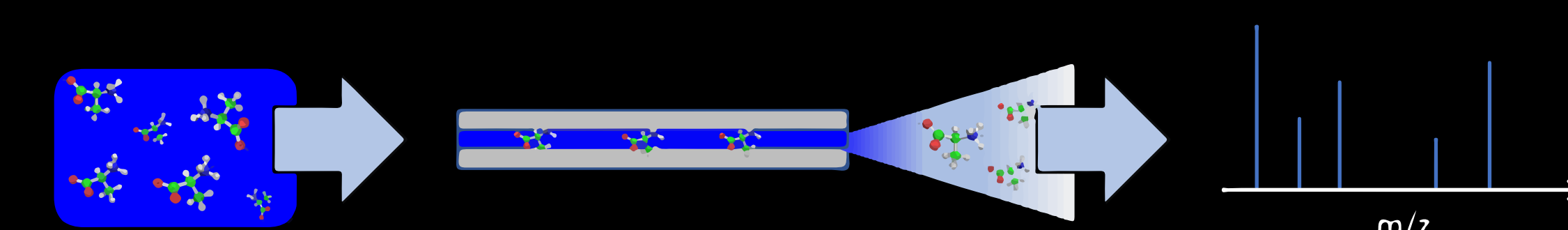
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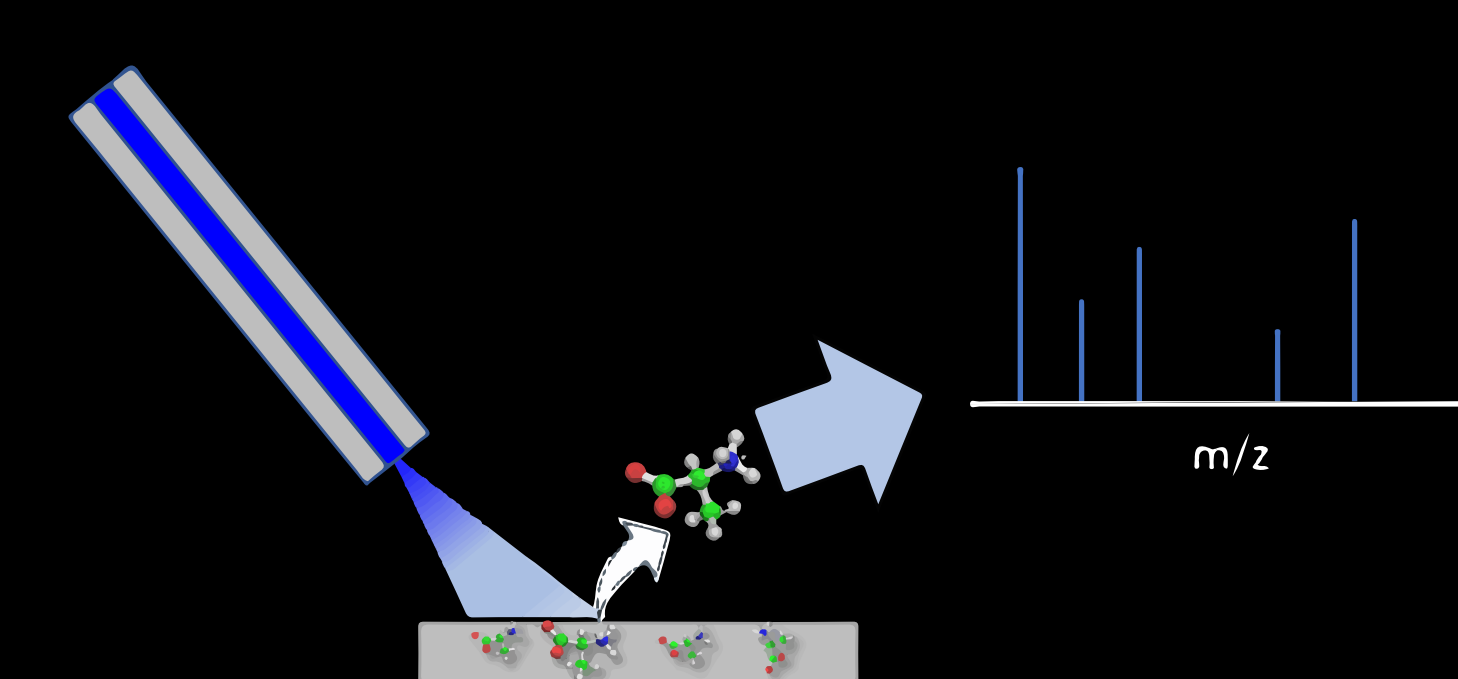
Principle of Operation



Direct Ionization Mode



Secondary Ionization Mode

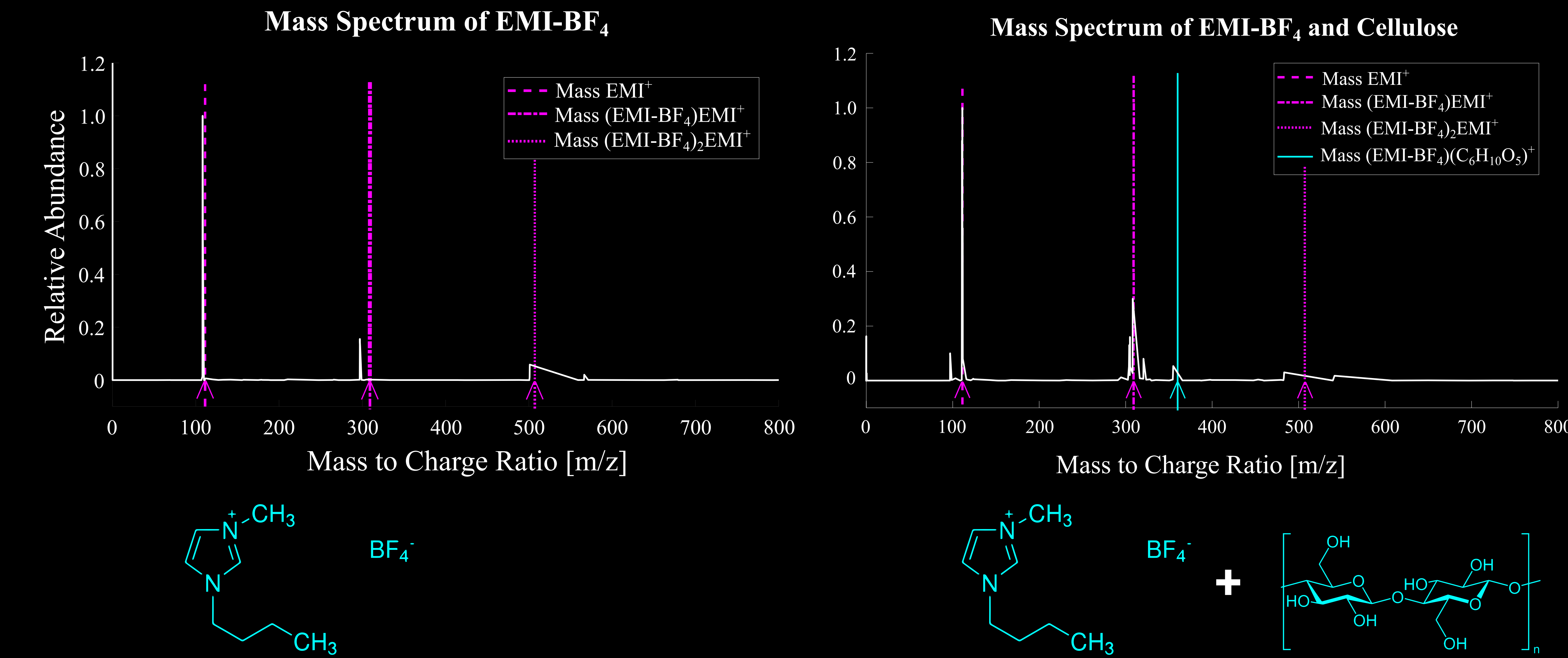


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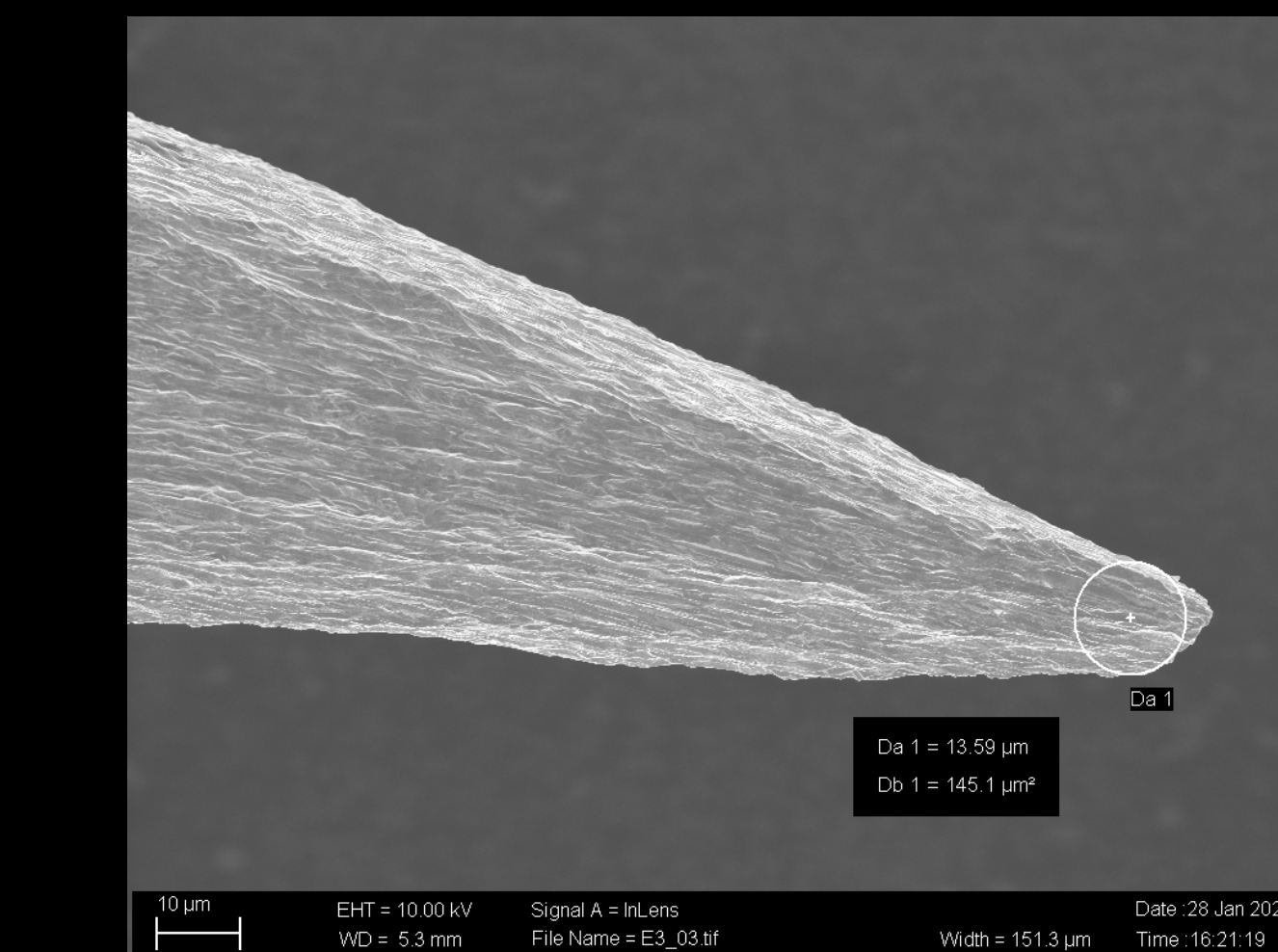
NASA Jet Propulsion Laboratory
California Institute of Technology

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Direct Ionization Initial Results



Microscope image of a needle wetted with EMI-BF4



SEM Image of a tungsten needle tip

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