

Supplemental Information

Supplemental Table 1. Tuning parameters for the comparing standard and coaxial EESI in the analysis of oleic acid aerosol using a Bruker HCTultra ion trap mass spectrometer. Differences between the two configurations are bolded.

Configuration	Standard EESI	Coaxial EESI
Trap Drive (V)	41.0	41.0
Octopole RF Amplitude (Vpp)	149.0	149.0
Lens 2 (V)	52.0	52.0
Capillary Exit (V)	-133.3	-133.3
Skimmer (V)	-40.5	-40.5
Lens 1 (V)	6.5	6.5
Octopole 1 (V)	-12.0	-12.0
Octopole 2 (V)	-1.7	-1.7
Dry Gas Temperature (°C)	300	300
Nebulizer Gas Pressure (psi)	10.0	10.0
Dry Gas Flow Rate (L/min)	8.0	8.0
HV Capillary (V)	5000	6000
HV End Plate Offset (V)	-500	-500
Solvent Flow Rate (μL/min)	2.0	3.0

Supplemental Table 2. Tuning parameters for the comparing standard and coaxial EESI in the analysis of aerosolized pyrolysis products of cellulose using a Bruker Esquire 3000 ion trap mass spectrometer. Differences between the two configurations are bolded.

Configuration	Standard EESI	Coaxial EESI
Trap Drive (V)	41.7	41.7
Octopole RF Amplitude (Vpp)	150.0	150.0
Lens 2 (V)	-60.0	-60.0
Capillary Exit (V)	87.4	87.4
Skimmer 1 (V)	19.4	19.4
Skimmer 2 (V)	6.0	6.0
Lens 1 (V)	-5.0	-5.0
Octopole (V)	2.4	2.4V
Dry Gas Temperature (°C)	300	300
Nebulizer Gas Pressure (psi)	10.0	10.0
Dry Gas Flow Rate (L/min)	5.0	5.0
HV Capillary (V)	5000	6000
HV End Plate Offset (V)	-500	-500
Solvent Flow Rate (μL/min)	2.0	3.0