

RGA Ion Source

Electron Impact Ion Source

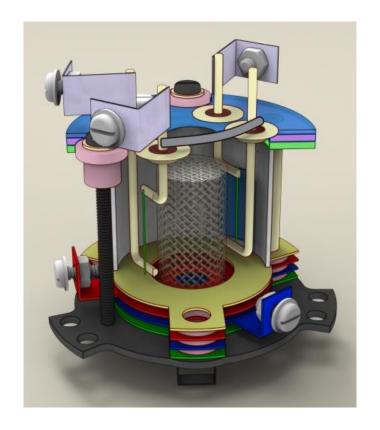


The ion source is one of the three key parts of the quadrupole mass spectrometer.

The neutral gas arrives at the ion source and the electron impacts ionise the species within the source.

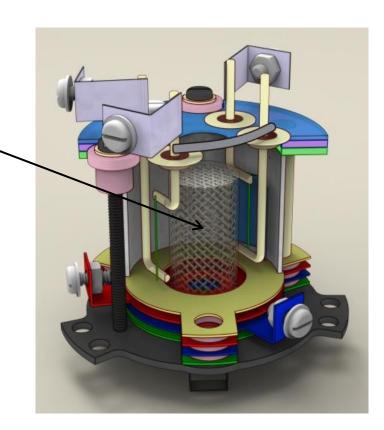
Ion are extracted by the charged plates and exit the ion source to the quadrupole.







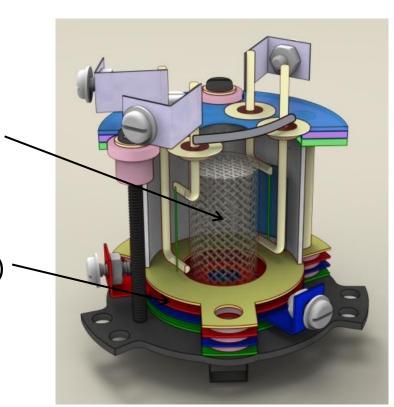
Source cage +3 volts (Range 0 to 10 volts)



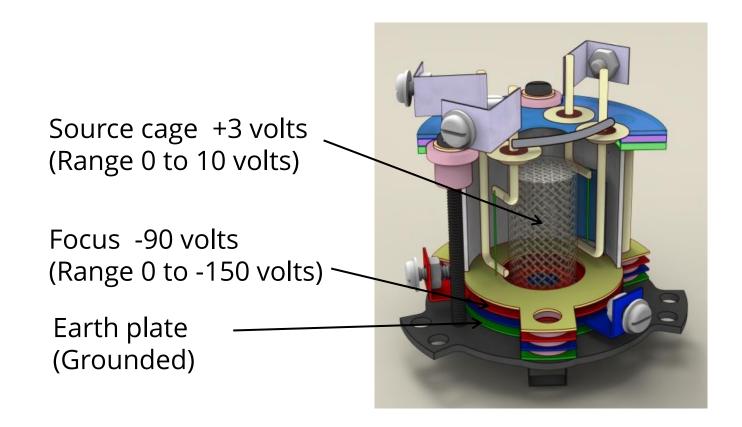


Source cage +3 volts (Range 0 to 10 volts)

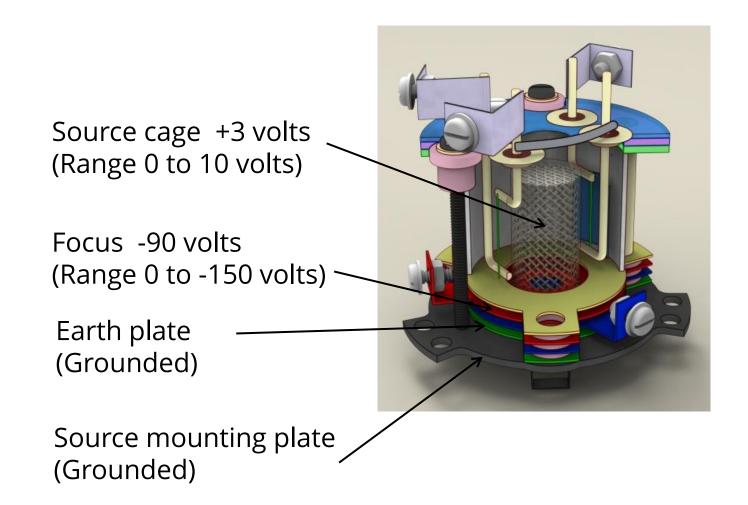
Focus -90 volts (Range 0 to -150 volts)











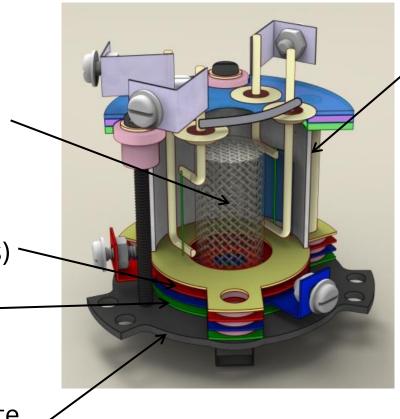


Source cage +3 volts (Range 0 to 10 volts)

Focus -90 volts (Range 0 to -150 volts)

Earth plate (Grounded)

Source mounting plate (Grounded)



Electron repeller (connected with a tag to filament common, -67 volts)



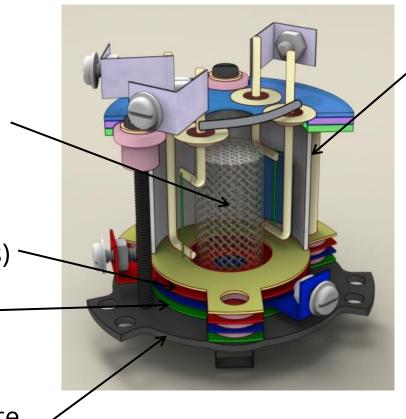


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Earth plate (Grounded)

Source mounting plate (Grounded)



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Settings:

Emission 1000 µA (Range 20 to 5000 μ A)

Electron energy 70 eV (Range 4 to 150 eV)