



GBC Scientific Equipment

Visionary Technology

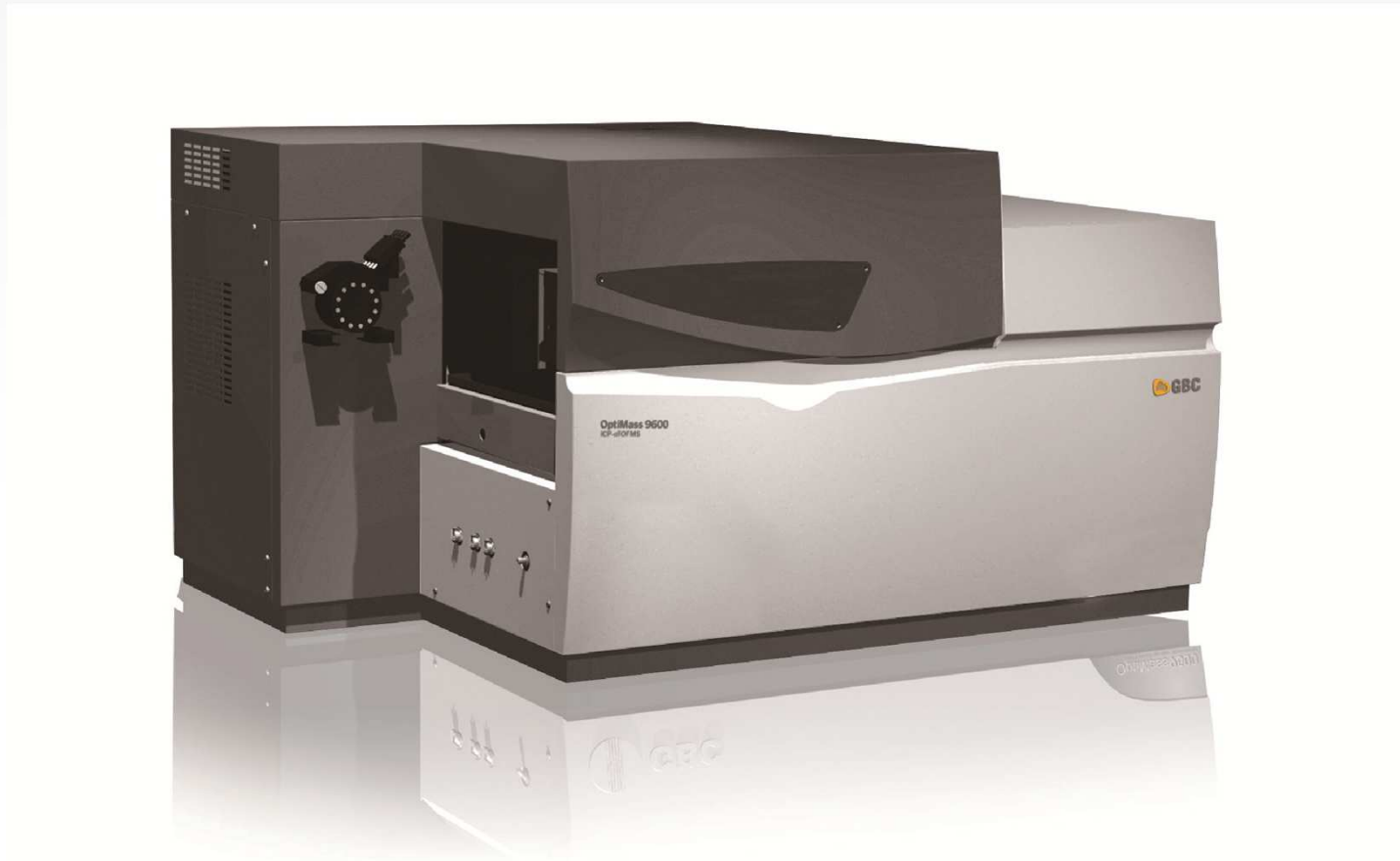


OptiMass 9600

ICP Time of Flight Mass Spectrometer



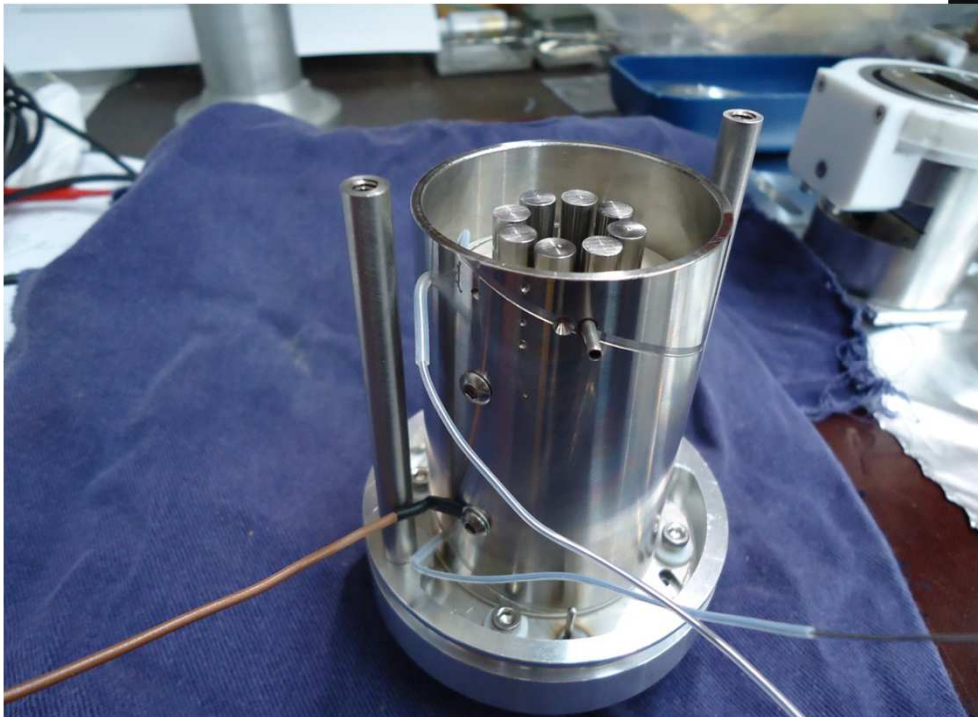
OptiMass 9600...



- First commercialised in 1983
- Multi-element analysis at ppt levels
- Wide elemental coverage
- Isotopic information
- Environmental, clinical, semiconductor, metallurgical, nuclear and geochemical industries

The development of the GBC Octopole collision cell

In the beginning



- Octopole ion guide – to maximise the transport of ALL ion masses for TOF analysis
- Redesign ion optics to optimise ion transport in the cell

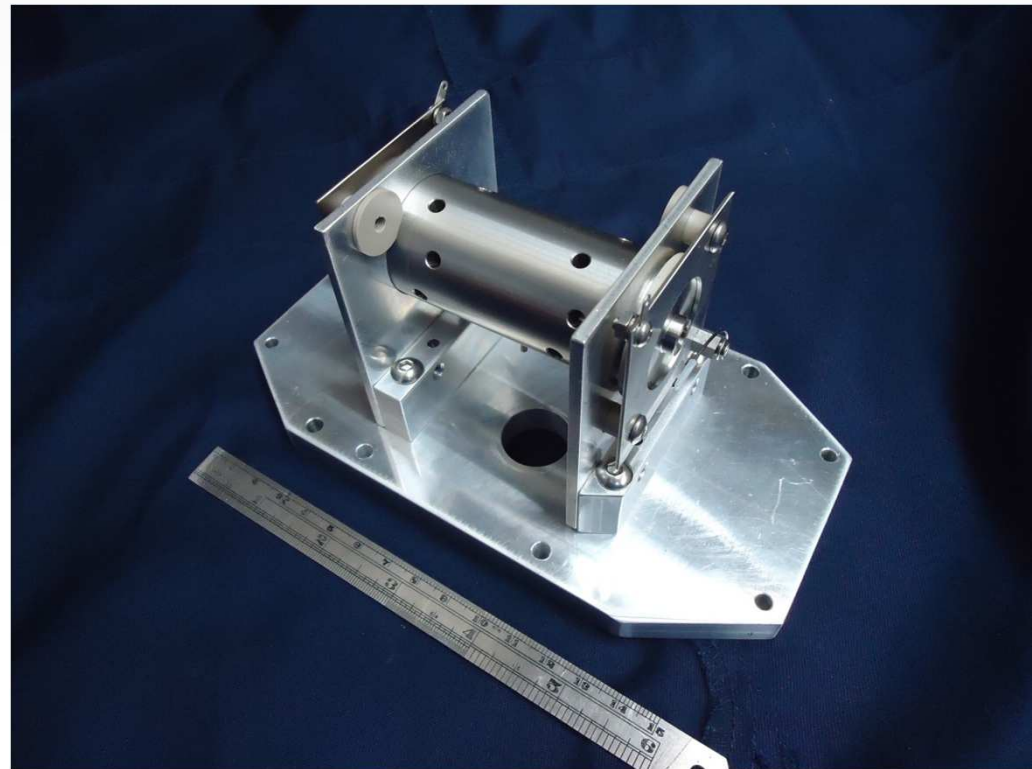
Ion optics module has improved ion transport leading to increased sensitivity



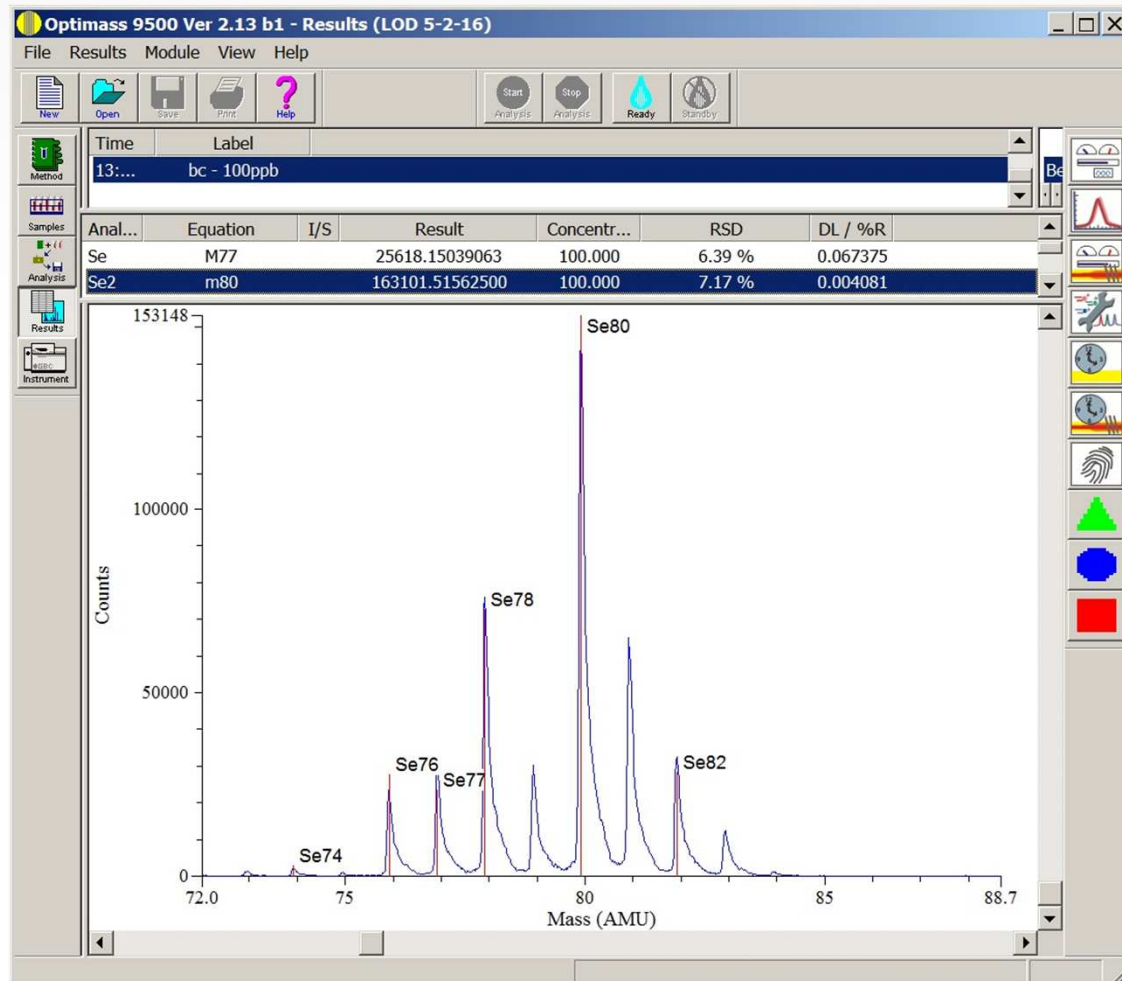
- Multiple gas input for a variety of interference management applications
- 0 – 10 mL/min mass flow control regulated gas flow
- Enhanced electronics for control and improved ion transport



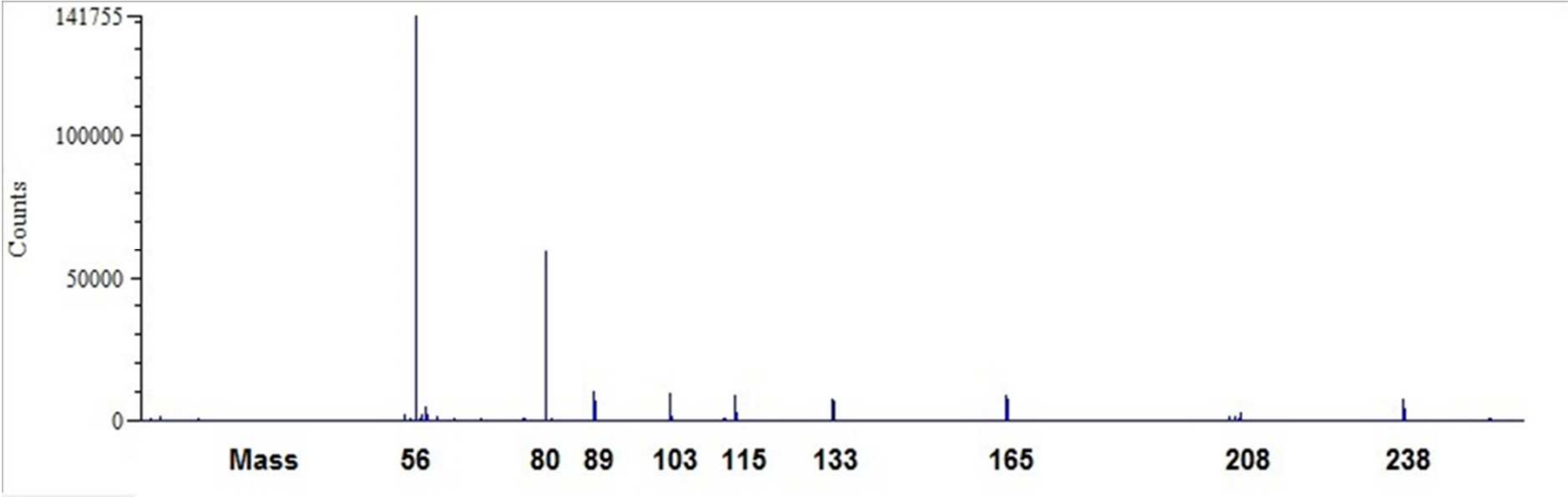
Mounted on the vacuum chamber lid to provide easy alignment and simple insertion into the mass spectrometer

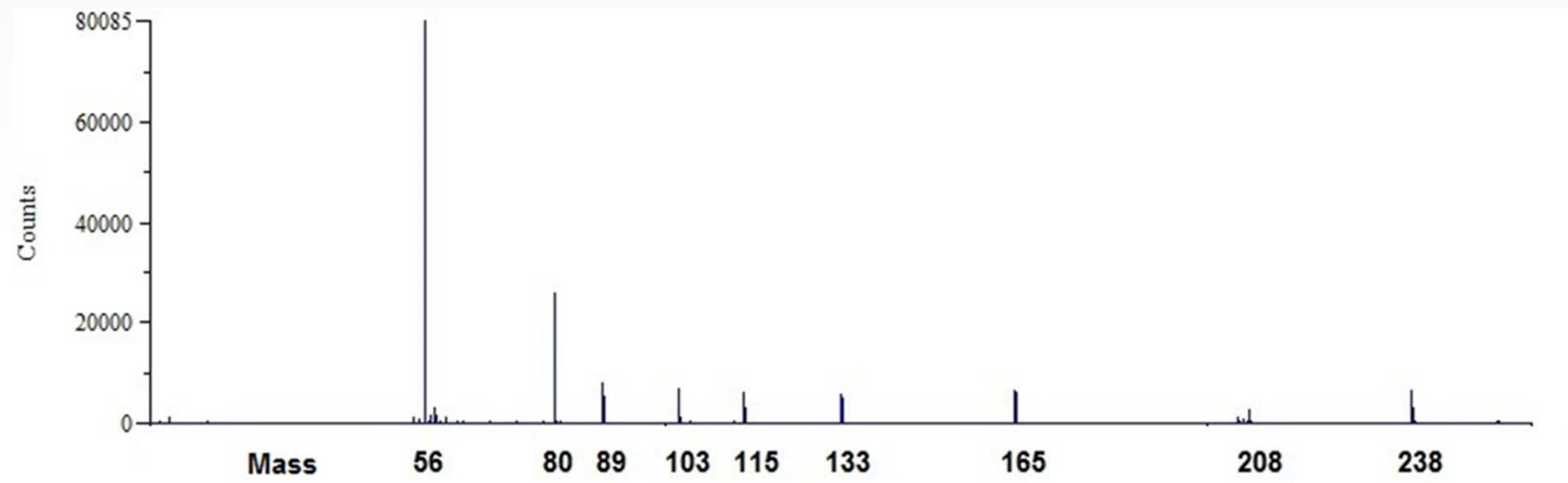


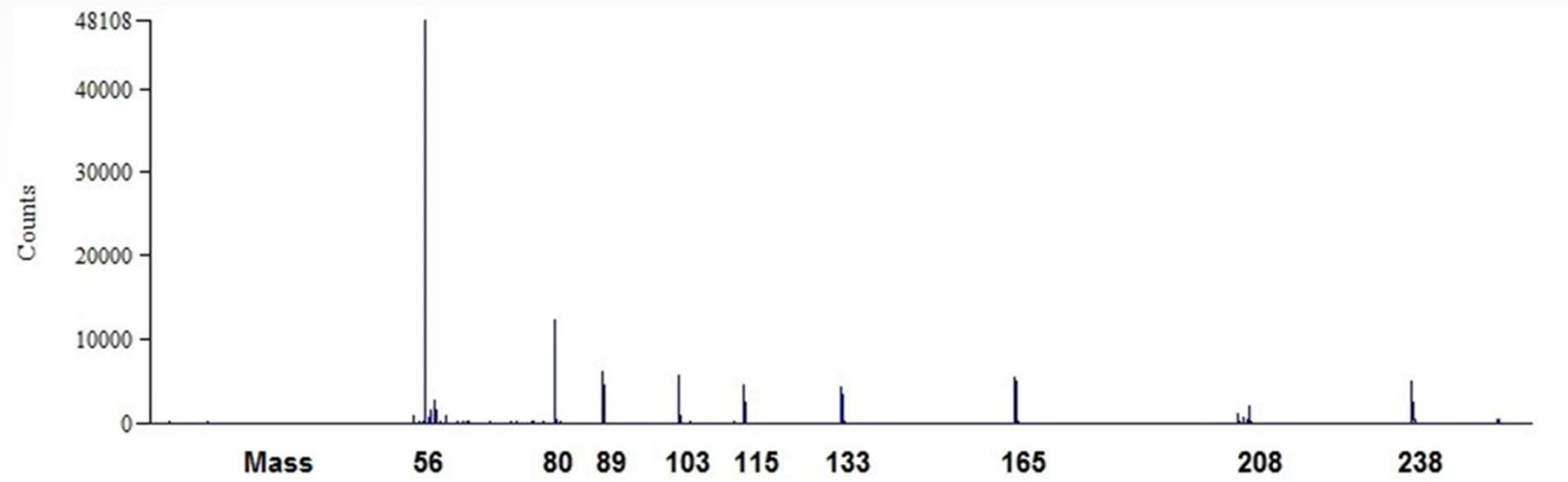
- Measured IDL of 4 ppt for Se at mass 80

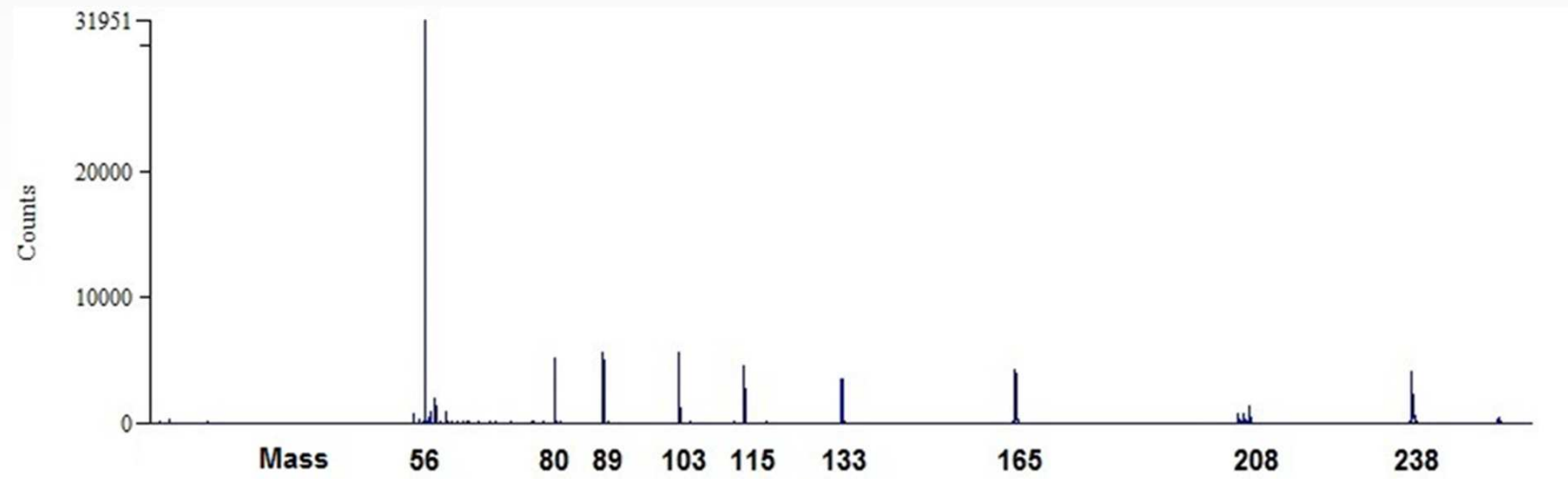


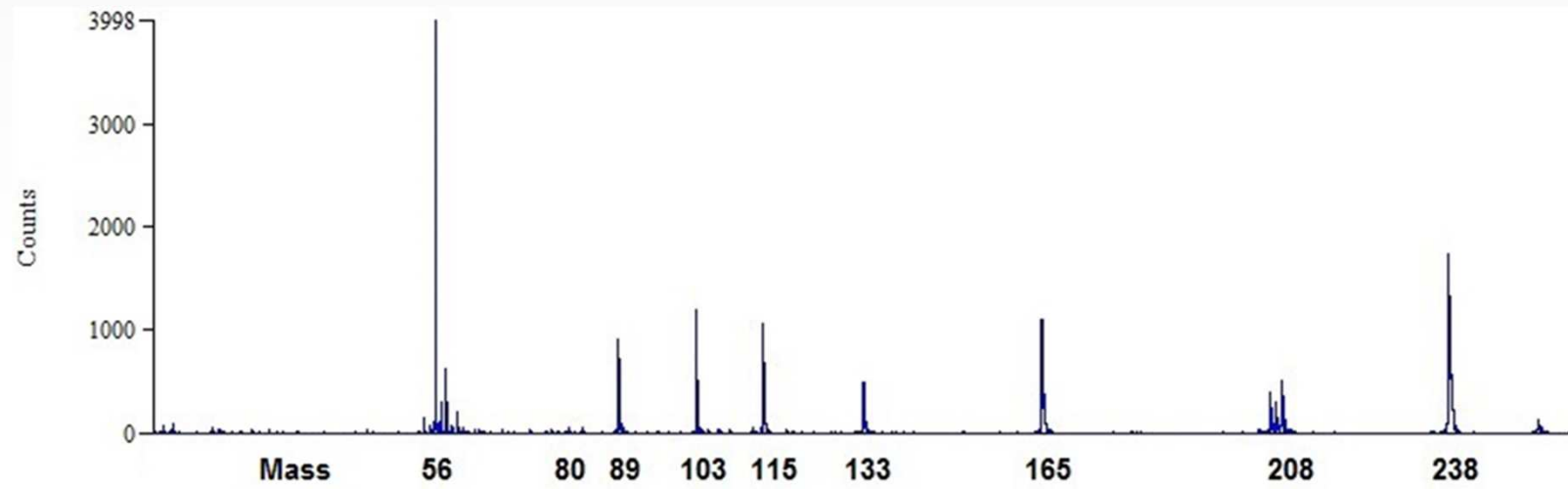
Reduction of Argon Dimer Signal for Entire Mass Range

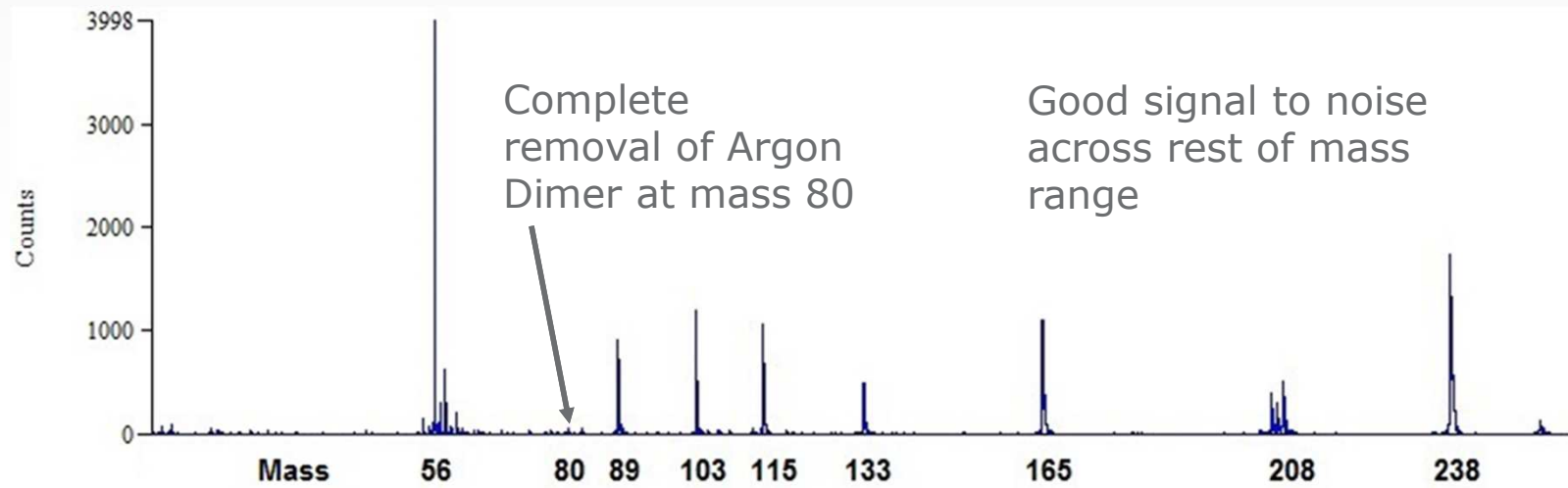




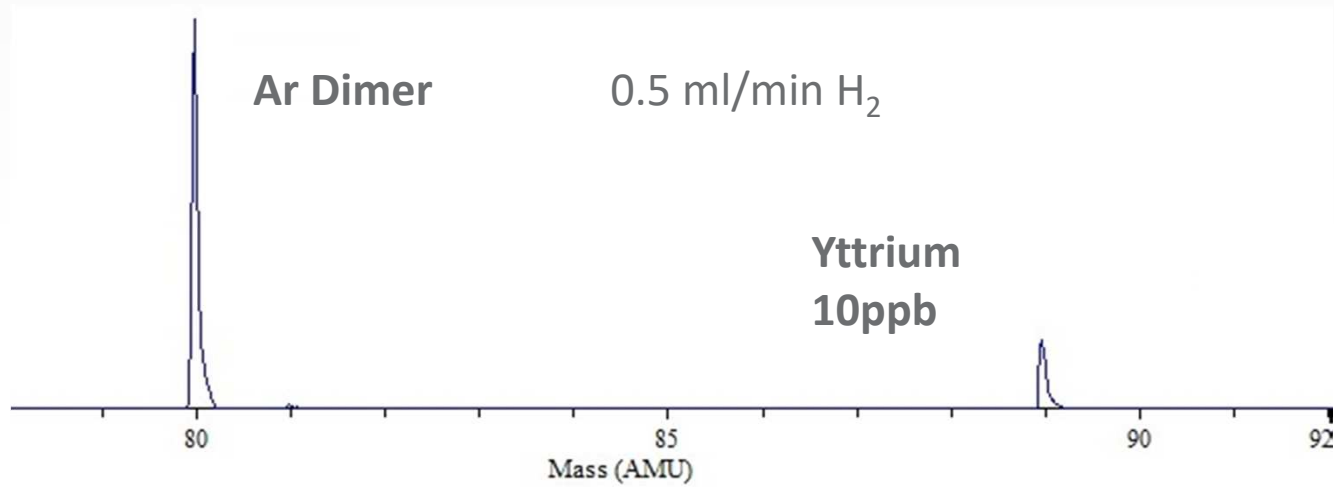


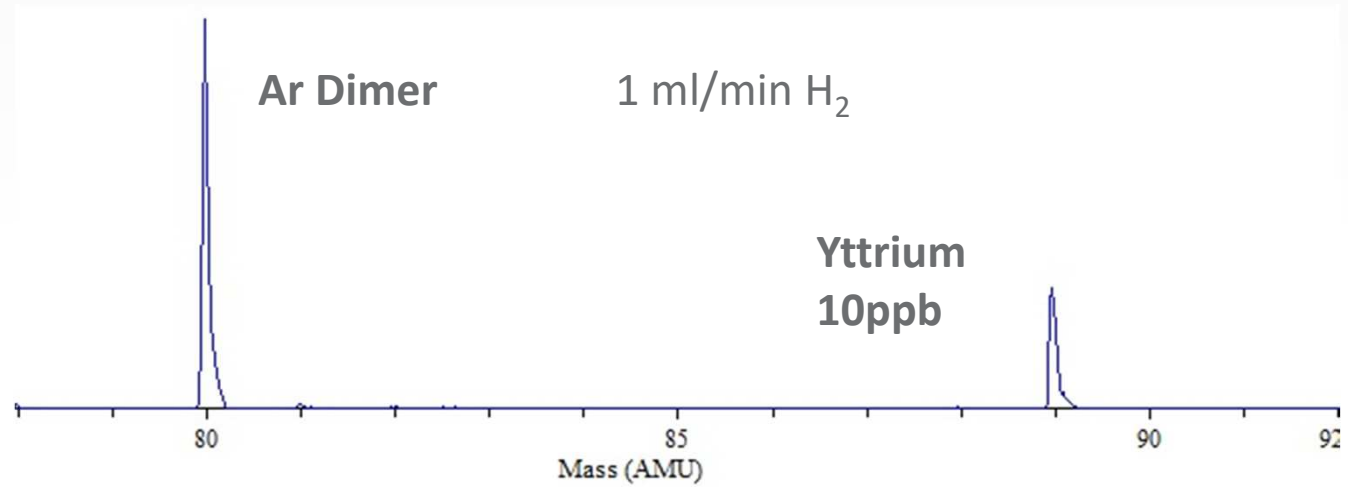


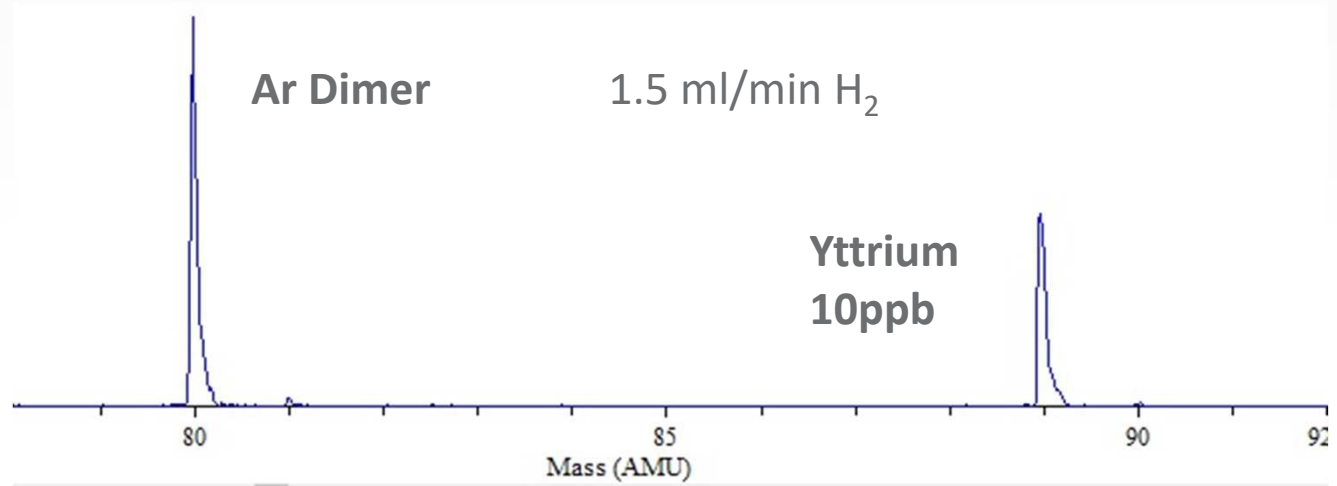


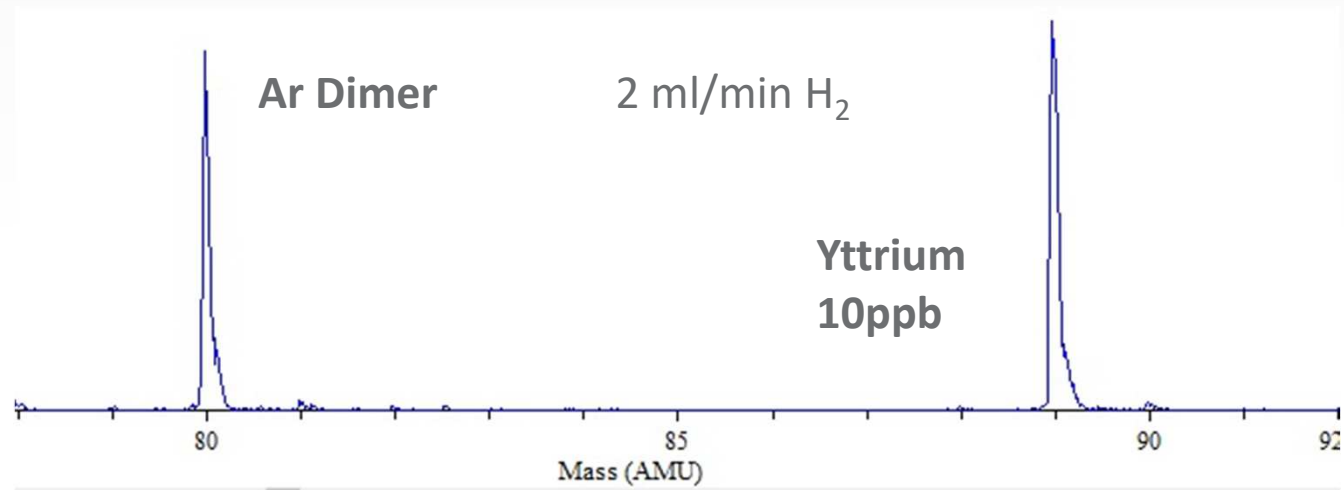


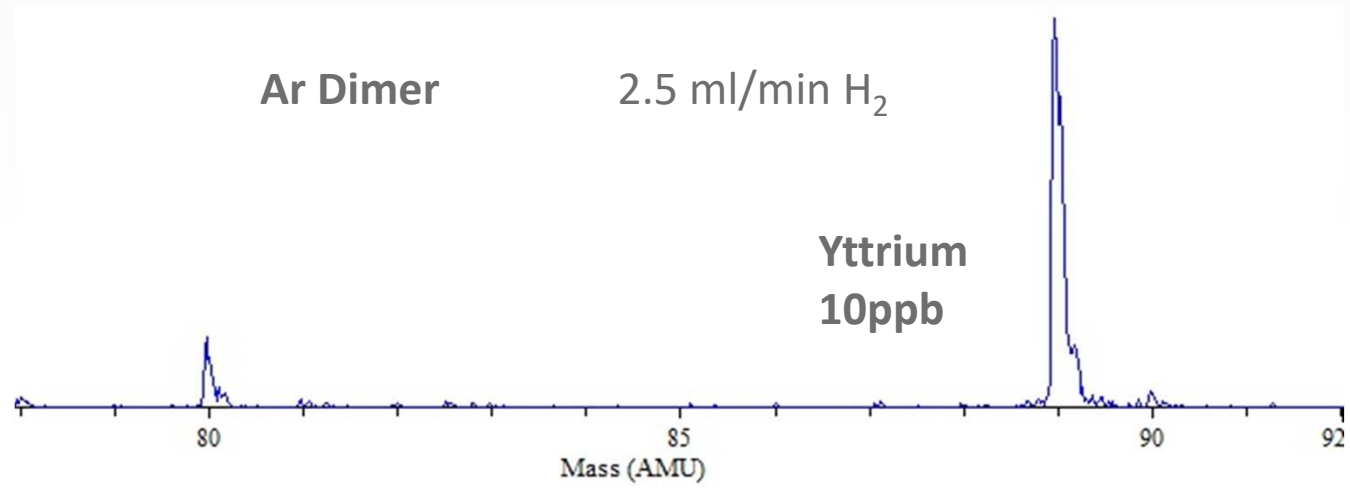
Reduction of Argon Dimer Signal

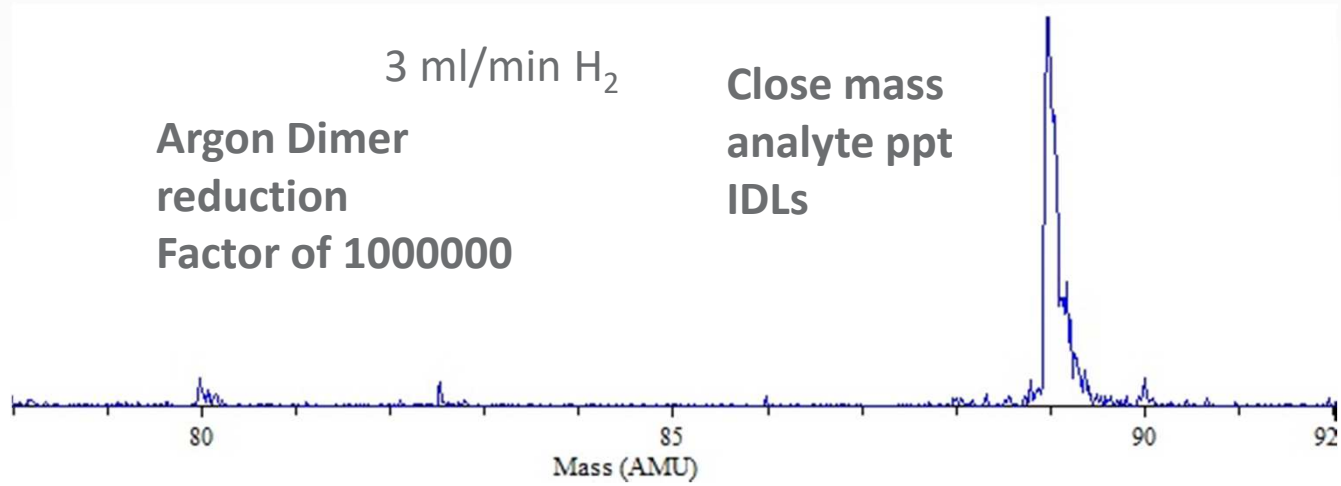












- The OptiMass can offer up to 5 times increase in sample throughput over competing technology
- Instrument maintenance is minimal (<20 minutes per day) over at least 2 month period
- Detection limits are within required limits for most commercial application
- ***Lowest Argon Flow of any ICP-MS on the market
(<12 L/min TOTAL argon flow for aqueous samples)***