



 *nu instruments*
Instruments that work

nu plasma **HR**[™]
MULTI-COLLECTOR ICP-MS



nu plasma **HR**[™]
MULTI-COLLECTOR
ICP-MS

The Nu Plasma HR[™] plasma source multi-collector mass spectrometer was 'designed for purpose' in collaboration with users to provide the best in performance, flexibility and reliability.

The no-compromise design has resulted in the production of a double-focusing instrument that provides the best in high precision and accurate isotope ratio measurements, coupled with flexibility and ease-of-use.

Features

Double-Focusing Mass Spectrometer

Variable dispersion ion optics (patented) in combination with a multiple collector system with no moving parts

High Resolution and Pseudo High Resolution Capability

Separation and partial separation of polyatomic interferences

State-of-the-Art Ceramic Faraday Detectors

With long-term field proven active inner surfaces

Discrete Dynode Ion Counting Multipliers

With optional multiple multiplier configurations

Optional High Abundance Deceleration Filter

Improves abundance sensitivity by an order of magnitude

Unique Pumping Configuration

Providing maximum protection of vacuum integrity and pump lifetime

Ground Potential Operation

Providing easy access for service and maintenance procedures

High Ionisation Efficiency ICP Source

Combined with a supersonic beam-sample interface and optional enhanced interface pumping configuration

Laminated Magnet

High precision 24-bit and temperature compensated Hall probe control

State-of-the-Art Electronics

Purpose designed and built, with full monitoring of all instrument parameters and power supply status

Open Access Software Policy

Intuitive and comprehensive operating software with free upgrades for the lifetime of the instrument

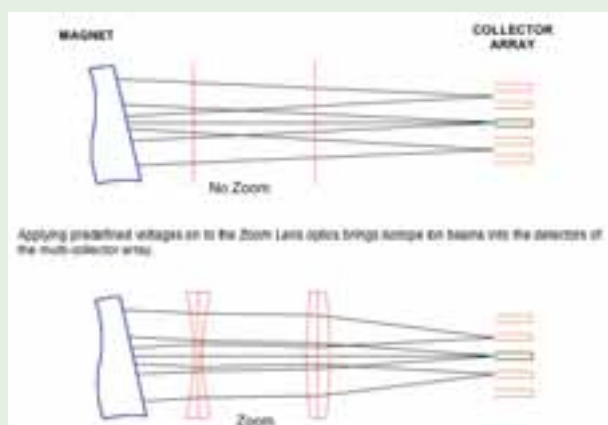
Small Instrument Footprint

Compatible with Third Party Accessories

Including laser ablation systems, autosamplers and other sample preparation devices

Variable Dispersion Ion Optics

The Nu Plasma HR™ utilises Nu Instruments unique patented Zoom Optics, removing the necessity for employing adjustable collectors. This greatly increases the reliability of the collector array and allows instantaneous switching between collector configurations.



Collector System

Twelve Faraday detectors are fitted as standard. Using a unique ceramic and graphite design the longevity of the Faraday detectors have been field proven for more than 10 years.

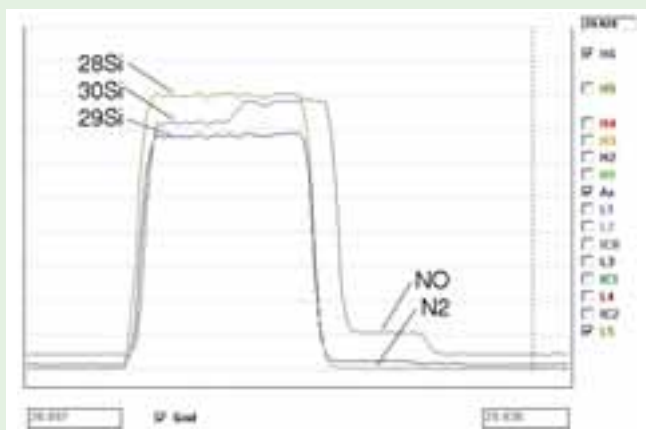
Due to the fixed collector design, multiple full-size discrete dynode ion-counting multipliers can be incorporated benefiting from their superior performance and longer life. Optional Deceleration Lens Filters can be fitted improving the normal abundance sensitivity (<5ppm) by an order of magnitude.



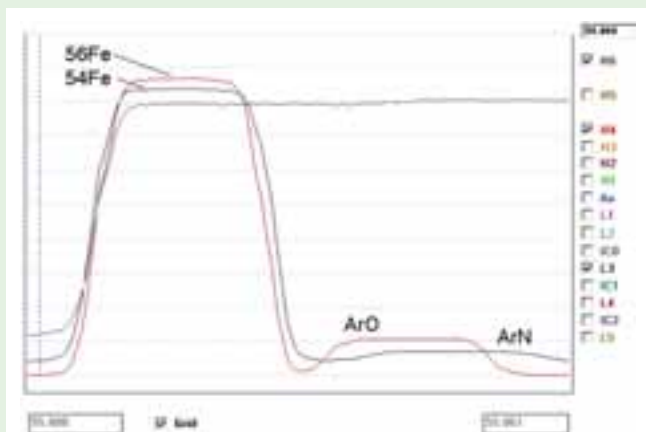
High Resolution

The Pseudo High Resolution feature of the Nu Plasma HR provides partial separation of analyte peaks from many polyatomic interferences, whilst maintaining 'flat top' interference free areas for precise and accurate isotopic measurements.

Due to the unique design of the Nu Plasma HR™ fixed collector system, selected collectors have an adjustable slit mechanism that allows the collector slit widths to be reduced, obtaining true High Resolution. This method allows the user to observe the complete resolution of interferences from peaks.



Pseudo Resolution of Si Isotopes from Interferences



Full Resolution of Fe Isotopes from Interferences



Unit 74, Clywedog Road South,
Wrexham Industrial Estate, Wrexham, LL13 9XS, UK

Tel: +44 (0)1978 661304

Fax: +44 (0)1978 664301

Email: sales@nu-ins.com

www.nu-ins.com