

Thermo Fisher launches high-precision isotope ratio MS system

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Combines innovative features from the field-proven technology of existing Thermo Scientific variable multicollector instrumentation



A new inductively coupled plasma mass spectrometry (ICP-MS) instrument has been designed to enable scientists working in earth sciences, nuclear safeguards and biomedical research to conduct reliable, high-precision isotope ratio analysis across a wide range of applications, without compromising sensitivity, stability or ease-of-use.

The Thermo Scientific Neoma Multicollector ICP-MS (MC-ICP-MS) system combines innovative features from the field-proven technology of existing Thermo Scientific variable multi-collector instrumentation. A new level of automation with the integration of peripherals makes access to reliable, high-precision isotope ratio data easier and more efficient, leading to enhanced research productivity and novel applications. The new instrument offers the flexibility to quickly change between a broad range of isotopic systems, which is a key consideration for productivity in multi-user facilities.

"High quality isotopic data enables scientists to better understand the processes that shape our environment and that control the distribution of mineral resources," said Fabrizio Moltoni, Vice President and General mManager, Applied Analytical Technology, Chromatography and Mass spectrometry, Thermo Fisher Scientific. "These data also shed light on events in earth's history and our understanding of climate change, as well as underpinning nuclear safeguards and providing novel tools for metallomics and biomedical research. The Neoma Multicollector ICP-MS system builds on our experience with the market-leading Thermo Scientific Neptune Series MC-ICP-MS instrument and represents a major step forward in flexibility and ease-of-use, without compromising performance. The Neoma ICP-MS greatly increases accessibility to the wealth of information that isotope ratio data can provide, which will benefit geoscientists as well as researchers from numerous scientific disciplines."

The new modular concept is designed to integrate future developments.

Users of the Neoma Multicollector ICP-MS system will benefit from:

- The ability to extract the finest detail of isotopic information from samples, utilising the highest sensitivity ICP interface,

and the lowest noise detectors available.

- The most flexible MC-ICP-MS instrument available; a new detector array that covers the broadest range of isotopic applications with uncompromising accuracy.
- Productivity stemming from the combination of modern hardware design with intuitive, easy-to-learn Qtegra Intelligent Scientific Data Solution (ISDS) software.