

New Triple Quadrupole ICP-MS launched by Thermo Fisher

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Thermo Scientific iCAP TQ ICP-MS has been recently launched by Thermo Fisher Scientific at Pittcon 2017. It offers advanced interference removal for analysing challenging matrices while delivering reliable, reproducible data and will be beneficial for laboratories working with challenging matrices from a new triple quadrupole inductively coupled plasma mass spectrometer (ICP-MS) as it is designed to combine power and simplicity in a single instrument.

It is easy-to-use system, developed to support ultralow detection limits, offers advanced interference removal capabilities designed to overcome interferences common in challenging matrices. It is also designed to provide reliable and reproducible data for a range of applications.

Adrian Holley, marketing director, trace elemental analysis, Thermo Fisher said, "There's a growing need to push the boundaries of detection, especially in metallurgy, clinical research, pharmaceutical compliance, environmental science, food

safety and geoscience."

He also added, "Our customers want the detection limits and accuracy of triple quadrupole technology with the ease of a single quad, and the iCAP TQ ICP-MS delivers that combination of power and simplicity."

The new iCAP TQ ICP-MS allows users to switch between single and triple quadrupole modes in a single multi-element experiment so that laboratories can keep their existing workflow as well as add new capabilities over time.

Jörg Bettmer, PhD, assistant professor, department of physical and analytical chemistry, University of Oviedo, Spain said, "Triple quadrupole technology ICP-MS is enabling us to overcome research challenges in sample analysis that we were unable to address with single quad technology."

"For example, analyzing titanium in biological system samples is challenging due to its low concentration and similarity to other interfering elements. With the iCAP TQ ICP-MS system, we are able to significantly increase sensitivity and decrease detection limits so that we attain the measurements that allow us to analyze low concentrations of titanium in complex samples. This is especially important as use of titanium as nanomaterials continues to increase in daily consumer products."

When combined with Thermo Scientific Qtegra Intelligent Scientific Data Software, an intuitive user interface and the Reaction Finder tool, researchers can reduce time-consuming method development.

Minimal user maintenance, QCell flatpole technology, a small volume collision/reaction cell with flatpole rods, and a dedicated gas distribution unit for lab safety and maximum flexibility are some of the unique features of this product. It also features self-aligning sample introduction components for reproducibility and an ergonomic benchtop design with a compact footprint that saves valuable lab space. Finally, by integrating control of peripherals, the system is designed for outstanding productivity with minimal errors - targeting consistent performance and reliable data.