

Thermo Fisher launches single quadrupole mass spectrometer

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Thermo Scientific ISQ EM system offers a robust, easy-to-use and reliable solution for both novice and expert users



Chromatographers looking for bold confidence in their samples can now benefit from a single quadrupole mass spectrometer designed for ease-of-use while offering application flexibility and reliable results for challenging mass confirmation analyses.

Driven by industry demand for a robust, easy to implement system, Thermo Fisher Scientific designed the Thermo Scientific ISQ EM single quadrupole mass spectrometer for high performance and productivity standards in laboratories. With a mass range of 10–2000 m/z, the system offers the power to detect and quantify small and large molecules and supports analytical needs across an extensive range of applications from drug development to manufacturing support and quality control.

The system's high-performing heated electrospray ionization (HESI) and dual HESI/atmospheric pressure chemical ionization (APCI) probes facilitate the measurement of polar and non-polar analytes, enabling application flexibility.

"Liquid chromatography users have been struggling with the inherent perceived complexities of mass spectrometry technology as they use LC-MS to routinely analyze samples," said Fabrizio Moltoni, vice president and general manager, High-Performance Liquid Chromatography (HPLC), Thermo Fisher Scientific. "With this top of mind, we designed the ISQ EM to enable novice and expert mass spectrometry users to take advantage of the technique's excellent sensitivity and selectivity for the rapid and reliable analysis of complex sample matrices."

"We've long been looking for a single quadrupole mass spectrometer that could allow us to obtain substantial information from routine samples, and thereby permits single assay runs, reliably tracks emerging impurities and quickly confirms the mass of newly synthesized entities," said Lydia Sweet, senior analytical chemist, Sachem, Inc. "The new ISQ EM addresses all of these needs, while being easy-to-use for the scientists in our lab."

The ISQ EM is integrated with HPLC systems and fully controlled by Thermo Scientific Chromeleon Chromatography Data System (CDS), which offers tools to guide users through LC-MS method development and select appropriate source conditions.

Thermo Scientific Chromeleon XPS Open Access software also supports the ISQ EM with walk-up workflows for simple daily operation. Additionally, full integration with native control in Chromeleon CDS enables users to benefit from the entire

productivity suite, from method creation through final reporting. A built-in reference standard also automates instrument calibration for a user-friendly experience.

Thermo Fisher is showcasing the new instrument at the 32nd International Symposium on Chromatography (ISC) 2018 at Booth #16, the Congress and Exhibition Centre, Cannes-Mandelieu, France, September 23–27.

The introduction of the ISQ EM further expands the product portfolio introduced in 2017 with the launch of the Thermo Scientific ISQ EC single quadrupole mass spectrometer.

The ISQ EC was designed to integrate with both ion chromatography and liquid chromatography systems and deliver low-molecular-weight performance for the detection and quantification of ions with limits of detection in the single-digit-parts-per-billion range.