

Press Release

Rigaku introduces the NEX QC⁺ high resolution benchtop EDXRF at the 2012 Gulf Coast Conference (GCC)

Austin, TX – October 16, 2012. Applied Rigaku Technologies, Inc. today introduced a new low cost, high resolution benchtop Energy Dispersive X-ray Fluorescence (EDXRF) elemental analyzer, the [Rigaku NEX QC⁺](#), at the 2012 Gulf Coast Conference (GCC) in Galveston, Texas. On exhibit at Booth #1004, the compact NEX QC⁺ delivers rapid quantitative determination of sodium (¹¹Na) to uranium (⁹²U) in solids, liquids, powders and alloys and is compliant with the ISO 13032 method (Application Note #1272) for determination of ultra-low sulfur in diesel (ULSD).

Derived from the NEX QC elemental analyzer that was introduced in 2011, the NEX QC⁺ was likewise designed for routine quality control applications. The new instrument is differentiated by a high-resolution Peltier cooled Silicon Drift Detector (SDD) that, together with a 50kV X-ray tube, delivers exceptional short-term repeatability and long-term reproducibility with excellent elemental peak separation. This high voltage capability (50 kV), along with multiple automated X-ray tube filters, provides a wide range of applications versatility and low limits-of-detection (LOD). Like the NEX QC, it has an intuitive smartphone style touch screen interface for easy operation and a built-in printer for convenience.

A silicon drift detector (SDD) affords extremely high count rate capability with excellent spectral resolution. This enables the Rigaku NEX QC⁺ to deliver the highest precision analytical results in the shortest possible measurement times. The unique engineering feature of a SDD is the transversal electrical field generated by a series of ring electrodes that forces charge carriers to 'drift' to a small collection electrode. Current generation SDD detectors, with the field effect transistor (FET) moved out of the radiation path, represent the current state-of-the-art in conventional EDXRF detector technology.

Options for the NEX QC⁺ include fundamental parameters, an automatic sample changer, a sample spinner and helium purge for enhanced light element sensitivity. Applications for the NEX QC span a broad spectrum of analytical needs and industries. In addition to the ULSD application, the new Rigaku NEX QC⁺ offers superior performance for backup cement analysis (Application Note #1273) and for the valuation of automotive catalysts (Application Note #1254).

About Rigaku

Since its inception in Japan in 1951, Rigaku has been at the forefront of analytical and industrial instrumentation technology. Rigaku and its subsidiaries form a global group focused on life sciences and general purpose analytical instrumentation. With hundreds of major innovations to its credit, Rigaku and its subsidiary companies are world leaders in the fields of small molecule and protein crystallography, X-ray spectrometry and diffraction, X-ray optics, as well as semiconductor metrology. Rigaku employs over 1,100 people globally and its products are in use in more than 70 countries – supporting research, development, production control and quality assurance activities. Throughout the world, Rigaku continuously promotes partnerships, dialog, and innovation within the global scientific and industrial community.

For further information, contact:

Robert Bartek, President
Applied Rigaku Technologies, Inc.
tel: +1. 512-225-1796
info@RigakuEDXRF.com