



Press Release

Rigaku introduces compact WDXRF analyzer for ultra-low sulfur (ULS) determination in fuels

Rigaku Global Marketing Group

Laura Oelofse
XRF Product Manager
Laura.Oelofse@Rigaku.com

July 1, 2013 – Tokyo, Japan. Rigaku Corporation is pleased to announce the introduction of the [Rigaku Micro-Z ULS sulfur analyzer](#). Designed for ultra-low level sulfur analysis of diesel and petrol (gasoline) fuels, this benchtop wavelength dispersive X-ray fluorescence (WDXRF) instrument features a novel design that measures both the sulfur peak and the background intensity. Rigaku Micro-Z ULS meets ASTM 2622-10 and ISO 20884 specifications.

The Rigaku Micro-Z ULS is the ideal solution for sulfur analysis of petroleum based fuels, with a lower limit of detection (LLD) of 0.3 parts-per-million (ppm) S. Employing robust fixed optics, featuring a specially designed doubly curved RX-9 analyzing crystal, the analyzer can be powered by any standard “wall” AC outlet.

New US EPA sulfur regulations for gasoline

On March 23, 2013, the US Environmental Protection Agency (EPA) proposed long-anticipated Tier 3 standards for gasoline sulfur content for light-duty and medium-duty passenger vehicles. With a proposed start in 2017, the Tier 3 program is also harmonized with the California Air Resources Board (CARB) Low Emission Vehicle (LEV III) program, enabling automakers to sell the same vehicles in all 50 states. EPA is proposing that federal gasoline contain no more than 10 ppm of sulfur on an annual average basis by January 1, 2017, down from the current 30 ppm standard. In addition, EPA is proposing to either maintain the current 80 ppm refinery gate and 95 ppm downstream caps, or lower them to 50 and 65 ppm respectively. The proposed Tier 3 gasoline sulfur standards are similar to levels currently in place in California, Europe, Japan, South Korea, and several other countries. A 15 ppm sulfur specification, known as Ultra Low Sulfur Diesel (ULSD), was phased in for highway diesel fuel beginning in 2006.

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 in the manufacture and support of its analytical equipment. Its products are in use in more than 70 countries – supporting research, development, 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:

Laura Oelofse
XRF Product Manager
Rigaku Corporation
Laura.Oelofse@Rigaku.com