

Press Release

Applied Rigaku Technologies, Inc. presents latest EDXRF solutions at PEFTEC 2019

X-ray analytical instrumentation from Applied Rigaku Technologies is featured at PEFTEC 2019 in Rotterdam

Rotterdam, The Netherlands, – May 22, 2019. Applied Rigaku Technologies, Inc. (ART) is presenting its line of energy dispersive X-ray fluorescence (EDXRF) instrumentation at the *Petroleum, Refining, and Environmental Monitoring Technologies Conference* (PEFTEC 2019) from Wednesday, May 22, 2019 to Thursday, May 23, 2019 at the Ahoy Exhibition Centre in Rotterdam, The Netherlands. PEFTEC is an international conference and exhibition for analytical chemists, scientists, process operators, laboratory personnel and environmental managers who work in and with the petroleum, refining, chemical and petrochemical industries.

EDXRF is employed for rapid non-destructive elemental analysis of crude, oils, gasoline, fuels, lubricants and waste materials. ART is exhibiting its lines of EDXRF instrumentation at booth # 63.

Among the instrumentation on display is the <u>Rigaku NEX</u> <u>DE</u> high-performance direct excitation EDXRF elemental analyzer.

The NEX DE analyzer was conceived for heavy industrial applications and engineered to heighten flexibility and ease of use. It is equipped with a 60 kV, 12 W X-ray tube and advanced Peltier cooled silicon drift detector (SDD) for significant gains in elemental peak resolution and counting statistics, to deliver superior calibrations and precision for the most challenging measurements.



Rigaku NEX DE - Energy Dispersive X-ray Fluorescence Spectrometer

The NEX DE spectrometer is ideally suited for the rapid qualitative and quantitative determination of metals in crude oil. As high metal content can adversely affect the refining process, low metal crude is desirable. To that end, a unique capability of the analyzer being highlighted is the measurement of ultra-low levels of nickel and vanadium in crude oil.

The system operates on the latest <u>Rigaku QuantEZ</u> analytical software, specifically designed for the Rigaku family of benchtop EDXRF analyzers. Running on the Microsoft Windows operating system, on a laptop or benchtop personal computer (PC), the software offers all the functions required for calibration and routine operation.



Other EDXRF solutions from ART include the Rigaku NEX QC benchtop EDXRF spectrometer, a compact elemental analyzer specifically designed for routine quality control applications. The analyzer delivers rapid qualitative and quantitative determination of major and minor atomic elements in a wide variety of sample types and features an intuitive "icon-driven" touch screen interface and built-in printer for easy operation and convenience.

With new International Convention for the prevention of Pollution from ships (MARPOL) regulations set to go into effect in 2020, the NEX QC analyzer is positioned as



Rigaku NEX QC Energy Dispersive X-ray Fluorescence Spectrometer

an ideal tool to monitor sulfur content of fuel oil used by ships, enabling compliance with low sulfur fuel oil requirements.



Rigaku NEX XT –
Process Elemental Advanced
X-ray Transmission / Absorption
Total Sulfur Gauge

In addition to its line of benchtop EDXRF analyzers, the ART division also offers the Rigaku NEX XT X-ray transmission (XRT) process analyzer for monitoring the sulfur content of heavy hydrocarbons such as crudes and bunker fuels. Use of the XRT technique eliminates issues such as window coating and plugging commonly seen on other XRF techniques.

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 general-purpose analytical instrumentation and the life sciences. With hundreds of major innovations to their credit, Rigaku companies are world leaders in X-ray spectrometry, diffraction, and optics, as well as small molecule and protein crystallography and semiconductor metrology. Today, Rigaku employs over 1,400 people in the manufacturing and support of its analytical equipment, which is used in more than 90 countries around the world supporting research, development, and quality assurance activities. Throughout the world, Rigaku continuously promotes partnerships, dialog, and innovation within the global scientific and industrial communities.

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