

## Press Release

### Rigaku introduces new 5<sup>th</sup> generation MiniFlex benchtop X-ray diffraction (XRD) instrument

**March 12, 2012 – The Woodlands, TX.** Rigaku Corporation today announced the newest additions to its MiniFlex series of benchtop X-ray diffraction (XRD) analyzers at the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2012). The new 5<sup>th</sup> generation MiniFlex is a general purpose X-ray diffractometer that can perform qualitative and quantitative analysis of polycrystalline materials. MiniFlex is now available in two variations. Operating at 600 watts (X-ray tube), the MiniFlex 600 is twice as powerful as other benchtop models, enabling faster analysis and improved overall throughput. Running at 300 watts (X-ray tube), the new MiniFlex 300 does not require an external heat exchanger and thus requires even less space. Each model is engineered to maximize flexibility in a benchtop package.

Ideally-suited for today's fast-paced XRD analyses, the new 5<sup>th</sup> generation MiniFlex delivers speed and sensitivity through innovative technology enhancements such as the optional D/teX high speed detector coupled with the new 600 W X-ray source. The optional graphite monochromator, coupled with the standard scintillation counter, maximizes sensitivity by optimizing peak-to-background ratios. If resolution is paramount, incident and diffracted beam slits can be selected to provide the desired resolution. For high sample throughput, MiniFlex is the only benchtop XRD system with an available sample changer. Whether used for teaching X-ray diffraction at the college and university level or routine industrial quality assurance, the MiniFlex delivers both performance and value.

Each MiniFlex comes standard with the latest version of PDXL, Rigaku's full-function powder diffraction analysis package. The latest version of PDXL offers important new functionality, including a fundamental parameter method (FP) for more accurate peak calculation, phase identification using the Crystallography Open Database (COD), and a wizard for *ab initio* crystal structure analysis.

The original MiniFlex, introduced in 1973, was designed to empower a novice to produce results comparable to those obtainable by a trained diffractionist using a compact XRD instrument. The new MiniFlex builds upon the characteristics that have made it popular for many years – including compact size and robust design – enabling installation in a small space with easy-to-use operation and very low cost of ownership.

#### 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.

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