# Press Release

## Rigaku Launches the SmartLab 3 Multipurpose X-ray Diffractometer with Built-in Intelligent Guidance

**Rigaku Global Corporation**
Paul Swepston, Ph.D.
Chief Marketing Officer
paul.swepston@rigaku.com

**June 16, 2014 – Tokyo, Japan.** Rigaku Corporation is pleased to announce the release of the SmartLab® 3 system, a highly versatile multipurpose X-ray diffractometer with built-in intelligent guidance. The SmartLab 3 system, which is debuting at the 14th European Powder Diffraction Conference (EPDIC), 15-18 June, in Aarhus, Denmark, offers continued refinement of the ease-of-use features that enabled the original SmartLab to receive the coveted R&D 100 Award in 2006: automatic alignment, component recognition, cross beam optics and a five axis goniometer.

Award-winning guidance software recognizes installed components and seamlessly integrates them into data collection and data analysis methods. The cross beam optics module offers permanently mounted, permanently aligned and user selectable optical geometries for various diffraction experiments. As an example, one can choose a Bragg-Brentano and parallel beam combination for measurements of both powders and thin films without the need for instrument reconfiguration. One could also choose a Bragg-Brentano and focusing transmission combination to measure organic materials in both transmission and reflection modes.



The fifth, or in-plane, axis of the SmartLab diffractometer allows the measurement of structures that are in the surface plane of the sample.  This enables the measurement of extremely thin films and depth profiling in coatings. The SmartLab 3 system further extends application capability with the next-generation HyPix™-400 2-D detector.  This hybrid pixel array detector offers the highest resolution and count rates available today. It is manufactured and fully integrated into the SmartLab 3 system by Rigaku and, as such, offers the superior ease of use pioneered by Rigaku in the original SmartLab diffractometer.  The SmartLab 3 system configured with a HyPix-400 detector operates in 0-, 1-, and 2-D modes without the need to exchange the detector.

*The Rigaku SmartLab 3 Intelligent X-ray diffraction system*

## 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:

Keisuke Saito, Ph.D.
Global Product Marketing Manager XRD
Rigaku Corporation
keisuke.saito@rigaku.com


###