

# Rigaku presents latest XRM and CT technology at 2017 Microscopy & Microanalysis meeting

## *Rigaku to showcase its newest analytical instrumentation at M&M 2017*

**August 6, 2017 – St. Louis, MO.** X-ray analytical instrument manufacturer [Rigaku Corporation](#) is pleased to announce its attendance at the Microscopy & Microanalysis 2017 Meeting ([M&M 2017](#)), being held August 6-10, 2017 at [America's Center](#) in St. Louis, Missouri.

The Microscopy & Microanalysis Meeting is the world's largest scientific gathering of microscopy and microanalysis professionals, academics, technicians, students and exhibitors. A wide range of microscopy and microanalysis techniques and their application to the biological and physical sciences will be presented. X-ray microscopy ([XRM](#)) and computed tomography ([CT](#)) equipment from Rigaku enable nondestructive analysis of large samples at high resolution. Rigaku, a global leader in X-ray analytical technology, is representing its current XRM and CT solutions at **booth 218**.

X-ray microscopy is suited to a range of materials, from low-density substances such as biological samples to high-density materials such as ceramics and steels. The [Rigaku nano3DX](#) X-ray microscope images an entire sample from multiple angles. In doing so, it can reconstruct a 3D image at 0.27  $\mu\text{m}$  resolution. The computer model allows the user to view sections at any point on any plane, providing valuable insights into the structure of the sample.

Another advantage of the nano3DX is its ultra-wide field of view. The nano3DX is able to measure volumes up to 25 times larger in a single scan compared to other systems at similar resolutions in comparable time frames.

Applications for the nano3DX are many and varied, from materials science to electronics and semiconductors to mining and minerals exploration to life sciences and pharmaceuticals.

Also of note is the [Rigaku CT Lab GX](#) industrial 3D X-ray micro computed tomography (CT) imager, an ultra-high-speed, high-resolution 3D CT suited for measurements of pharmaceuticals, medical devices, bones, ores, electronic devices, batteries, aluminum castings, and printed circuit boards.



*The Rigaku nano3DX  
X-ray microscope*

Computed tomography reveals, at high-speed, the high-resolution, three-dimensional structure of an object by means of computer-processed combinations of numerous X-ray images taken from different angles. The CT Lab GX series offers the latest 3D CT technology enabling measurement of industrial products in a short period of time.

A principal feature of the CT Lab GX is its capacity for ultra-high-speed measurement. In 3D mode, a CT scan can be achieved in 8 seconds and image reconstruction in 15 seconds. High-definition 3D observation is possible with a minimum resolution of 4.5 $\mu$ m and maximum number of pixels of 8000 $\times$ 8000 - the largest available compared to other products in the same class. Two versions are available: the low-powered "CT Lab GX90," suited for measurement of subjects such as resins, and the high-powered "CT Lab GX130," suited for subjects less penetrable by X-ray beams such as metals.



*The Rigaku CT Lab GX 3D  
X-ray micro CT imager*

### **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 70 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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