



NEWS RELEASE

Bruker Introduces New SKYSCAN 2214 Ultra-High Resolution Nano-CT

6/12/2018

BILLERICA, Mass., June 12, 2018 /PRNewswire/ -- Bruker today announced the launch of the **SKYSCAN™ 2214**, a multiscale X-ray nano-CT (computed tomography) system with a unique X-ray source and detector geometry that generates sharper images with outstanding precision. The **SKYSCAN 2214** offers unprecedented, ultra-high resolution for larger fields of view in larger objects, which makes nano-CT practical and truly useful for industrial and academic research.

The **SKYSCAN 2214** features an innovative, modular design which accommodates up to four detectors, allowing customers to select the most appropriate detector for their samples and applications. This flexibility offers the scanning of a wide variety of samples types and sizes in one instrument, reducing the need for multiple, different CT systems. The four detectors are field-upgradeable for cost-effective expansion of the **SKYSCAN 2214**, in order to accommodate changing analytical requirements.

The **SKYSCAN 2214** pushes the boundaries for measuring larger objects at ultra-high resolution. Its uniquely large field of view allows for the analysis of objects up to 300 mm in size. For objects up to 12 mm in size, it provides better than 500 nanometer true 3D resolution. The achievable voxel size is 60 nanometer. Its unique detector design encompasses a 6 Megapixel (Mp) flat-panel, and three optimized 8/11 Mp cooled CCD cameras. The **SKYSCAN 2214** produces up to 8K x 8K pixels in every slice, which is 16 times larger than any other nano-CT system available on the market.

While delivering cutting-edge, research-grade results, the **SKYSCAN 2214** comes equipped with user-friendly, comprehensive software for excellent data collection and high-end analysis capabilities. Spiral scanning enables distortion-free data acquisition and artefact-free reconstruction. The world's fastest 3D reconstruction software speeds up imaging an object's internal microstructure 10-100 times compared to traditional CT reconstruction

algorithms. The **SKYSCAN 2214** requires almost no maintenance, thus enhancing system uptime and reducing cost of ownership.

Dr. Frank Burgaezy, President of the Bruker AXS division, commented: "The **SKYSCAN 2214** is a game-changer for ultra-high resolution nano-CT in the material sciences. Its superior high resolution for larger objects offers new opportunities for developers of composite materials, as well as for geology, where precision is key to determine porosity and grain size. In metrology, the precision of the **SKYSCAN 2214** enables exact internal dimension measurements at the submicron scale. Ultra-high resolution is also critical for the development of lithium batteries and other energy storage devices."

Dr. Wulf-Ingo Jung, President of the Bruker BioSpin Preclinical Imaging division, added: "The **SKYSCAN 2214** enables new capabilities in preclinical imaging as well. Its large field of view combined with true high-resolution allows a wide range of samples to be imaged ex vivo, offering artefact-free analysis of soft tissues, e.g. in lung imaging or tumour vascularization. This top-of-the-line, new nano-CT system is also the ultimate tool in the growing fields of zoology and entomology, where very small objects can be studied with extreme precision."

About Bruker Corporation (NASDAQ: BRKR)

Bruker is enabling scientists to make breakthrough discoveries and develop new applications that improve the quality of human life. Bruker's high-performance scientific instruments and high-value analytical and diagnostic solutions enable scientists to explore life and materials at molecular, cellular and microscopic levels. In close cooperation with our customers, Bruker is enabling innovation, improved productivity and customer success in life science molecular research, in applied and pharma applications, in microscopy and nanoanalysis, and in industrial applications, as well as in cell biology, preclinical imaging, clinical phenomics and proteomics research and clinical microbiology. For more information, please visit: www.bruker.com.

Media Contact:

Thorsten Thiel, Ph.D.

VP of Group Marketing

Bruker BioSpin Group

T: +49 (721) 5161-6500

E: thorsten.thiel@bruker.com

Investor Contact:

Miroslava Minkova

Bruker Director of Investor Relations &

Corporate Development

T: +1 (978) 663-3660, ext. 1479

E: miroslava.minkova@bruker.com

View original content with multimedia:<http://www.prnewswire.com/news-releases/bruker-introduces-new-skyscan-2214-ultra-high-resolution-nano-ct-300662689.html>

SOURCE Bruker Corporation

