

ProductNews

Andor Technology Launches Zyla sCMOS Camera



Andor Technology plc announced the launch of the new Zyla 5.5-megapixel Scientific CMOS (sCMOS) camera. Ideal for research and OEM usage, Zyla sCMOS offers 100 fps frame rate, rolling and snapshot (global) shutter modes, and ultra-low noise performance, in a light, compact, and cost-effective design. Zyla achieves down to 1.2-electron rms read noise and can read out the 5.5-megapixel sensor at a sustained 100 fps through a "10-tap" Camera Link interface.

Andor Technology plc
www.andor.com/zyla

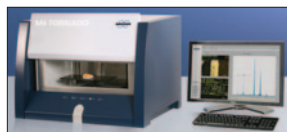
Quick-Release Magnetic Imaging Chambers



Warner Instruments introduced a new family of chambers designed to form coverslip-bottom imaging chambers quickly, using standard size coverslips. Features include silicone O-ring seals, no grease required, magnetic clamping, and use of standard size coverslips. A silicone O-ring seals the coverslip to the polycarbonate chamber using eight powerful magnets, without the use of silicone grease. Assembly and disassembly is as easy as rotating the chamber in either direction on the anodized aluminum base.

Warner Instruments
www.warnerinstruments.com

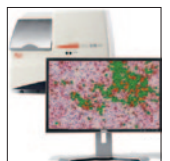
μ -XRF Maps Elemental Distribution at High Speed



The M4 Tornado μ -XRF system from Bruker offers high-speed analysis with excellent spatial resolution by using capillary optics and silicon drift technology. Optimized for rapid elemental analysis, the M4's optics concentrates the X-ray excitation into a spot as small as 25 μ m, yielding count rates of up to 500,000 counts per second. Bruker's X-Flash[®] Silicon Drift Detector processes high count rates with excellent energy resolution, resulting in fast, accurate spectral analysis and elemental maps.

Bruker Nano
www.bruker-nano.com

Leica Microsystems Introduces Tissue IA 2.0 Quantitative Image Analysis Fluorescence and Brightfield Analysis for Digital Pathology



Leica Microsystems announces the release of Tissue IA 2.0, high-performance image analysis for discovery research. Combining fluorescence and brightfield analysis capabilities in a single platform, with precision cell modeling, Tissue IA 2.0 offers a superior solution for IHC biomarker quantification. Tissue IA 2.0 joins the Total Digital Pathology portfolio from Leica, providing streamlined end-to-end excellence in capture, management, and analysis of digital pathology images.

Leica Microsystems
www.leica-microsystems.com

JAI's Latest Multi-Spectral Camera Has Higher Resolution and Sensitivity



JAI announced the release of the AD-130GE, a new 2-CCD multi-spectral camera offering significantly greater resolution and light sensitivity than the company's first-generation models. Like the existing AD-080 series, the AD-130GE incorporates a dichroic prism to provide simultaneous capture of both color and near-infrared (NIR) digital video on a single optical path for efficient multi-spectral inspection and analysis.

JAI Inc.
www.jai.com

Lumenera[®] Corporation Introduces Improved High-Resolution 11-Megapixel GigE Camera



Lumenera Corporation introduced the newly engineered, small form factor 11-megapixel Gigabit Ethernet (GigE) digital camera. The new Lg11059 provides significant technological advancements, enhanced performance, and ease-of-use over its predecessor, including lower noise and higher bit depth while housed in a smaller, robust enclosure. Lumenera's progressive scan Lg11059 digital camera offers 5 frames per second at full 4008 \times 2672 resolution, with high dynamic range of up to 66 dB.

Lumenera Corporation, a division of Roper Industries
www.lumenera.com

High-Power, Fiber-Coupled LED Light Engines Replace Lasers and Arc Lamps in Industrial, Medical, and Life Science Equipment



Innovations in Optics, Inc. introduces its new product line; LumiBright FC[™] fiber-coupled LED light engines. The versatile and powerful solid-state light sources are ideal for fiber optic applications. LumiBright FC light engines offer intense and stable optical power, short warm-up time, energy efficiency, low maintenance, and long-rated life. Models are available that accept fiber active core diameters from 1 mm up to 8 mm.

Innovations in Optics, Inc.
www.innovationsinoptics.com

B&W Tek Announces a Quantum Leap in the Evolution of Miniature CCD Spectrometer Technology



B&W Tek, Inc. introduced the future of miniature spectrometers and what users are calling the first truly "smart" spectrometer. B&W Tek's Exemplar[™] is the first miniature spectrometer to include an embedded processor to allow for effortless on-board data processing, including averaging, smoothing, and automatic dark subtraction. The ability to control the CCD exposure time to within one microsecond allows the user to have unparalleled control over the spectra's signal-to-noise ratio.

B&W Tek, Inc.
www.bwtek.com

IsoPlane – Revolutionary Imaging Spectrograph



Princeton Instruments's new IsoPlane SCT320 spectrograph features a revolutionary optical design that eliminates the primary aberrations present in traditional imaging spectrographs. IsoPlane completely eliminates astigmatism and greatly reduces coma thus producing images that are clearer and sharper across the focal plane. More photons end up in spectral peaks, significantly increasing the effective signal-to-noise ratio. Applications include microspectroscopy, multichannel spectroscopy, LIBS, Raman scattering, biomedical imaging, and most other spectroscopic imaging techniques.

Princeton Instruments
www.princetoninstruments.com

Thermo Fisher Scientific Releases Forescatter Detector to Improve Electron Image Contrast



Thermo Fisher Scientific has released a new forescatter electron detector designed for use with the Thermo Scientific QuasOr EBSD detector. The new forescatter detector restores backscatter detector functionality at full 70-degree tilt, allowing users conducting EBSD phase analysis to generate high-contrast electron images. The new detector can be attached to the arm of the QuasOr EBSD as an upgrade or purchased completely integrated within the QuasOr EBSD detector.

Thermo Fisher Scientific
www.fishersci.com

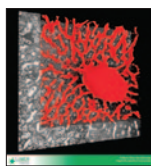
XFlash®6—the Next Generation of EDS Detectors



Bruker Nano Analytics introduces XFlash®6, the next generation of silicon drift detectors (SDD) for energy dispersive X-ray spectrometry (EDS) on electron microscopes. With the availability of large detector sizes up to 100 mm², energy resolution down to 121 eV, and throughput up to an incredible 600 kcps, the XFlash®6 series sets new standards for speed and sensitivity in EDS analysis and is exceptionally powerful for applications in nano technology and nano research.

Bruker Corporation
www.bruker.com/quantax

Renovo Neural Initiates First Dedicated Commercial 3D-Electron Microscopy Service; Collaborates with Customers to Co-Develop New 3D Nanohistology Applications



Renovo Neural, Inc., a specialty research company that has spun off from the Cleveland Clinic Foundation, announced that it has launched the world's first for-profit nanohistology service based on automated, high-speed 3D-electron microscopy (3D-EM). Working with the company, customers submit cell and tissue samples and, in return, receive image stacks containing hundreds of sequential slices through their material.

Renovo Neural, Inc
www.renovoneural.com

JEOL Introduces New Versatile FE-SEM Series for Sub-Nanometer Imaging and Analysis of Nanostructures and Magnetic Samples



JEOL's new series of field emission scanning electron microscopes offer expanded imaging and analysis capabilities customizable to performance requirements. The JEOL JSM-7100F series offers sub-1 nm imaging capabilities and analytical characterization at the sub-100 nm scale, accomplished through the combination of large beam currents with a small probe size at any accelerating voltage. The JSM-7100F SEM offers a new level of expanded performance for the budget-conscious lab.

JEOL USA, Inc.
www.jeolusa.com

Granite Isolator Introduces Low-Cost Vibration Isolation Platform for Microscopy



Granite Isolator announces a simple, low-cost vibration isolation platform requiring no air supply that easily slips under a microscope, precision weighing scale, or other sensitive instrument. The anti-vibration platform consists of only three parts: granite top plate for mass and stability, silicone gel for ultra-soft support and damping, and a plastic base. Standard sizes are: 13 × 15 × 1.25 in., 16 × 21 × 1.5 in., 18 × 26 × 1.75 in., and 22 × 32 × 1.75 in.

Granite Isolator
www.graniteisolator.com

EDAX Launches New Hikari XP EBSD Camera



EDAX Inc. introduces the Hikari XP, which offers outstanding performance across the complete range of EBSD applications, from high-speed analysis for process development and quality control to high-sensitivity indexing at low beam currents and low accelerating voltages for improved spatial resolution. The Hikari XP blends market-leading speed, sensitivity, and precision in one camera. When paired with EDAX's TEAM™ EBSD software, Hikari XP offers the highest indexing success rates on the market.

EDAX, Inc.
www.edax.com

Olympus Launches New Opto-Digital Solution



The DSX Series imaging system delivers a completely new type of technology that combines Olympus performance reliability with the touchscreen ease of a smartphone or tablet computer. DSX Series instruments include the DSX500, DSX500i, and DSX100. Designed for simplicity, accuracy, and reliability, all instruments in this line are designed to provide two core benefits—enhanced productivity and increased efficiency. The DSX Series captures clear images, acquires reliable measurements, and performs high-level analysis for reproducible results—all with a tap of a touchscreen.

Olympus Corporation
www.olympus-ims.com/opto-digital