

ProductNews

Zeiss Xradia Ultra Load Stage



Xradia Ultra Load Stage uniquely enables *in situ* nanomechanical testing—compression, tension, indentation—with non-destructive 3D imaging. Study the evolution of interior structures in 3D, under load, down to 50 nm resolution. Understand how deformation events and failure relate to local nanoscale features. The Xradia Ultra Load Stage explores a new critical length scale for *in situ* materials characterization, enabling researchers to observe internal features such as nanoscale cracks and voids at the macroscale.

Zeiss Xradia
www.zeiss.com/xrm

Lumen 1600-LED Fluorescence Illumination System



The Lumen 1600-LED offers individual control for 16 selectable wavelengths. With its unique 16 selectable LED wavelengths, the Lumen 1600-LED is compatible with all simple and multiband filter sets. For the user who wants ease of use, the Lumen 1600-LED has a “white light” mode with simple on/off and intensity buttons. Fitting directly to most microscopes, the system enables for rapid switching between LED wavelengths to allow for capture of high-speed events.

Prior Scientific
www.prior-us.com/Products

Circular Polarization Spectroscopy of Microscopic Samples



CRAIC Technologies announced the addition of circular polarization spectroscopy capabilities to CRAIC microspectrophotometers with the microspectra™ feature. It allows the user to measure the circular polarization spectra in either transmission or reflectance modes. The ability to measure circular polarization represents a powerful new tool for both materials science and biological research. CRAIC Technology's circular polarization package consists of optics and hardware designed to be added to CRAIC Technologies' microspectrophotometers in both transmission and incident illumination modes.

CRAIC Technologies, Inc.
www.microspectra.com

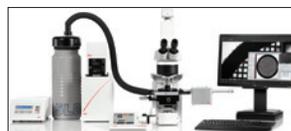
Leica Microsystems Launches Inverted Microscope



Leica Microsystems introduced the modular Leica DMI8 inverted microscope platform for industrial applications. The Leica DMI8 makes it possible for users to configure a basic microscope system now and upgrade later as needs and applications change. In addition, users can speed up their workflow, because working with an inverted microscope makes sample placement and change between samples faster than in upright microscopy. Additionally, the Leica Application Suite software guides users through the analysis step by step.

Leica Microsystem
www.leica-microsystems.com

Leica Microsystems Combines Cryo Fixation, Fluorescence Light Microscopy, and Electron Microscopy in One System



Leica Microsystems launched Leica EM Cryo CLEM. In CLEM, the sample is studied under the fluorescence light microscope and the electron microscope. The image data from both sources can be combined. The Leica EM Cryo CLEM system consists of a fluorescence light microscope with cryo stage, cryo objective, and a cryo transfer shuttle. It keeps cryo-fixed samples under cryo conditions during imaging and during transfer.

Leica Microsystem
www.leica-microsystems.com

Olympus CX23 Microscope Offers Ruggedness, Dependability, and Optical Excellence for Education, Training, and Laboratory Use



Like other instruments in the Olympus CX series, the new microscope features high-performance infinity-corrected optics for bright, clear, crisp images. The stable, color-corrected LED light source delivers reliable, natural-looking illumination, using far less power and lasting many times longer than traditional bulbs. A field number of 20 provides for added efficiency. The user can lock the frame to prevent the objective and glass slide from coming in contact.

Olympus Corporation
www.olympusamerica.com

4-channel CoaXPRESS Interface Enables 5-megapixel JAI Camera to Run at 253 fps



JAI has added a 4-channel CoaXPRESS interface to its 5-megapixel SP-5000 camera enabling the camera's high performance CMOS imager to run at its maximum full frame rate of 253.8 frames per second for 8-bit, 10-bit, or 12-bit pixel formats. Two models are available, the SP-5000M-CXP4 (monochrome) and SP-5000C-CXP4 (color). Both models feature a 2560×2048 pixel CMOS imager available exclusively from JAI.

JAI Inc.
www.jai.com

New AFM with High-Definition Electrical Measurement Capabilities



Nanoscience Instruments introduced the Nano-Observer AFM. This high-definition single-pass Kelvin Probe Force Microscopy (KFM) provides high-resolution surface potential mapping. The ResiScope, an award-winning innovative module, can be combined with the Nano-Observer to measure resistance over 10 orders of magnitude using atomic force microscopy. Resistance measurements can be coupled with magnetic force microscopy, electric force microscopy, or single-pass KFM imaging modes to acquire multiple properties in the same scan area.

Nanoscience Instruments
www.nanoscience.com

Magnetically Coupled, Oil-Sealed Rotary Vane Pumps from ULVAC for Clean, Leak-Free Vacuum



ULVAC Technologies, Inc. introduced the GHD-031 magnetically coupled, oil-sealed rotary vane pump that does not leak. It operates cleaner than other rotary vane pumps because it has no rotary shaft seals to wear out. A built-in check valve at the inlet port prevents oil backflow. GHD

pumps offer reduced power consumption and quieter operation. They have a pumping speed of 36 l/m and ultimate vacuum of 5×10^{-3} Torr.

ULVAC Technologies, Inc.
www.ulvac.com

Leica Microsystems Launches Digital Microscope Leica DVM6



Leica Microsystems launched the Leica DVM6. Integrated illumination options and PlanApo-corrected optics ensure high-quality images. The design of the Leica DVM6 enables users to work with the instrument intuitively, for example, tilting the microscope head or changing the objectives with one hand. Because of the instrument's encoding, results are reproducible, and reports and documentations can be generated with the click of one button.

Leica Microsystems
www.leica-microsystems.com

IDS3010 Pico-Precise Optical Displacement Sensor for Machine Integration



Some of the most important tasks in industrial metrology applications are contactless measurements of distances and displacements, the detection of vibration amplitudes of machine components and tools, and the ultra-precise survey of rotationally symmetric parts. attocube's new high-sensitivity displacement sensor IDS3010 presents the perfect solution to satisfy these demanding requirements.

It surpasses the performance of other commercial interferometry subsystems in terms of accuracy, speed, compactness, and cost.

attocube systems AG
www.attocube.com

Broad-Spectrum LED Illumination for Fluorescence Microscopy



The Lumen 300-LED is the latest addition to Prior's wide range of illumination products. The unit is specifically designed to offer broad-spectrum LED white light illumination for fluorescence applications. The Lumen 300-LED offers instant on/off operation. Alternatively, a liquid light guide Lumen 300-LED is available where there is a need to keep the illumination source remote from the microscope. Providing

25,000+ hours of bulb life, the Lumen 300-LED is an environmentally friendly (mercury-free) illumination system.

Prior Scientific
www.prior.com

Leica Microsystems Launches Wi-Fi Capability for Educational Microscopy in Universities and Colleges



Leica Microsystems launched two Wi-Fi-capable microscopy instruments for the science classroom: the Leica EZ4 W educational stereo microscope with built-in wireless camera and the Leica ICC50 W digital camera, which can be added to educational compound microscopes. Both systems transfer HD images directly to students' mobile devices. The Leica AirLab App for both iOS and Android devices allows capturing, annotating, sharing, and organizing of images and makes the classroom more interactive.

Leica Microsystems
www.leica-microsystems.com

Jenoptik Presents New Microscope Camera



The PROGRES GRYPHAX SUBRA, the first model in this new generation of cameras, is a USB 3.0 camera that boasts impressive features such as an intuitive software interface and an optimized workflow, having been designed specifically to address requirements

relating to quality assessment and control. One new feature is the live panorama function, which enables a large sample to be scanned automatically in real time, before the sections are combined to form a final overall image.

JENOPTIK Optical Systems GmbH
www.jenoptik.com/os

New Scanning Electron Microscope for Large Samples



The Phenom XL SEM is the first desktop SEM that offers full imaging of samples up to 100 mm x 100 mm. The combination of the motorized XY stage with the Phenom programming interface software is a powerful package, allowing the user to automate measurements across multiple samples and locations. Elemental analysis can

be added by the EDS technology already proven on the Phenom ProX. An optional secondary electron detector is available.

Nanoscience Instruments
www.nanoscience.com

Dynamic Focus VZM Lenses Use an Internal Liquid Lens to Electronically Adjust Focus



Edmund Optics introduced its new Dynamic Focus VZM Lenses. These lenses use an internal liquid lens to seamlessly adjust focus over a 7x range, from 0.65x to 4.6x. At the same time, the lens maintains the zoom capabilities of the standard VZM Zoom Imaging Lenses.

Dynamic Focus VZM Lenses feature a lockable iris, zoom control, and a rotatable mount for optimal camera orientation.

Edmund Optics®
www.edmundoptics.com