

ProductNews

Gatan Launches Ilion II, for Ultimate SEM Cross-Sectional and Planar Specimen Preparation



This sets a new standard for SEM cross-sectional and planar sample preparation, especially with access to routine, rapid, fine finishing at low energy, notably benefitting EBSD sample preparation. All applications can use recipe operation from the touch screen interface. On the advanced variants of the tool, a digital viewing camera can monitor the progress of preparation and record images as layers are removed.

GATAN, Inc
www.gatan.com

Leica Microsystems Launches Two Cameras for Routine Imaging Applications



Leica Microsystems has launched two cameras for routine brightfield or fluorescence applications. Both cameras are equipped with sensors dedicated to the respective applications that allow live images of up to 30 frames per second. The Leica DFC3000 G is a grayscale USB 3.0 microscope camera for routine fluorescence applications. The Leica DMC2900 is a USB 3.0 microscope camera with a 3.1-megapixel CMOS sensor for standard brightfield applications in research, industry, and life sciences.

Leica Microsystems
www.leica-microsystems.com/science-lab/digital-cameras

Asylum Research Introduces the MFP-3D Origin™ AFM



Asylum Research announced the new MFP-3D Origin Atomic Force Microscope. The MFP-3D Origin is at the intersection of performance and affordability in the Asylum Research MFP-3D™ AFM family. The MFP-3D Origin features the technical excellence, innovation, and excellent customer support that are the trademark of every Asylum AFM. With full upgrade potential to the MFP-3D and its complete range of accessories, the MFP-3D Origin is the best place to start with atomic force microscopy.

Asylum Research, an Oxford Instruments company
www.Asylum-Research.com

FEI's New Helios NanoLab 660 DualBeam



The XHR SEM delivers sub-nanometer imaging resolution, high signal collection efficiency, and high contrast over the widest range of accelerating voltages. Fast time to data is enabled both by the new in-column detection system, which allows simultaneous topographic and materials contrast imaging and by the new high-current SEM mode. The Tomahawk™ FIB column guarantees the tightest beam at high and low currents, for fast, large-volume removal and polishing, respectively; and exceptional low-energy performance, to remove surface damage in the final polishing steps.

FEI Company
www.fei.com

Advanced TEM Imaging with the Olympus 11-Megapixel Morada G2



The Morada G2 delivers up to 4032 × 2688 pixels, resulting in a very large field of view of about 36 mm × 24 mm, important for numerous TEM imaging applications. The 9 μm × 9 μm pixel size facilitates high-resolution images in low- and mid-range magnifications. A large field of view is not the only important specification for TEM cameras; it is accompanied by high contrast, high sensitivity, and superior resolution.

Olympus Soft Imaging Solutions GmbH
www.soft-imaging.net

Oxford Instruments Launches Gas Injection System



OmniGIS II is a revolutionary single-port, multiple-gas injection system with unique features that provide unrivalled levels of control and accuracy. Vent-free auto-ID cartridges facilitate fast and easy source changes, providing expandable source capacity with up to three precursors and two gases connected at the same time. A “flow-through” carrier approach promotes efficient chemical delivery and rapid processing, while pressure feedback control provides automated tuning to a wide range of chamber pressures.

Oxford Instruments plc
www.oxford-instruments.com

Vibration Isolator from Minus K Technology



Minus K Technology, a leading manufacturer of passive vibration isolation products, has just released a compact, high-capacity, low-frequency negative-stiffness isolator designed to support heavy payloads while reducing low-frequency vibrations. The new CM-1 isolator comes in several capacity ranges to match vibration-sensitive instruments such as SPMs (AFMS, STMs, etc.), micro-hardness testers, profilers, interferometers, electron microscopes, or other imaging systems, for weight loads from 50 to 825 lbs.

Minus K Technology, Inc.
www.minusk.com

The Next-Generation VersaXRM



Xradia announces the VersaXRM family of non-destructive 3D X-ray imaging solutions. The new VersaXRM-520 extends the boundaries of non-destructive imaging with advanced contrast capabilities, extensive filtering options, and enhancements delivering greater accuracy and efficiencies. These features are easily managed by the Scout-and-Scan control system, software that simplifies and speeds operation from within the VersaXRM user interface (up to 40% faster reconstruction on all VersaXRM). The new dual GPU on the VersaXRM-520 reduces reconstruction time up to another 40%.

Xradia
www.xradia.com

Olympus Launches LEXT OLS4100 Laser Confocal Microscope



Olympus announced the release of the LEXT OLS4100 laser confocal microscope system. Designed to deliver nanometer-level imaging, accurate 3D measurement, and outstanding surface roughness analysis, the OLS4100 features auto brightness and a new high-speed stitching mode. Engineered to meet a growing demand for increased measurement precision and wider observation applicability, the OLS4100 offers advanced measurement performance at ten-nanometer resolution with a variety of user-friendly performance parameters. The OLS4100 can reliably measure acute-angled samples.

Olympus Corporation
<http://olympus-ims.com/en/metrology/ols4100>

WITec's RayShield Coupler Makes Accessible Raman Data at Low Wavenumbers



WITec's RayShield Coupler is now available for the alpha300 and alpha500 microscope series. It allows the acquisition of Raman spectra at wavenumbers down to below 10 rel. cm^{-1} . This high-transmission coupler system includes a specialized narrow-band filter set, which is optimally aligned to detect Raman lines extremely close to the Rayleigh line while maintaining ideal Rayleigh shielding. Thus additional spectral information from Stokes and Anti-Stokes Raman signals can be obtained.

WITec GmbH
www.witec.de

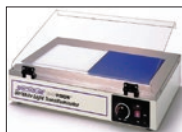
H101F Flat Top Microscope Stage for Upright Microscopes



Prior Scientific introduced their latest motorized high-precision microscope stage for upright microscopes, the H101F Flat Top Stage. The design of the H101F incorporates a completely flat top plate that eliminates any obstacle to objective rotation, while ultra-low profile sample holders facilitate the use of high NA objectives. High-resolution embedded X and Y axis encoders provide closed-loop control. High-torque motors allow access to the condenser and other microscope adjustments.

Prior Scientific, Inc.
www.prior.com

Transilluminator Provides Both Ultraviolet and White Light Illumination



The advanced Spectroline® Bi-O-Vision™ Series transilluminators feature two workstations, producing both 312 nm ultraviolet and white light. The TD-1000R model offers fixed-intensity, and the TVD-1000R model offers variable-intensity control of either UV or white light. These units are continuously adjustable from 100% down to 50%. This enables life science researchers to select medium-wavelength ultraviolet or white light illumination to view fluorescent gels or visible blots. The UV-B (312 nm) intensity of the TVD-1000R can be varied.

Spectronics Corporation
www.spectroline.com

FEI Helios 1200AT DualBeam System Accelerates Process Development and Ramp



FEI released the Helios NanoLab™ 1200AT, the newest generation of its full-wafer DualBeam™ analysis systems. The addition of an optional automated FOUP (front-opening universal pod) loader allows location of the Helios NanoLab 1200AT system inside the semiconductor wafer fab, where its scanning electron microscope imaging and precise focused ion beam milling are used by engineers to extract ultrathin samples of targeted structures and defects for examination in a high-resolution transmission electron microscope.

FEI Company
www.fei.com/helios

VisiLine Cameras with IP 65/67 Protection Solve Demanding Imaging Applications



Baumer expands its GigE camera series with ten new IP protected models that have been specifically developed for particularly demanding industrial environments. With IP 65 and IP 67 protective housings, every sensitive camera component, all the way to the lens, is protected from dust, water spray, and temporary immersion. Designed for industrial uses, they can be powered by a 12- to 24-volt or power over ethernet (PoE) supply.

Baumer, Ltd.
www.baumer.com

The EMS Coolstage for SEM, LV, or VP



The Coolstage is a Peltier-driven SEM cooling stage for scanning electron microscopy (SEM), low-vacuum (LV), or variable-pressure (VP) applications. The stage can be cooled to sub-zero temperatures for specimens that may be sensitive at ambient temperature, subject to beam damage, or may otherwise "sublime" (lose water) at ambient temperatures. There are three versions of coolstage—Standard, Enhanced, and Ultra—to cover differing specimen requirements.

Electron Microscopy Sciences
www.emsdiasum.com

Nikon Introduces the World's Largest Zoom Range, Highest-Resolution Stereomicroscopes



Nikon Instruments, Inc. announced two new stereomicroscopes: Nikon SMZ25 and SMZ18. Ideal for all bioscience applications, these new microscopes meet the increasing need of scientists for imaging systems capable of spanning spatial scales from single cells to whole organisms. The SMZ25 is fully motorized. It uses the Nikon Perfect Zoom System, resulting in a large zoom ratio of 25:1 for superior resolution and exceptional fluorescence transmission capability. The SMZ18 offers the same features but is manual.

Nikon Instruments Inc.
www.nikoninstruments.com