ProductNews

Asylum Research Announces Scanning Microwave Impedance Microscopy for Nanoscale Mapping of Permittivity and Conductivity on Any Material



Asylum Research announced Scanning Microwave Impedance Microscopy (sMIM), an atomic force microscopy (AFM) technique that enables nanoscale mapping of permittivity and conductivity with unprecedented sensitivity and

resolution on any material including conductors, semiconductors, and insulators. sMIM incorporates electronics and proprietary AFM probe technology developed by PrimeNano Inc. and is available integrated exclusively with Asylum Research MFP-3D™ and Cypher™ AFMs.

Asylum Research, an Oxford Instruments company www.AsylumResearch.com/sMIM

New ZMorf Surface Imaging and Metrology Software for **Zeta Instruments Optical Profilers**



Zeta Instruments and Digital Surf announced that Zeta Instruments is offering ZMorf Surface Imaging and Metrology software with its Zeta optical profilers for biotech, solar cell, LED, MEMS, data storage, and other micron-scale

applications. ZMorf is based on Digital Surf's industry-standard Mountains Technology® software platform. The software provides powerful 3D surface imaging and analysis coupled with automated metrology reports and full data.

Zeta Instruments and Digital Surf www.zeta-inst.com and www.digitalsurf.com

ZEISS Crossbeam for 3D Nanotomography and Nanofabrication

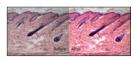


The new Crossbeam features include high speed in materials analysis and processing and its wide diversity of applications. Time-intensive 3D experiments that used to run for several days can now be completed overnight. The newly developed

FIB column enables fast and precise materials processing that can be observed with the field emission scanning electron microscope in real-time. High resolution over the entire voltage and current range allows users to work quickly and precisely.

The Carl Zeiss Group www.zeiss.com

Datacolor Launches Novel Color Calibration System for



Datacolor announced the launch in the U.S. of Datacolor CHROMACALTM, a first-of-its-kind system that enables scientists to establish and preserve the

color integrity of their digital transmitted bright-field microscopy images. The system is available for sale through EMS (Electron Microscopy Sciences, Hatfield, PA), the exclusive distributor of Datacolor CHROMACAL in the United States. With CHROMACAL, one has a reliable, easy-to-use, and integrated system for achieving digital color integrity in bright-field microscopy.

Datacolor www.datacolor.com/products

Leica DCM8 Unites Advantages of High-Definition Confocal Microscopy and Interferometry in One Instrument



Leica Microsystems launched the Leica DCM8 for non-destructive three-dimensional surface profiling. The instrument is a combined confocal and interferometric optical profiler and therefore provides the benefits of both

technologies: high-definition confocal microscopy for high lateral resolution and interferometry to reach sub-nanometer vertical resolution. Both techniques can be important for surface analysis of materials and components across numerous research and production environments.

Leica Microsystems, Inc. www.leica-microsystems.com

EDAX Introduces Octane Series SDDs for Transmission Electron Microscopes

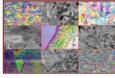


EDAX's new detectors for the TEM utilize the Octane Silicon Drift Detector family. The Octane TEM Series offers modules sized from 30 mm² to 100 mm² and provides solid angles up to 1.1 steradian. Built with EDAX Smart detector design, the detectors allow optimal geometry inside the TEM column

and maximize data collection. Octane TEM SDDs can produce resolutions as low as 123 eV and are optimized for low-energy X-ray collection.

AMETEK EDAX www.edax.com

EDAX New PRIAS Tool for SEMs



EDAX, Inc has developed a new advanced imaging tool that allows scanning electron microscopes to obtain crystallographic, compositional, and topographical contrast images with unprecedented flexibility in signal collection and processing. Pattern

Region of Interest Analysis System or PRIAS is a ground-breaking imaging tool that allows users to gain new insights through advanced microstructural imaging. It synergistically uses an EDAX Hikari XP or DigiView camera to visualize and characterize the microstructure of materials.

AMETEK EDAX www.edax.com

Aven Cyclops Digital Scope Has HDMI and **USB Outputs**



A versatile new inspection microscope by Aven, Inc. connects directly to a HD monitor as well as to a computer. The new Aven Cyclops Digital Microscope, with HDMI and USB output modes, lets users see magnified views in two ways. In HDMI mode, it

has a magnification range of 15× to 270× on a 21.5" HD monitor. If the USB cable is used for PC viewing, magnification increases up to 534×.

Aven, Inc www.Aveninc.com

Compact, New Imaging Spectrograph



Princeton Instruments announcd the IsoPlane® 160 imaging spectrograph. The IsoPlane 160 is the world's first compact spectrometer to provide outstanding imaging, high spectral resolution, and excellent lightgathering power from vacuum-UV to mid-IR range without performance trade-offs. Benefits of this new 160 mm focal length spectrograph include high spectral and spatial resolution across

the entire $27 \times 14\,\text{mm}$ focal plane, as well as complete flexibility in spectral coverage, resolution, and wavelength range thanks to a triple-grating turret.

Princeton Instruments www.princetoninstruments.com/products/spec/isoplane

Dage-MTI Introduces All-in-One HD Video Solution for Pathology/Microscopy



Dage-MTI announced the all-inone, click-and-capture HD-210U High Definition Camera. Developed primarily for clinical imaging, the live streaming HD (1920 × 1080 resolution) video system operates at 60 frames per second (fps) and offers direct, real-time viewing of slides, even as the stage and

slide are being moved. It is designed to aid in the navigation of the slide to the important areas of interest, improving speed and efficiency.

Dage-MTI www.dagemti.com

Electron Microscopy Sciences Announces the PP3010T Cryo-SEM Preparation System

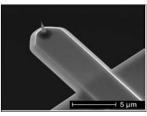


Electron Microscopy Sciences adds to their extensive product catalog with the release of the PP3010T Cryo-SEM preparation system. The PP3010T is a highly automated, easy-to-use, column-mounted, gas-cooled cryo preparation system suitable for most makes and models of

SEM, FE-SEM, and FIB/SEM. The PP3010T has all the facilities needed to rapidly freeze, process, and transfer specimens. The PP3010T is a leap forward in cryo-SEM technology. It combines the highest quality results with ease of use.

Electron Microscopy Sciences www.emsdiasum.com

NanoWorld AG Introduces Ultra-Short Cantilevers for High-Speed Atomic Force Microscopy



NanoWorld AG announced six types of ultra-short cantilevers dedicated for use in high-speed atomic force microscopy (HS-AFM). HS-AFM is a quickly evolving technique within the field of scanning probe microscopy that enables the users of dedicated instruments and AFM probes to visualize dynamic processes at the

single-molecule level. After a very successful beta-testing phase, six types of AFM probes for high-speed scanning are commercially available.

NanoWorld AG www.highspeedscanning.com

Raman Images Faster than Ever Before



SWRenishaw's new StreamLineHRTM Rapide option for its inVia Raman microscope enables the rapid collection of large amounts of Raman data. With this capability, and inVia's high sensitivity, users can generate high-definition chemical images quickly. Faster imaging

tight integration between Renishaw's detector and motorized sample stage enables very rapid imaging (detector spectrum readout rate over $1000~\rm s^{-1}$). Coupled with large file handling, this means it is easy to produce highly detailed Raman images with extreme speed.

Renishaw plc www.renishaw.com/raman

JAI's Elite EL-2800 2.8-Megapixel CCD Cameras Now Available With CoaXPress Interface



JAI's new Elite EL-2800 industrial CCD cameras are now available with a CoaXPress digital interface. The new models, named EL-2800M-CXP (Monochrome version) and EL-2800C-CXP (color version), are equipped with a single CoaXPress connector supporting cable lengths up to 169

meters. The EL-2800 cameras feature high sensitivity, improved NIR response, reduced smear, higher quantum efficiency, and excellent image uniformity while minimizing shutter leakage and readout noise for increased image quality.

JAI, Inc. www.jai.com

New InGaAs Camera Engineered for Advanced, Low-Light, NIR/SWIR Applications

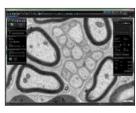


Princeton Instruments introduced a new member of the NIRvana® family of InGaAs imaging cameras, the NIRvana 640ST. Princeton Instruments's scientific-grade NIRvana camera series is the world's first to use a deep-cooled indium gallium arsenide (InGaAs) focal plane array for research. The new NIRvana 640ST

has been designed for scientific imaging applications in the shortwave infrared (SWIR). This new state-of-the-art camera is available with the latest Princeton Instruments LightField[®] data acquisition software.

Princeton Instruments www.princetoninstruments.com/products/imcam/nirvana

The Future of Electron Microscopy Software



RADIUS software utilizes simple, intuitive user operation, a range of functions that interact perfectly, and a structure that is flexible and modular. Of course all current OSIS TEM cameras can be controlled via RADIUS, but next to these, most modern TEMs can or will soon be able to be

controlled and automated via RADIUS, including magnification, stages, beam blanker, etc. RADIUS controls connected devices, allowing complex recording processes to be performed and automated.

Olympus Soft Imaging Solutions GmbH www.olympus-sis.com