

## ProductNews

### New WITec Multi-Wavelength Coupling Unit for the alpha300 and alpha500 Series



It is now possible to switch between up to three laser sources by the simple rotation of a filter wheel. Calibration and alignment of the laser beam path is guaranteed at all positions, assuring accurate and variable Raman imaging. Each excitation wavelength features a high-quality and wavelength-optimized filter set, enabling the highest throughput and contributing greatly to the exceptional speed and sensitivity of WITec's systems.

WITec GmbH  
www.witec.de

### TEMwindows by SiMPore Offers Thinnest Silicon Nitride TEM Windows



TEMwindows by SiMPore is proud to now offer the thinnest available silicon nitride TEM window grids at 5 nm thick. They are available in two formats: the classic 9 windows and a new single 25 x 25 micron window. These window grids are surprisingly robust and have supported over 30 psi and 50 psi, respectively. They are also introducing the first labeled microporous silicon nitride window grid so you can move from one instrument to another without losing your place.

TEMwindows by SiMPore  
www.TEMwindows.com

### New JEOL Large-Angle Energy Dispersive Spectrometer (EDS) for Ultrafast Elemental Mapping of S/TEM Samples



JEOL has developed a new generation of Energy Dispersive Spectrometer (EDS) for ultrafast, ultra-sensitive collection of X-rays through analysis with its Scanning Transmission Electron Microscopes (S/TEM). Centurio from JEOL is a novel Silicon Drift Detector (SDD) EDS that collects X-rays from samples at an unprecedented large solid angle of up to 0.98 steradians from a detection area of 100 mm<sup>2</sup>.

JEOL USA, Inc.  
www.jeolusa.com

### Thermo Fisher Scientific Launches New GC-MS/MS Instrument for Superior Selectivity and Sensitivity at ASMS 2011



Thermo Fisher Scientific Inc., the world leader in serving science, announced the launch of its new triple quadrupole gas chromatography-mass spectrometry (GC-MS/MS) system designed to offer best-in-class selectivity, analytical performance, and productivity. The Thermo Scientific TSQ Quantum XLS Ultra delivers the increased matrix selectivity needed for challenging applications that require lower levels of quantitation in extremely complex matrix extracts.

Thermo Fisher Scientific Inc.  
www.thermoscientific.com/xlsultra

### Electron Microscope Preparation Equipment Line Expanded



Electron Microscopy Sciences is pleased to introduce the EMS 300 series of large specimen sputter coaters for SEM preparation and thin film applications. The series features a multiple sputtering head design that ensures even coating deposition over a single large specimen or multiple small specimens. The flexible system allows sputtering to be limited to a single source for more economical sputtering of smaller specimens.

Electron Microscopy Sciences  
www.emsdiasum.com

### Lumenera Launches Unique 5-Megapixel CCDInfinity USB2 Scientific Camera



The INFINITY2-5 5.0-megapixel camera is ideal for qualitative and quantitative imaging in life science, clinical, and material science applications where higher resolution, superb color reproduction and excellent sensitivity are of the utmost importance. Features include: Sony ICX655 2/3" CCD sensor; 8- and 14-bit output; up to 23 fps; and large field of view and progressive scan global electronic shutter. This is a versatile, high-speed research camera offering high dynamic range for microscopy.

Lumenera Corporation  
www.lumenera.com

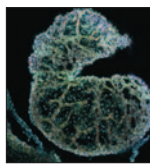
### SR Microscope Stages are More Stable with Capacitive Feedback



PI (Physik Instrumente) LP has added two higher-performance models to its successful PInano™ superresolution (SR) microscope stage series. The new models are equipped with direct-measuring capacitive sensors. This type of sensor can provide higher linearity and long-term stability than the lower cost piezoresistive sensor-equipped stages, which are still available. Capacitive sensors are also less sensitive to noise as opposed to the DC-based sensing technique used in piezoresistive sensors.

PI (Physik Instrumente) LP  
www.nanopositioning.net/XYZ\_nanopositioning\_stage.php?#nano

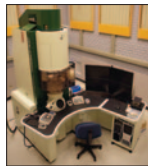
### Leica Microsystems Introduces the Leica TCS SP5 II "Growth Confocal" Imaging System



Leica Microsystems introduces the high-sensitivity, super-resolution Leica TCS SP5 II Growth Confocal Imaging System for entry-level budgets. The system provides optimal excitation of fluorophores with multiple lasers to extend fluorophore lifetime and living cell viability. Also, multiple fluorescent channels can be acquired simultaneously with Leica Microsystems's spectral detection system, a feature unique to Leica. The system also offers super-sensitivity and photon-counting with optional Hybrid Detectors for quantitative imaging.

Leica Microsystems  
www.leica-microsystems.com/growth

## JEOL Introduces New Environmental Control System for Scientific Instrument Labs



Scientific instrumentation is typically housed in an enclosed room, with just enough access for operation or service. The heat generated from equipment, personnel entering and exiting the room, and the enclosed facility itself can all affect the performance of sensitive instrumentation. To help ensure optimum instrument performance and to maintain a consistently cool environment without adding air turbulence, JEOL has developed the JEOL Hydro Radiant Panel system that is custom-designed and fitted to each room.

JEOL USA, Inc.  
www.jeolusa.com/PRODUCTS/EnvironmentalControlSolutions/tabid/816/Default.aspx

## FEI Announces New Vion PFIB System for Advanced IC Packaging



FEI released the Vion™ plasma focused ion beam (PFIB) system that removes material more than 20 times faster than existing FIB technologies. Faster (20–50×) material removal addresses new markets for FIB-based failure analysis in advanced integrated circuit (IC) packaging applications. The Vion PFIB systems can provide site-specific cross-sectional analysis of these new technologies in minutes rather than hours that will accelerate process development and reduce time-to-market for new products.

FEI Company  
www.fei.com

## AEP Technology NanoMap-D 3-D Optical and Stylus Surface Profiler



The NanoMap-D is a dual-purpose surface profiling system, offering both optical and stylus measuring techniques in a single platform. Both techniques provide accurate and repeatable 3-D surface images. The optical profiler provides 2-million-pixel images, achieving 0.001 nm Z resolution. Users can quickly and easily switch between the two measuring heads by software control. System applications include measuring step heights, surface roughness, flatness, and curvature.

AEP Technology  
www.aeptechology.com

## Micro Photonics Launches the SkyScan 2140—World's First Combined $\mu$ CT/ $\mu$ XRF System



The SkyScan 2140, offered by Micro Photonics Inc., is the world's first commercially available laboratory micro-CT/micro-XRF system. The SkyScan 2140 extends the boundaries of non-destructive 3-D imaging by adding true 3-D chemical analysis capabilities to high-resolution micro-tomography. It combines a micro-CT scanner, which provides high-resolution morphological information and absorption-correction maps for chemical analysis with a full-field 3-D micro-XRF scanner for reconstruction of 3-D chemical composition.

Micro Photonics Inc.  
www.microphotonics.com

## CAMECA Launches New Field Emission Electron Probe Microanalyzer



CAMECA has unveiled the SXFiveFE, a field emission electron probe microanalyzer that is available in two configurations: SXFive with W and LaB<sub>6</sub> sources and SXFiveFE with FE source. CAMECA has optimized the performance of both instruments for challenging microanalytical applications at sub-micron spatial resolution. Equipped with high-precision spectrometers for greatest reproducibility, the instrument delivers highest quality minor and trace element analysis. In addition, it offers full automation for long-term unattended analysis.

CAMECA Business Unit  
AMETEK Materials Analysis Division  
www.cameca.com

## Colorimetry and Spectroscopy of Microscopic Features with CRAIC Technologies



CRAIC Technologies introduced the 308 PV™ microscope spectrophotometer with colorimetry. Designed to be added to the photoport of a microscope or probe station, the 308 PV™ is a spectrophotometer that can non-destructively analyze the color of many types of microscopic samples. Featuring CRAIC Technologies new Lightblades™ spectrophotometer technology, the 308 PV™ can measure the color of microscopic sample areas by both transmission and incident illumination.

CRAIC Technologies  
www.microspectra.com

## E-Series Lamps Optimize UV Irradiance



The versatile Spectroline® E-Series lamps feature corrosion-resistant, specular-aluminum reflectors to optimize UV irradiance. These compact, light-weight lamps can easily be carried to wherever they are needed, for example, to use a UV trans-illuminator. All 254-nm and 312-nm models have exclusive LONGLIFE™ filter glass for higher initial UV transmission and maximum resistance to solarization. The 365-nm models are available with integrally filtered long-wave UV tubes (BLB) or unfiltered UV tubes (BL) with or without separate filter assemblies.

Spectronics Corporation  
www.spectroline.com

## OPTRONICS® Announces the Release of Microcast® HDXST

OPTRONICS announced the release of their Microcast® HDXST™ full 3CCD 1920 × 1080 progressive scan high-definition c-mount camera system for demanding research and microsurgical imaging applications. Distinguishing features of HDXST™ include an improved 3CCD HD prism with new embedded software features enabling increased imaging performance for challenging, dynamic real-time microscope visualization and documentation applications. The Microcast® HD 1080p microscope camera systems create a 2-megapixel video that has six times more pixel resolution compared to conventional camera systems.

OPTRONICS® | Medical Grade HD Microimaging Systems  
www.optronics.com