

## ProductNews

### Leica Microsystems Digital Light Sheet Module for the Leica TCS SP8



Leica Microsystems launches the TCS SP8 DLS, a digital light sheet microscope, which is fully integrated into the Leica TCS SP8 confocal microscope for the observation of developmental processes in real time and 3D. The light sheet module is an optional add-on to the Leica TCS SP8 modular imaging platform and expands its imaging options. Additional functionality such as STED super-resolution, advanced lasers, and multiphoton or quantitative imaging can also be added.

Leica Microsystems GmbH  
www.leica-microsystems.com

### Bolt-On SIMS Analyzer for FIB Microscopes



Hidden SIMS bolt-on mass spectrometers and ion guns enable a complete SIMS facility to be added to analytical UHV surface analysis tools including FIB systems. The latest Hidden EQS probe now offers the inclusion of an integrated SNMS mode to provide the dual roles of sputtered neutral and secondary ion mass spectrometry, which are beneficial for the measurement of optical and metallurgical coatings, alloys, and corrosion layers with a full concentration range from trace to 100%.

Hidden Analytical  
www.HiddenAnalytical.com

### ZEISS GeminiSEM and ZEISS Sigma – Two Families of Field Emission Scanning Electron Microscopes



The ZEISS GeminiSEM family's Nano-twin lens delivers images with high contrast and sub-nanometer resolution. NanoVP allows the use of in-lens detection at pressures of up to 150 Pa. Even charging samples can now be imaged with high quality. At the same time, NanoVP improves lateral resolution of EDS data, providing higher

spatial resolution on chemical specimen composition, thus gaining more information from the sample.

Zeiss United States  
www.zeiss.com

### Bruker Introduces Contour Elite 3D Optical Microscopes



The Contour Elite microscopes are the latest generation of Bruker's surface profiler brand. The new models take the platform to new heights of functionality by tightly integrating advanced 3D optical metrology technology, true high-definition imaging, patent-pending illumination design, and

proprietary software algorithms for data processing, analysis, and visualization. Intuitive operation and new ease-of-use features make Contour Elite systems quickly productive for both operators without extensive training, as well as for experienced users.

Bruker Corporation  
www.bruker.com

### ibss Group's New A05 Gentle Asher Chamber



The compact A05 GA Chamber together with ibss Group's established GV10x Downstream Asher, the GV/GA, allows for simple, non-damaging *ex-situ* hydrocarbon removal, prevention of additional SEM/TEM contamination, and sample storage. The GV/GA carbon removal

rate has a repeatable consistency of about 1.5nm/min. The streamlined A05 chamber offers adaptors for all available TEM holders accessible from front of chamber, can receive three holders simultaneously, and is less expensive than competitive units.

ibss Group, Inc  
www.ibssgroup.com

### Electron Microscopy Sciences EMS300T ES -Large Chamber Turbomolecular-Pumped Thermal Evaporator/Sputter Coater



The new EMS300T ES is ideally suited to metal evaporation onto large diameter specimens up to 6"/152mm. The EMS300T ES also comes with interchangeable sputtering and carbon evaporation inserts to allow a coating radius of up to 4"/102mm. The sputter coating insert will deposit both oxidizing metals, for example,

chromium, aluminum, and non-oxidizing (noble) metals such as gold and platinum. A chromium target is fitted as standard.

Electron Microscopy Sciences  
www.emsdiasum.com/microscopy

### New 1024 × 1024 Pixel, High-Speed EMCCD Cameras Provide Low-Light Imaging Performance



Princeton Instruments announced an addition to the ProEM<sup>®</sup>-HS line of high-speed EMCCD cameras. The new ProEM-HS:1024BX3 is a 1024 × 1024 pixel back-illuminated EMCCD camera with patented eXcelon<sup>®</sup>3 technology (X3) for low-light imaging and spectroscopy applications. This camera offers a combination

of high sensitivity (>95% QE) and best fringe suppression in the near infrared as well as single-photon sensitivity. The camera delivers from 25 full frames per second to >20,000 spectra per second.

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

### HEMCO Announces Microflow II Ductless Workstation

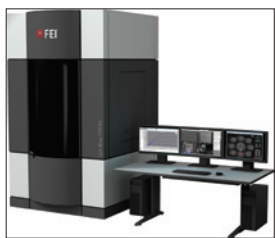


The MicroFlow II is a Class 1 ductless carbon-filtered workstation equipped with activated carbon filtration. It is completely self-contained with integral recessed work surface to contain spills. A clear hood surrounds the work area and includes a hinged viewing sash for user protection. The sash can be conformed for use with a microscope. Variable speed fan control allows for

high speed 100f/m. air flow thru the sash opening or medium and low flow for sensitive operations.

HEMCO Corporation  
www.HEMCOcorp.com

### New DualBeam Plasma Focused Ion Beam for Electrical Fault Isolation and Failure Analysis



The Helios PFIB EFI is built upon the world's most advanced DualBeam Plasma FIB platform with fully integrated SEM and nanoprobe capabilities, delivering site-specific sample preparation with *in-situ* SEM end-pointing and low-beam energy SEM-based transistor characterization. It includes electron-beam absorbed current for interconnect-level electrical fault isolation and electron-beam induced current analysis for diffusion characterization. The system boosts deprocessing yields for 10 nm devices by using FEI's unique Dx delayering solution.

FEI Company  
[www.fei.com/helios-pfib-efi-for-electronics](http://www.fei.com/helios-pfib-efi-for-electronics)

### Intuitive 3D Control for Multi-Axis Nano Positioning Applications



The 3D mouse SpaceNavigator allows for convenient remote control of all attocube piezo drives via a newly programmed software interface with full functionality to drive up to 6 attocube positioners. A push, pull, twist, or tilt of the SpaceNavigator is translated into the corresponding movement of the positioner. The running speed is proportional to the respective deflection of the Space Navigator. Also all associated parameters can be set individually with the new software features.

attocube systems AG:  
[www.attocube.com](http://www.attocube.com)

### Newest JAI Go Series Camera Features Sony IMX174 Low-Noise CMOS Imager



JAI introduced the GO-2400-PGE, a new small and lightweight industrial camera featuring Sony's IMX174, a 2.35-megapixel global shutter CMOS imager. The new camera offers a maximum resolution of 1936×1216 pixels, while running at 48.8 frames per second over a GigE Vision interface. The GO-2400-PGE features a small form factor and weighs in at only 46 grams—one of the lightest cameras available at this resolution.

JAI Inc.  
[www.jai.com](http://www.jai.com)

### Oxford Instruments Introduces the World's Fastest EBSD Detector



Oxford Instruments launched NordlysMax<sup>3</sup>, an EBSD detector that acquires indexes and displays results at 1,580 points per second, a speed sustained during simultaneous EBSD and EDS acquisition. This is the world's fastest commercial EBSD system—

full EBSD maps displaying sample microstructure are completed twice as fast. It also represents a breakthrough for those performing *in-situ* experiments where data are collected under dynamic conditions, such as increasing strain or temperature.

Oxford Instruments NanoAnalysis  
[www.oxford-instruments.com](http://www.oxford-instruments.com)

### High Power LED Driver Supplies Constant Drive Current Continuously up to 75 Amps



Innovations in Optics, Inc. introduces the Model 5000A-100 LED Driver/Controller for powering its patented and patent-pending High Power LED Light Engines. The 5000A-100 LED Driver provides constant current in continuous, pulsed, or pulsed width modulation modes. An embedded system adds network control with 10/100 Mbps Ethernet connectivity. The Model 5000A-100 is intended for OEM applications. Drive current in continuous mode is selectable from 7.5 to 75 A at 0.6 to 5.5VDC output.

Innovations in Optics, Inc.  
[www.innovationsinoptics.com](http://www.innovationsinoptics.com)

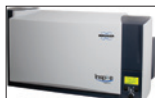
### PicoQuant Introduces Two New High-Powered Laser Modules



PicoQuant has released two high-powered picosecond pulsed laser modules with variable repetition rates. The VisIR-765 STED delivers an optical output power of up to 1.5 W at 766 nm with a laser pulse width of 500 ps. Short pulse width below 70 ps can be offered optionally. The VisUV laser can generate light at 266 nm, 355 nm, and 532 nm. Average output powers between 2 mW and 500 mW can be offered. Pulse widths of less than 70 ps are achieved.

PicoQuant GmbH  
[www.picoquant.com](http://www.picoquant.com)

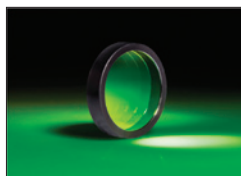
### Bruker Introduces Second-Generation Inspire Nanochemical Imaging Solution



Bruker announced the release of its second-generation *Inspire*<sup>™</sup> infrared (IR) nanocharacterization system, which features 10-nanometer spatial resolution infrared chemical mapping in an easy-to-use, laser-safe package. *Inspire* accomplishes all of this at the highest spatial resolution, making it an exceptionally powerful and versatile nanochemical characterization system. *Inspire* provides infrared absorption and reflection chemical maps with a resolution only limited by the AFM tip radius, based on scattering scanning near-field optical microscopy.

Bruker Nano Surfaces Division  
[www.bruker.com](http://www.bruker.com)

### Deep UV Bandpass Filters Provide Bandpasses as Low as 122 nm



Edmund Optics<sup>®</sup> introduces new Deep UV Bandpass Filters. These versatile filters are ideal for applications in fluorescence microscopy, Raman spectroscopy, Excimer lasers, and biological filtering. RoHS compliant Deep UV Bandpass Filters are offered in twelve models with center wavelengths of 122 nm, 193 nm, 248 nm, and 308 nm in diameters of 12.5 mm, 25 mm, and 50 mm. Each bandpass filter is mounted in an aluminum ring for easy identification and system integration.

Edmund Optics<sup>®</sup>  
[www.edmundoptics.com](http://www.edmundoptics.com)