

## IndustryNews

### MM-200 Measuring Microscope



Nikon Instruments, Inc. introduces the new MM-200 Measuring Microscope. Ideal for measuring a variety of metal, plastic and electronic parts, this powerful new microscope is specifically designed and engineered with machining engineers and inspectors in mind. The MM-200 features a space-saving footprint of just 420 x 297mm, 50 percent smaller than existing Nikon MM models, and weighs just

40kg. Designed with a built-in 2" x 2" O3L type digital stage, the MM-200 can be used with the low-cost SC2 Digital Readout.

Nikon Instruments, Inc.  
www.nikoninstruments.com

### Evolve™ EMCCD Camera



This is the first camera to make experimental imaging data quantifiable and reproducible by using the photoelectron to scientifically measure an image. The Quant-View™ feature provides a repeatable methodology to gather and interpret data by reading out pixel values in photoelectrons, allowing investigators to ensure their experimental data are well-controlled and consistent, as

well as reproducible within and across labs. In addition, Evolve enables researchers to correct spurious event data.

Photometrics  
www.photomet.com

### PELCO® Silicon Nitride Membranes

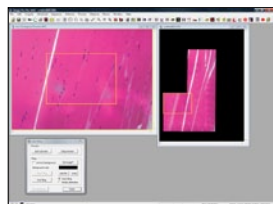


Ted Pella, Inc., has greatly extended the product range of the patented debris-free PELCO® Silicon Nitride membranes. In addition to the existing 50 and 200nm membranes, there is now an ultra-thin 15nm pinhole free membrane available for ultra high resolution TEM imaging applications.

At the same time, new window sizes, including multiple windows, are introduced. For special TEM holders, which need thinner frames, a new 50 micron frame thickness is now available.

Ted Pella, Inc.  
www.tedpella.com

### Image-Pro Plus Version 7.0



Media Cybernetics announces the release of Image-Pro Plus Version 7.0 image processing and analysis software package. Image-Pro Plus is used worldwide by thousands of research professionals in a range of applications, including life science research, quality control, industrial inspection, as well

as forensic and physical sciences. Users of Image-Pro Plus v.7.0 now have the option to add the Live Tiling and EDF module, which allows acquisition and tiling of large images.

Media Cybernetics  
www.mediacy.com

### Universal Direct Parfocalizing C-Mount Camera Adapter



TOFRA, Inc. has released Universal Direct Parfocalizing C-Mount Camera Adapter for Microscopes. This camera adapter is used to position the camera chip in the intermediate image plane of the microscope. The parfocalizing operation consists of three steps: 1) the microscope is adjusted to have the ocular image in focus,

2) the bottom part of the UDPC Adapter is turned until the image in the camera is also in focus, 3) the top part of the UDPC Adapter is rotated slightly to align the camera with the stage.

TOFRA, Inc.  
www.tofrainc.com

### YPS Schottky Field Emission Sources



Ted Pella, Inc., Redding, CA, is the exclusive distributor for the YPS (York Probe Sources Ltd) Schottky Field Emission Sources. The YPS TFE sources can be used in many brands of SEM, TEM, Auger, and CD-SEM systems. They are an excellent and cost-effective drop-in replacement for existing TFE sources and come as a complete assembly with pre-centered TFE cathode

and suppressor electrode. The product is aimed at customers with limited budgets and who are able to change their TFE source.

Ted Pella, Inc.  
www.tedpella.com

### MiniVid Camera

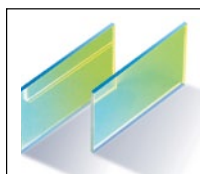


The LW Scientifics MiniVid camera is an all-in-one eyepiece camera that easily attaches to any brand of microscope for instant video micrography. The innovative MiniVid eyepiece camera slips into any standard microscope eyepiece tube in place of the eyepiece for crisp imaging in an instant. Recently improved resolution to 3.1 megapixels, MiniVid gives

you an option to turn your old microscope into a digital microscope and improve QC documentation for under \$500. This is the ultimate upgrade for your microscope.

LW Scientifics  
www.lwscientific.com

### Watson Laboratory Information Management System (LIMS)



Thermo Fisher Scientific Inc. introduces new functionality to the latest release of its Thermo Scientific Watson LIMS (Laboratory Information Management System) that brings critical time and cost savings to pharmaceutical companies and contract research organizations (CROs) involved in drug metabolism and

pharmacokinetic (DMPK) studies for drug discovery and development. The latest release of Watson LIMS, the leading bioanalytical laboratory information management system, delivers improved efficiencies and reduced validation time.

Thermo Fisher Scientific Inc.  
www.thermofisher.com

### QDI 2010 Forensic™ Microspectrophotometer



Trace evidence is one of the most common types of evidence recovered from a crime scene. It includes textile fibers, hair, paint chips, and more. Due to its size, trace evidence is commonly only visible by microscope, making a thorough analysis of it quite challenging. CRAIC Technologies, the leading innovator of UV-visible-NIR microanalysis solutions for forensic laboratories, announces the QDI 2010 Forensic™ microspectrophotometer. This system is configured to rapidly and non-destructively analyze many types of trace evidence.

CRAIC Technologies  
www.microspectra.com

### Quemesa TEM Camera



High sensitivity and contrast at optimal resolution are the ultimate goals for a TEM camera. Every single photon generated in the scintillator per incident electron is needed. This means the scintillator has to be optimized for the entire pear-shaped interaction volume to achieve maximum signal. Consider the Quemesa, the new 11-Megapixel, on-axis

TEM camera by Olympus Soft Imaging Solutions, where scintillator thickness and pixel size are perfectly matched to the dimensions of the entire interaction volume.

Olympus Soft Imaging Solutions  
www.soft-imaging.net

### mySEM® Wins R&D 100 Award

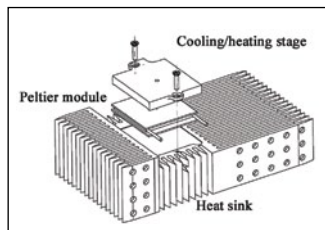


Novelx, Inc. was just selected for a prestigious R&D 100 Award for one of the 100 most technologically significant new products in 2009. R&D Magazine recognized the Novelx mySEM® for miniaturizing and driving the cost out of the core technology inside a scanning electron microscope (SEM). Powered by the patented Novelx Stacked Silicon Technology, the

mySEM is a bench-top SEM for imaging and characterizing nanoscale objects and materials. Utilizing a compact design, the mySEM delivers capabilities previously only available in high-end field emission SEMs.

Novelx, Inc.  
www.novelx.com

### Dip Pen Nanolithography® (DPN®)



Recent advances in producing a variety of new nanoscale products using NanoInk's patented Dip Pen Nanolithography® (DPN®) have been achieved with a new thermoelectric variable temperature stage module. The suite of materials that can be controllably deposited with DPN

will grow with this new range of temperatures. This new approach enables the deposition of a wide variety of new molecules.

NanoInk  
www.nanoink.net

### Helios 1200 Full Wafer DualBeam™ System



FEI Company announced the newest member of the Helios NanoLab™ Family—the Helios 1200 Full Wafer DualBeam™ system. The ability of the Helios 1200 to analyze full wafers up to 300 mm improves the efficiency of semiconductor and data storage failure analysis and manufacturing support labs that need to deliver accurate data quickly to the production floor. The Helios 1200 combines (SEM) image resolution and extremely fast switching between imaging and ion beam milling to deliver rapid, reliable, efficient cross-sectional analysis of structures and defects. It can accommodate full wafers up to 300 mm.

FEI Company  
www.fei.com

### Axio CSM 700 Confocal Microscope



The accurate measurement of large sample areas is now faster, simpler, and more convenient with the introduction of the Axio CSM 700 confocal microscope. The new microscope visualizes surfaces three-dimensionally in true color at high resolution to enable the precise measurement of 3D microstructure surface roughness. Ideally suited to materials research, quality inspection, and routine applications, the Axio CSM 700 performs topographical measurements at a rate of more than 100 frames per second.

Carl Zeiss  
www.zeiss.com/micro

### STACIS® Floor Platform System



Technical Manufacturing Corp. announces its STACIS® FP active vibration cancellation floor platform system designed for use with scanning electron microscopes (SEMs). The STACIS®

FP features sub-Hz vibration cancellation in an active hard-mount floor platform that fits most commercial SEMs. SEMs are among the most vibration sensitive tools made, and these precision instruments typically incorporate an internal vibration isolation system. STACIS® FP is compatible with all internal SEM vibration isolation systems.

Technical Manufacturing Corporation  
www.techmfg.com/products/floorplatforms/Stacis\_FP.html

### SIGMA Field Emission SEM

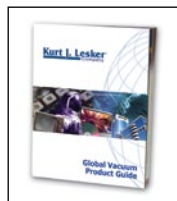


Carl Zeiss launched a variable pressure (VP) operation mode as an extension of its SIGMA field emission scanning electron microscope (FE-SEM). Featuring the Carl Zeiss GEMINI® column, proven VP technology, and a design with analytical accessories in mind, the SIGMA VP provides a comprehensive analytical solution for a constantly growing amount of applications. The chamber includes

the provision for all WDS variants, as well as a geometry suitable for coplanar EDS and EBSD analysis.

Carl Zeiss  
www.zeiss.com/nts

### Global Vacuum Product Guide, 9th Ed.



The Kurt J. Lesker Company proudly announces the publication of our new, 9<sup>TH</sup> Edition Global Vacuum Product Guide. Featuring nearly 1,000 full-color pages, this volume is packed with photos, drawings, and technical specifications for over 14,000 vacuum products, and many new Lesker brand products and services. This 9th Edition includes our standard and custom components:

sputter sources, thermal sources for high temperature and organic films; pure deposition materials; chambers and sub-systems; complete thin film deposition systems; pumps, oils, traps, and filters; valves, hardware, feedthroughs; and vacuum services.

Kurt J. Lesker Company  
www.lesker.com

### EMS7000smz and EMS5000mz Vibrating Microtomes

Electron Microscopy Sciences has added the EMS7000smz and EMS5000mz high precision vibrating microtomes to their product line for microscopy and histology. Designed to produce the highest quality slices of the most difficult material, the EMS vibrating microtomes minimize damage to tissue surfaces and produce slices of uniform thickness. Tissue cooling is accomplished by the use of either an ice-water bath or an electronically controlled thermo-electric cooler. Other options include mountable LED cold lights, magnifiers, and inspection microscopes. For more information please visit the online product information at: [http://www.emsdiasum.com/microscopy/products/equipment/vibrating\\_microtome.aspx](http://www.emsdiasum.com/microscopy/products/equipment/vibrating_microtome.aspx).

Electron Microscopy Sciences  
[emsdiasum.com/microscopy/products/equipment/vibrating\\_microtome.aspx](http://www.emsdiasum.com/microscopy/products/equipment/vibrating_microtome.aspx)

### Applied Physics Technologies LaB<sub>6</sub>, CeB<sub>6</sub> or CeBix Cathodes

Electron Microscopy Sciences is pleased to offer Applied Physics Technologies lanthanum hexaboride (LaB<sub>6</sub>) and cerium hexaboride (CeB<sub>6</sub> or CeBix) cathodes. Both LaB<sub>6</sub> and CeBix cathodes are ideal for many small spot size applications such as SEM, TEM, surface analysis, and metrology, and for high-current applications such as microwave tubes, lithography, electron-beam welders, X-ray sources, and free electron lasers. For applications with large beam spot sizes where high total current and current density are required, LaB<sub>6</sub> and CeBix can be the cathodes of choice over dispenser cathodes, providing long-term, stable operation at current densities up to 50 A/cm<sup>2</sup>.

Electron Microscopy Sciences  
[www.emsdiasum.com](http://www.emsdiasum.com)

### Hard-Coated Dichroic Beamsplitters

Semrock, Inc., the standard in optical filters for biotech and analytical instrumentation, has introduced hard-coated dichroic beamsplitters for image-splitting applications. These beamsplitters offer superb image quality for both transmitted and reflected light when separating beams of light by wavelength for simultaneous capture of multiple images. For applications such as Fluorescence Resonance Energy Transfer (FRET) and real-time live-cell imaging, users can now separate two, four or even more wavelength ranges onto as many cameras or regions of a single camera sensor.

Semrock, Inc.  
[www.semrock.com](http://www.semrock.com)

### Tecnai Osiris™ Scanning/Transmission Electron Microscope

FEI Company announced the release of the Tecnai Osiris™ scanning/transmission electron microscope (S/TEM), delivering revolutionary analytical speed and performance. It includes FEI's new ChemiSTEM technology, which reduces the time for large field-of-view elemental mapping from hours to minutes. The Tecnai Osiris is designed to combine this breakthrough analytical throughput with exceptional ease-of-use to meet the requirements for both high-volume industrial and multi-user research laboratories. The patent-pending ChemiSTEM technology enables the Tecnai Osiris to achieve a factor of 50 or more enhancement in speed of energy dispersive x-ray (EDX) elemental mapping by combining technical advances in beam generation with disruptive changes in EDX signal detection.

FEI Company  
[www.fei.com](http://www.fei.com)

### EM GP Plunge Freezer

To standardize immersion freezing and make the bare grid technique more reproducible, Leica Microsystems has developed the Leica EM GP plunge freezer, in conjunction with Dr. Guenter Resch of the IMP/IMBA Electron Microscopy Facility in Vienna. The Leica EM GP plunge freezes specimens into liquid ethane after removing excess fluid by automatic blotting. The process can be initiated via touchscreen or footswitch and viewed using the stereomicroscope with LED illumination for full control of the entire procedure. After freezing, the grid is transferred to a pre-cooled grid box inside a container filled with LN<sub>2</sub>, which is then transferred to the cryo-TEM. See [yourimage@leica-microsystems.com](mailto:yourimage@leica-microsystems.com).

Leica Microsystems  
[www.leica-microsystems.com](http://www.leica-microsystems.com)

### Imago LEAP 3000X HR Atom Probe Microscope

Imago Scientific Instruments announced today that the University of California Santa Barbara has placed in service an Imago LEAP 3000X HR Atom Probe Microscope. The high-spatial-resolution, three-dimensional imaging and analyses provided by the atom probe will be utilized by researchers in the Materials, Electrical Engineering, Chemical Engineering, Physics, Chemistry, and Geology departments at UCSB. UCSB's instrument is the only one of its type operational in North America and will be made available on a schedule-permitting basis to qualified research organizations outside of UCSB.

Imago Scientific Instruments  
[www.imago.com](http://www.imago.com)

### UltraSM® TEM Windows

Through TEMwindows.com, SiMPore offers porous and nonporous pure silicon UltraSM® TEM Windows, as well as a variety of silicon oxide and silicon nitride windows. The company recently launched a new 0 nm silicon oxide TEM window with two 100 x 1,500 micron slots. The pure silicon UltraSM® TEM Windows are available in 5, 9, and 5 nm thicknesses and in both square and slot formats. Compared to widely used carbon windows, UltraSM® TEM Windows have uniform thinness, improved stability, and can handle extensive plasma cleaning.

SiMPore  
[www.TEMwindows.com](http://www.TEMwindows.com)

# Microscopy Society of America Awards

Nominations are now open for the Microscopy Society of America Annual Awards. The awards process is one way in which the Microscopy Society of America recognizes the significant and diverse contributions that individuals make to our field. Deserving nominations for consideration should be submitted online no later than December 15th, 2009 to:

*[AssociationManagement@microscopy.org](mailto:AssociationManagement@microscopy.org)*

## The Main Society Awards Are

### *Distinguished Scientist Awards*

These Awards recognize preeminent senior scientists from both the Biological and Physical disciplines who have a long-standing record of achievement during their career in the field of microscopy or microanalysis.

### *Burton Medal*

The Burton Medal was initiated to honor the distinguished contributions to the field of microscopy and microanalysis of a scientist who is less than 40 years of age on January 1st of the award year. (Please note the change in the selection criterion regarding age.)

### *Outstanding Technologist Awards*

These Awards honor technologists from both the Biological (Hildegard H. Crowley Award) and Physical Sciences (Chuck Fiori Award) who have made significant contributions such as the development of new techniques which have contributed to the advancement of microscopy and microanalysis.

### *Morton D. Maser Distinguished Service Award*

This Award was initiated to recognize outstanding volunteer service to the Society as exemplified by Mort Maser, who served the Society for many years with great dedication. This award is made to honor an MSA member who has provided significant volunteer service to the Society over a period of years.

**Further details of the nomination process  
can be found on the society webpage at:  
[www.microscopy.org](http://www.microscopy.org)**

