

## IndustryNews

### Aven Microscope Oblique Viewer Accessory



Aven, Inc. introduces an accessory that lets microscope users expand object-viewing beyond just an overhead perspective. A 3-D Oblique Viewer attachment is available for two series of microscope bodies from the Michigan precision equipment supplier to allow full-depth imaging from any angle. It rotates around items at 45 degrees to let QC inspectors check purchased parts or production line samples from all sides without lifting or rotation. Scientific specimens also can be examined and documented with greater ease and detail.

Aven, Inc.  
www.aveninc.com

### Large Format 50mm Raptor Lens



Navitar Inc. introduces their new 50 mm large format machine vision lens ideal for use with full frame 11 and 16 mega pixel sensors. The 50 mm Raptor lens exceeds industry requirements for MTF, relative illumination, and low distortion required of systems with high cost, large format cameras. The Raptor large format lens covers a 43 mm diagonal sensor with a field of view of 50 mm and focusing range of 0.5 m to infinity. Lens aperture range is  $f/2.0 - f/22.0$ , and its angular field is  $46.0^\circ$  diagonal and  $37.0^\circ$  horizontal.

Navitar  
www.navitar.com

### Solver Next Dual Probe AFM/STM Wins R&D-100 Award



NT-MDT new Solver Next has received the coveted R&D 100 award for the first commercial scanning probe microscope featuring both Atomic Force Microscopy (AFM) and Scanning Tunneling Microscopy (STM). Built and priced especially for university labs and more routine industrial applications, Solver Next provides the flexibility and versatility of over 40 different

measurement modes, without the need for advanced training. The full system can be run remotely, making it ideal for telemicroscopy and hazardous environments such as nuclear facilities.

NT-MDT  
www.NT-MDT.com

### AbrasiMatic® 300 Abrasive Cutter



Buehler's new AbrasiMatic® 300 Abrasive Cutter is a versatile bench-top cutter featuring manual cutting action in three directions and automated cutting action in one direction. Features include a 12" (305mm) cut-off wheel capacity, high torque motors, corrosion resistant construction, and large cutting capacity. Buehler's unique SMARTCUT system automatically reduces feed

rate to produce burn-free, consistent sections. The user-friendly color touch-screen interface provides the maximum versatility to section a wide variety of sample materials, sizes, and geometries.

Buehler  
www.buehler.com

### SMZ-745T Trinocular Stereo Microscopes



Featuring the highest zoom magnification in its class at 7.5 $\times$  zoom, Nikon Instruments, Inc. introduces the new SMZ-745T line of trinocular stereo microscopes. The SMZ-745T comes equipped with a camera port and a built-in 0.55 $\times$  c-mount adapter permitting direct mounting of Nikon DS Series Digital Cameras. By optimizing the design of the greenough optical system, Nikon was able to realize a 7.5 $\times$  zoom and a total magnification from 3.35 $\times$

to 300 $\times$ . With the adoption of the new total reflection prism, the SMZ-745T allows bright and high contrast images to be obtained.

Nikon Instruments  
www.nikoninstruments.com

### EMS-002 Cryo Workstation Available

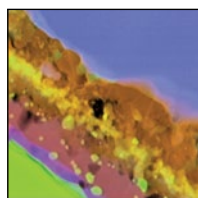


Electron Microscopy Sciences has added the EMS-002 Cryo Workstation to their product line for electron microscopy, light microscopy and histology. The EMS-002 Cryo Workstation is a complete ultra rapid freezing system that captures rapid events and labile structures

that are not seen in chemically fixed materials. The EMS-002 achieves ultra-rapid cooling by quenching the sample in liquid propane or other suitable cryogen, cooled to near liquid nitrogen temperature. The EMS-002 accomplishes this by using a stainless steel vacuum insulated Dewar and copper condensation chamber.

Electron Microscopy Sciences  
www.emsdiasum.com

### X-Max Large Area Silicon Drift Detector for Analytical TEM



Oxford Instruments' X-Max large area Silicon Drift Detector (SDD) is now available for the analytical TEM. The ability to handle high count rates in a liquid nitrogen free environment, combined with INCAEnergy TEM software, ensures X-Max will maximize the performance of a TEM. An 80mm<sup>2</sup> sensor guarantees high counts giving excellent analytical performance

down to and including Be. In contrast to Si(Li) detectors, excellent energy resolution is maintained at high count rates over 100,000cps. High quality X-ray maps and linescans can be collected much more rapidly.

Oxford Instruments  
www.oxford-instruments.com

### MonoCL4 Cathodoluminescence System



The MonoCL4 cathodoluminescence system is available in 4 configurations. Important new features include: enhanced sensitivity for UV and IR wavelengths; 'point and click' selection of spectroscopy; imaging and mapping modes; short-, long-, and band-pass imaging using optional filters; new DigitalMicrograph®

software with an option for stage mapping. The MonoCL4 design continues to provide high sensitivity by maximizing light collection efficiency via direct optical coupling through a chamber-mounted monochromator to high efficiency detectors.

Gatan, Inc.  
www.gatan.com

## Zeiss LIBRA 200 TEM and STEM

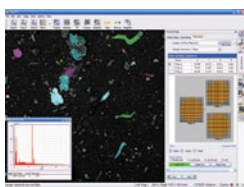


Carl Zeiss introduced its newly developed line of corrected LIBRA 200 transmission electron microscopes (TEM). Two different configurations are offered: The LIBRA 200 CS TEM is based on the energy-filter version of the 200kV LIBRA TEM with a corrector for spherical aberrations of the objective lens. By use of this corrector, image resolution below 0.7 Angstrom can be achieved. The LIBRA 200 STEM with a corrector for the condenser system is used for

imaging in the scanning mode with a resolution below one Angstrom and extreme high resolution chemical analysis of samples.

Carl Zeiss SMT, Inc.  
www.smt.zeiss.com

## Zeiss Smart Particle Analyzer

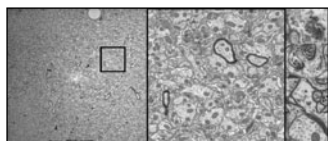


Carl Zeiss's new Smart Particle Investigator (SmartPI™) software package for use with ZEISS SEMs enables the automatic detection, investigation, and characterization of particles of interest. SmartPI™ integrates all aspects of SEM control, Image Processing and, Energy Dispersive X-ray (EDX)

analysis for particle detection and characterization. A high degree of automation for repetitive sample analysis provides non-subjective results with minimal user involvement and enables continuous unattended operation of the instrument.

Carl Zeiss SMT, Inc.  
www.smt.zeiss.com

## Zeiss Brain Mapping Instrumentation



Electron microscopy and analysis instruments from Carl Zeiss are redefining the science of brain mapping and 3-D reconstruction. Wide-field, high-resolution imaging, huge data storage and

manipulation capabilities plus highly automated sample preparation techniques are yielding research results 100-times, or more, faster than ever before. As a result, a number of high-ranking research institutes are adopting these instruments, and are producing phenomenal breakthroughs in understanding the human brain.

Carl Zeiss SMT, Inc.  
www.smt.zeiss.com

## LW Scientifics Microscopes



The i4 modular series microscope from LW Scientifics features exceptional optical quality and expandability for top-notch performance in the lab. Use the rotating head to adjust the height for taller users. Infinity Plan and Semi-Plan optics with a 30-year anti-fungal coating match quality with value within any clinic's budget. The i4 microscope provides comfort, durability,

dependability, and superior imaging for the lifetime of the laboratory. You have an option among dark field condenser, phase contrast, polarization, 50x oil objective, etc.

LW Scientifics  
draganam@lwscientific.com

## 100-Micron-Thick Frames for Pure Silicon TEM Window Grids



TEMwindows.com now offers its pure silicon UltraSM™ TEM Windows on 100-micron-thick frames. These thinner frames permit high-angle imaging in double-tilt sample holders, and the 9- and 15-nm-thick non-porous silicon windows enable higher resolution imaging without organic contamination. TEMwindows.com is also proud to announce two new international distributors for its UltraSM™ Silicon TEM Windows: Agar Scientific Ltd. in the United Kingdom and Alliance Biosystems Ltd. in Japan.

TEMWindows.com - a division of SiMPore Inc.  
www.TEMwindows.com

## EXi Aqua Bio-Imaging Microscope Camera



QImaging has announced the release of the EXi Aqua Bio-imaging Microscopy Camera. This product replaces QImaging's popular Retiga EXi and is an excellent entry-level imaging device ideal for a broad range of imaging applications--from

quantitative color and immuno-fluorescence imaging to the capture of dim fluorescent protein data. Besides being cost-effective and user-friendly, the EXi Aqua can act as both a sensitive monochrome camera and high-resolution color camera that is capable of being upgraded should imaging requirements change over time.

QImaging  
www.qimaging.com

## Programs at Concordia College and the College of Microscopy



Concordia University Chicago is enrolling students in a new Applied Microscopy program in partnership with the College of Microscopy, the education division of The McCrone Group. The Concordia/College of Microscopy Applied Microscopy program is among the first dedicated Bachelor of

Science microscopy programs in the nation. Applied Microscopy majors will complete three years of required courses at Concordia and take one year of classes with world-class scientists and microscopy educators at the College of Microscopy in Westmont, Illinois.

McCrone Group  
collegeofmicroscopy.com

## Microspectra 1™ Photometer for Microscopes



CRAIC Technologies announces the Microspectra 1™ photometer for microscopes. This system is designed to be added to a microscope's photoport to provide for the non-destructive photometric and radiometric analysis of microscopic samples. Also available is the Microspectra 10™ UV-visible-NIR microscope spectrophotometer. This system added to the open photoport of any optical microscope

enables it to be used to acquire spectra of microscopic samples. The Microspectra 10™ is capable of UV-visible-NIR range spectroscopy by absorbance, transmission, reflectance, and fluorescence.

CRAIC Technologies  
www.craictechnologies.com

### LMD6500 Microdissection Tool



The new Leica LMD6500 is the ideal microdissection tool to distinguish between relevant and non-relevant cells and tissues. Forensic DNA Technologists can selectively and routinely analyze microscopic regions of interest down to a single cell to obtain results and make determinations that are relevant, reproducible, and specific. The laser beam movement of the Leica LMD6500 is controlled by high precision optics, whereas the microscope stage and the sample are both fixed. This allows precise cutting accuracy at high magnifications, as well as high cutting speed at low magnifications.

Leica Microsystems  
www.leica-microsystems.com

### Falcon™ Direct Electron Detector



FEI announces the new Falcon™ Direct Electron Detector for its Titan™ and Tecnai™ transmission electron microscopes. The Falcon is based upon direct electron detection that enables the acquisition of low-noise images of delicate biological samples and other beam-sensitive materials. The Falcon is a direct electron detector with improved quantum efficiency, capturing more information from a given electron dose and accelerating the rate at which the signal-to-noise ratio improves over the exposure period.

FEI Company  
www.fei.com

### SEMs and Software for Automated Gunshot Residue Analysis



FEI Company announces the release of two dedicated scanning electron microscopes and a new software package for automated analysis of gunshot residues. Forensic scientists use GSR analysis to match residues from victims and suspects. The new GSR S50 and GSR F50 SEMs include the newly-released Magnum™ GSR software and specially-modified hardware to provide fully-automated analysis with dramatic improvements in speed, accuracy, and affordability. The new Magnum GSR software, included in both systems, uses the SEM's native imaging capabilities to locate particles.

FEI Company  
www.fei.com

### Nicolet iN10 MX FT-IR Microscope Wins R&D 100 Award



Thermo Fisher Scientific Inc. announced that its Thermo Scientific Nicolet iN10 MX FT-IR microscope has been selected as an R&D 100 award winner. The Nicolet iN10 MX stood out among the other entries because of its outstanding capability to efficiently address the main challenges associated with infrared microscopy, namely system integration, complexity, accuracy, and speed. The novel microscope offers high speed imaging and increased accuracy, while the built-in sampling and analytical procedures ensure ease-of-use.

Thermo Fisher Scientific  
www.thermo.com/ftir

### GIF Quantum™ Imaging Filter



Gatan's new GIF Quantum™ imaging filter combines advanced dodecapole-based electron optics with a fast CCD camera system to yield an imaging filter that defines the new standard in the capture of information-rich EELS and EFTEM data sets with maximum efficiency. With the post-column GIF Quantum™ design, there is no compromise between EFTEM and EELS performance. An entirely new level of software acquisition and control has been developed for the GIF Quantum™. This new AutoFilter acquisition suite uses smart exposure control and automation enabled by a newly designed fast electrostatic shutter.

Gatan, Inc.  
www.gatan.com

### UltraScan 10000 XP Large Format CCD Camera



The UltraScan 10000 XP Large Format CCD camera is the newest member of Gatan's UltraScan family of high performance CCD cameras. It has a 16-port readout using patented Multi-Scan® technology to deliver an unprecedented combination of resolution, speed, sensitivity, and versatility. With 10k × 10k pixel resolution (111 M pixel) and 100% fill-factor, this new Model 990 TEM CCD camera uses Gatan's next generation high-contrast resolution (HCR+™) technology to couple a newly-developed high-resolution scintillator to the largest CCD sensor ever manufactured.

Gatan, Inc.  
www.gatan.com

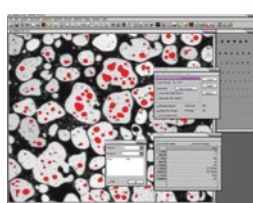
### ALTO 1000 Cryo-SEM



ALTO 1000 is a new concept in cryo-SEM. Depending on the user's applications and requirements, exactly the correct configuration of cryo-system can be specified. ALTO 1000 is designed to give optimum results with tungsten SEM and combined SEM-FIB microscopes at both high- and low-vacuum conditions. It features convenience in use plus high performance due to excellent temperature control, anti-contamination, fracturing, and coating facilities. Five versions of ALTO 1000 are available.

Gatan, Inc.  
www.gatan.com

### Image Pro Plus Software



Media Cybernetics announces the release of their Image-Pro Plus Version 7.0 Software Development Kit (SDK). The Image-Pro Plus SDK offers a powerful development environment for OEMs, systems integrators, and end users to create tailored versions of this popular scientific image processing and analysis software. This updated SDK offers a proven host environment that can be easily customized for specific imaging applications without starting from scratch, thereby reducing development risk and cost.

Media Cybernetics  
www.mediacy.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*

## 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)**

