

Andor's CCD and EMCCD cameras are well-suited to imaging fluorescent comet samples and for the first time Komet® systems will be bundled with these cameras to guarantee performance and offer outstanding value. Cameras can be selected from Andor's Luca EMCCD range, such as Luca-S, a VGA format camera with 10 µm pixels, and Luca R, a 1kx1k camera with 8 µm pixels. Both cameras are interfaced via USB 2.0. The bundle is completed with a high performance Windows® workstation, which is fully integrated and QC-tested before shipping. Bundles guarantee compatibility and provide performance and the high quality data necessary for research and safety testing. For more information, please visit www.andor.com/software/komet.

FEI Company released its **new extreme field emission gun (X-FEG) electron source module for the Titan™ family of scanning transmission electron microscopes (S/TEMs)**. The new technology combines higher brightness—previously available only with more complex cold field emission—with the high, ultra-stable current of thermally-assisted field emission. This combination provides significant improvements in resolution, speed, sensitivity and ease of use to the Titan—the world's most powerful, commercially-available microscope. Initial shipments of the new source are planned for the first quarter of 2009. The X-FEG can be fitted to any Titan TEM and provides benefits above and beyond those of correctors and monochromators already installed.

FEI Company (Nasdaq: FEIC) released the **MLA 600F system**, a high-speed automated mineralogy analyzer used in the mining industry to optimize the performance of mineral processing operations. The new MLA 600F reduces sample turnaround time from days to hours, allowing operators to increase metal recovery by responding faster and more frequently to changes in feed and waste stream mineralogy. The new system was developed in cooperation with FEI's partner, JKTech, based in Australia, and mining giant and automated mineralogy pioneer, Anglo Platinum, Ltd., based in South Africa. The MLA 600F uses a scanning electron microscope equipped with a field emission gun (FEG) and multiple high-speed energy



dispersive X-ray spectrometers (EDS) to automatically acquire image and composition information from a large number of samples—typically polished sections of particulates from mineral processing operations and drill core, or lump materials from exploration. More information can be found at: www.fei.com.

Following is a short description of new products introduced by **Electron Microscopy Sciences**.

INFINITYX High Resolution CMOS Cameras, 1, 5, 10, 21 megapixel resolution Ideal for archiving and documentation Applications: High Resolution, Brightfield, Darkfield, DIC, Live Cell Imaging, Histology, Pathology, Cytology, Defect Analysis, Semiconductor Inspection, Metrology.

EMS releases Fujifilm Instant Films and Film Holders Replacement film for Polaroid SEM films. **FP-100C Color Instant Film** a “peel-apart-type” instant color daylight film that performs extremely well under varied lighting conditions.

FP-100B Black & White Instant Film a This “peel-apart” film is ideal for ID photos, commercial photo proofs, medical & scientific applications, and image preview. Convenient 30-second development time.

EMS releases **Scanning Electron Microscope Digital Images SEM Digi-CAM**, An easy, inexpensive way to Digitize your Analog SEM images!

EMS releases **PathScan Enabler IV Low Cost Digital Histology Slide Scanner** designed to allow scanning of an entire whole mounted histology sample.

EMS releases **The Proscope HR™ Digital Handheld Microscope** a high-quality 1.3 Megapixel CCD and universal lens mount, Interchangeable lenses provide The ProScope HR™ with tremendous versatility.

ELECTRON MICROSCOPY Sciences releases **A Complete line of Mountants replacing the original BioMeda™ Line**

EMS releases **LYNX II Automated Tissue Processor for Histology and Microscopy** designed to be the successor of Lynx Tissue Processor with several enhancements including capabilities to perform optional processing of larger size samples for Histology.



EMS is proud to introduce **Catalog XV-A**, the most complete collection of products for light microscopy, histology and electron microscopy and general biological and materials research. visit us on the web at: www.emsdiasum.com for more information on any of these products.

Short descriptions of new products from **DIATOME**:

The Diatome Histo Jumbo Knife with the big water bath. This unique knife from Diatome allows you to pick up serial sections with ease. For successful ribbons of semithin sections the Histo Jumbo is perfect offering no section.

The Diatome AFM Diamond Knife for Ultra and Cryo Sectioning a diamond knife that may be used at room temperature as well as cryo temperatures for surface sectioning of all kinds of biological and industrial specimens for AFM Investigation. For more information on the Diatome patented platform knife or any of our other products or a copy of our complete catalog please call, write, E-mail, or visit our web site today. Diatome U.S. P.O. Box 410 Hatfield Pa. 19440 Tel: 215-412-8390 Fax: 215-412-8450 E-Mail: sgkcck@aol.com Web Site: www.emsdiasum.com

Andor Technology plc announced that it has **signed a global supply agreement with COOLED Ltd. to integrate the company's PrecisExcite® LED light source for fluorescence microscopy in its own range of microscopy systems**. This will allow scientists to perform their research with an efficient, stable and bright light setting. Also, Andor Technology plc reported that their performance leading iXon+ EMCCD cameras have been used in the development of a new structured illumination microscopy approach that delivers ‘sub-diffraction’ resolution at high speed. For more information, please visit www.andor.com/COOLED.

JENOPTIK Laser, Optik, Systeme GmbH announces that a **new camera driver, for ProgRes® microscope cameras** by Jenoptik can be directly controlled via ImageJ image analysis software for the first time. In addition to manual and automatic exposure time setting, camera resolution and color reproduction can also be selected now. Triggering and cooling are further selectable options where ProgRes® cameras have these capabilities installed. The driver is available for both Microsoft Windows and Apple Macintosh operating systems.

JENOPTIK also announces new software for ProgRes® microscope cameras: **Version 2.6 of its CapturePro image acquisition software**. This latest version of control software for ProgRes® microscope cameras, offers a whole series of new functions and enhancements that make camera operation easier. ProgRes® CapturePro supports all current ProgRes® camera systems. It is available both for Microsoft Windows and Apple Macintosh operating systems with immediate effect. Visit progres@jenoptik.com I www.progres-camera.com for more information.

After years of development, the largest high-performance acoustic enclosure has been released: The Crypt. Herzan LLC developed The Crypt to provide a large working area and huge volume without sacrificing the high level of noise reduction that Herzan enclosures are known for. Now the benefit of a quiet environment will be extended to researchers using scanning probe microscopy / atomic force microscopy with large instrumentation. As researchers have realized the wide range of applications of SPM / AFM, they have begun incorporating traditional AFMs with inverted optical and confocal microscopes, lasers and optical equipment, and an array of other accessories. This trend has increased researchers' need for working area without removing their need for a low noise environment in which to carry out their sensitive measurements. Herzan developed The Crypt with these researchers in mind. The Crypt offers eight square feet of working area and an internal volume of 25.4 cubic feet. It also offers a number of key usability features like large doors that open over 180 degrees, openable window doors for easy access, and cable management options that prevent parasitic noise. For more information, please visit www.herzan.com.

Semrock Inc. has announced a breakthrough invention in **thin-film optical filters: ultrawide-passband yet deep thin-film notch filters.** These new notch filters achieve the deep (optical density > 6) laser-line blocking of Semrock's renowned StopLine® notch filters, yet with low-ripple passbands that now extend from the ultraviolet (350 nm) well into the near-infrared (1600 nm). These new "E-grade" StopLine filters are in stock and immediately available for the most popular laser wavelengths, including 488, 532, 561, and 808 nm, with more coming. CONTACT: Amanda Valek-MacDonald, amacdonald@semrock.com

Life science research and routine applications will benefit from the outstanding flexibility and adaptability brought to the market by the **Axio Scope.A1 microscope from Carl Zeiss.** The Axio Scope.A1 is ideal for pathology, histology, cytology, microbiology, environmental research, molecular biology, plant physiology, developmental biology or genetics laboratories. Users have a choice of 23 stands, LED or halogen illumination, a retro-fittable fluorescence system, phase contrast, differential interference contrast (DIC) and the PlasDIC technique developed by Carl Zeiss, available in an upright routine microscope for the very first time.

Users in the fields of life sciences and materials microscopy can benefit from faster, easier-to-use and intelligent microscope control and image evaluation with the launch of AxioVision 4.7 image analysis software from Carl Zeiss. AxioVision 4.7 is ideal for capturing, archiving, processing, analysing, reconstructing and evaluating images in digital microscopy. The comprehensive range of specialist modules include the new "Fast MosaiX" module, which can scan large surfaces up to ten times faster than current solutions, and the "Dual Camera" mode, which doubles image acquisition speed by allowing simultaneous image capture from two cameras. The available dynamic range of digital cameras can be expanded with "HDR imaging", exposure time can be automatically updated with changing brightness levels, while "ASSAYbuilder" performs high content analysis in images captured with AxioVision. For further information, please contact: <http://www.smt.zeiss.com>

Once again, **Oxford Instruments** has revolutionized EDS! Its new **X-Max Silicon Drift Detector (SDD)** now provides electron microscopists



with the biggest area detector ever – over TEN times the solid angle of conventional EDS detectors. The X-Max Analytical SDD detector comes in a range of sizes from 20mm² up to an outstanding 80mm². No compromise in performance has been allowed, and the detectors achieve resolution down to

123eV with throughput far in excess of 100,000 cps (counts per second). A major advantage of the new detector is that all of these improvements come without any compromises on resolution or accurate analysis. Combined with the market-leading INCA EDS software, the system retains the analytical accuracy and usability Oxford Instruments is renowned for – only now with 10 times better productivity! For more information please visit www.oxford-instruments.com.

SiMPore Introduces New Nanometer Thick Sample Preparation Grids for High-Resolution Imaging. SiMPore's new **UltraSM™ Grids** feature imaging windows with uniform 7 or 15 nm thickness—25 to 65% thinner than silicon nitride grids and more consistently thin than carbon grids. UltraSM™ Grids are available as continuous films or with pores ranging from 5 to 50 nm in diameter. The pores allow simple and stable suspension of nano-scale materials for imaging without intervening background. The elemental silicon composition of UltraSM™ Grids introduces a minimal background signal for materials analysis and remarkably increases stability at high beam currents. Samples prepared on UltraSM™ Grids can be vigorously plasma cleaned and annealed at high temperature. These affordable grids are manufactured with state-of-the-art MEMS fabrication technology. For more information regarding SiMPore's UltraSM™ Grids or to place an order, please visit SiMPore's website at www.simpore.com.

JoeXray is proud to offer the **SAMx product line here in the USA.** With this addition it is clear to see that JoeXray is focused on X-ray Micro-analysis. SAMx products are centralized around both X-ray Microanalysis - WDS & EDS and the Electron Microscope - uProbe market, with strong emphasis on insuring that the end user has the best analytical hardware and software for complete and accurate analyses. Products include: IDFix - Complete EDS packages to interface to virtually any EDS SiLi or SDD detector. MaxView - User selected imaging packages to acquire, perform data reduction, and report generation in regards to image, linescan, x-ray map, phase analysis, particle analysis, and spectral imaging data. XMAS - Highly acclaimed WDS automation software insures the best package available! MASH - MASH options include hardware and software to control a SEM or uProbe, removal of all of the existing SEM or uProbe control electronics and replacing them with the SAMx PC capability. Hurricane - Monte-Carlo program - the most powerful algorithms available. STRATAgem - Thin film and thickness analysis program. 3D TOPx - Three dimension reconstruction and calculation program. Contact: Joe Ullmer, JoeXray LLC, E-mail: joexray@woh.rr.com

Olympus Soft Imaging Solutions would like to invite TEM users and all other interested parties to an **educational seminars series "TEM APPLICATIONS TODAY"**, a review of new tools based on today's digital imaging software and hardware. With the educational seminars "TEM APPLICATIONS TODAY" we would like to open a dialog and open a dialog with the users of TEMs, discuss their needs and requests, and demonstrate the latest improvements, features and capabilities of TEM imaging software and hardware. This year's educational event "TEM APPLICATIONS TODAY" topics focus on "Electron Tomography" and "Virology". Speakers will provide an introduction to each topic, followed by interactive software presentations and hands-on demonstration at the TEM. The event is free of charge to participants. For registration and further details please visit our website: www.soft-imaging.net/Roadshow_2008.htm The number of participants at these events is limited and applications will be assigned on a first come, first serve basis. Please reserve your spot as soon as possible. We will inform you as soon as possible about the status of your application.

Andor Technology plc announced today the release of **Komet® 6.0, the leading software for imaging and analysis of comet assay specimens.** The comet assay reveals DNA damage at the single cell level with extreme sensitivity. Andor's Database Viewer, included with Komet as a stand alone review tool, provides specimen decoding, visualization and data preparation for subsequent statistical analyses.