

The McCrone Group Inc., announced that **Kathy A. Cyr joins the College of Microscopy in Westmont, Illinois as Director of Program Development and Lois M. Gelwicks joins as Registrar.** Cyr will have responsibility for new course and program development as well as maintaining the Association of Continuing Education and Training (IACET) accreditation for the college. For the past seven years Cyr served as both Director and Program Director at the Campbell Center for Historic Preservation Studies located in Mount Carroll, Illinois where she worked with faculty to develop individual course offerings in the areas of Historic Preservation, Care of Material Culture and Conservation. For more information regarding the College of Microscopy and upcoming courses, visit www.collegeofmicroscopy.com.

FEI Company has introduced a revolutionary, high-throughput, cryo transmission electron microscope (TEM) that combines high-throughput sample handling with state-of-the-art electron optics. It provides fast, fully-automated three-dimensional data about biological molecules and macromolecular complexes. Designed specifically for the needs of cellular and structural biologists, the all-new **Titan Krios™ TEM** enables visualization of intricate interactive mechanisms of individual proteins and molecular machines within the three-dimensional architecture of living cells. “Traditional two-dimensional imaging techniques simply can’t reveal the full complexity of biological cells. Cryo-TEM provides a unique technique delivering critical detailed information about macromolecular machines and their localization and dynamics within cells,” explained Matthew Harris, vice president of FEI’s NanoBiology division. “Now we are even at the point of visualizing parts of fundamental biological processes down to the molecular level. This capability has the potential to further the understanding of biological pathways in significant disease fields such as cardiovascular disease or cancer.” The Titan Krios is ideal for advanced, high-resolution, dual-axis cryo electron tomography of frozen hydrated cells and cell organelles, single particle analysis and 2D electron crystallography. Based on FEI’s industry-leading Titan platform, the Titan Krios delivers superb stability and imaging with the flexibility of selecting optimum acceleration voltages between 80 and 300 kV. The Titan Krios also features robotic, contamination-free “auto-loading” of up to 12 frozen samples and 24x7 operation due to liquid nitrogen auto fill systems. Finally, its environmental instrument enclosure provides optimal thermal and acoustic shielding reducing installation and operating requirements. The innovative Titan Krios was developed in cooperation with the Max Planck Institute of Biochemistry in Martinsried, Germany. Complete information on the performance and technical aspects of the Krios, early experimental results and additional information on the *Frontiers in Microscopy* symposium can all be found at www.fei.com/TitanKrios.



JENOPTIK Laser Optik, Systeme GmbH publishes a new camera driver for direct integration of ProgRes® microscope cameras with Image-Pro image analysis software from Media Cybernetics. The updated driver seamlessly integrates camera control action into Image-Pro image analysis software, supporting also the new ProgRes® CT3 microscope camera with a CMOS image sensor. Natively programmed, the driver is compatible with versions 5.x and

6.x of Image-Pro. Against integration via a TWAIN PlugIn, which allows only for simple image recording action, users of Image-Pro are now provided with full image analysis software functionality thanks to the new driver. What’s more, the driver enables users of ProgRes® cameras to directly influence the achievable image frame rate and the level of image quality. Selectable color matrixes and interpolation algorithms are the tools to exert direct control over the speed of live images and image quality. The camera can thus be optimally set to digitally capture any sample. Another big advantage of native integration is a uniform graphical user interface between the camera and application software. Users are thus able to work within a familiar software screen. To registered ProgRes® users, the driver is available, as usual, in the download area of our website free of charge. In addition to integrated Image-Pro applications, ProgRes® microscope cameras can also be involved in a variety of other software solutions, for example, by Metasystems, Imagic AG, Imstar SA, VideoTesT, and IMTechnology. To learn more details about available drivers and integration options for ProgRes® cameras, you should visit our website. Jenoptik thus warrants that customers can equally rely on ProgRes® when working in their preferred image analysis software environment. Contact: JENOPTIK Laser, Optik, Systeme GmbH, E-mail: progres@jenoptik.com or www.progres-camera.com

Binary Works, Inc. announced a new lower price on their popular **OrbiLight ring light**. Supplied with a wired mouse, the OrbiLight is now \$299, or when supplied with a wireless mouse, the price is \$329. The OrbiLight is a unique mouse-controlled inspection lighting system with directional light control, for use with microscopes and cameras. Used in industrial, scientific and medical manufacturing QC applications, the ring light gives unprecedented visibility of subtle and hidden features, especially when dealing with reflective surfaces. 40 high intensity LEDs emit 18 lumens of total light output. Mouse operation gives the OrbiLight a versatile, user-friendly interface that is unmatched by any other ring light. The intuitive mouse interface controls all aspects of the light source, including intensity, direction, and directionality (from a 360 degree omni-directional beam to a highly directional 9 degree beam). Automatic light rotation can be enabled for hands-free operation. A mouse is provided, but the user can plug in a mouse of their choice. It even works with wireless mice. For More Information Contact: The Sales Department at sales@binaryworksinc.com or visit www.OrbiLight.com.

Agilent Technologies, Inc. introduced **Pico Image, a modular atomic force microscope (AFM) imaging and analysis software package** designed for AFM users working in a wide range of research applications, including life sciences and material sciences. Pico Image analyzes image data and generates dynamic, highly detailed surface analysis reports with unprecedented power and ease. Pico Image has now been integrated into the PicoView software platform for our complete line of AFMs, including the 5400 and 5500. Each Pico Image analysis document consists of a set of frames containing: surfaces, profiles extracted from surfaces, the results of applying filters and other operators, analytical studies, and 2D and 3D parameters that conform to international standards. Real-time 3D imaging provides excellent visualization. Videos of flight paths over a surface can also be integrated into Pico Image presentations. The software’s intuitive desktop publishing interface, comprehensive online help, and multilanguage support enhance ease of use. Information about Agilent is available on the Web at www.agilent.com.

JEOL USA introduces a new mobile Scanning Electron Microscope that can travel or easily be moved to different locations as needed. The new **CarryScope** is the ideal instrument for the mobile crime lab where imaging and analysis of trace evidence are conducted right at the crime scene. In the research or manufacturing setting, the CarryScope can be transported between the lab, conference room, or office for inspection of products or analysis of research samples. The JEOL CarryScope delivers several high resolution performance imaging and analytical capabilities of conventional electron microscopes, making it easy to observe high and low magnifications of fine surface structures and digitally record images. Standard features include 8X to 300,000X imaging and up to 5.0nm resolution. The CarryScope produces a sharp image that makes it possible to conduct and annotate high precision measurements on sub-micron structures. The optional eucentric motorized specimen stage holds a specimen up to 150mm (6 inches) in diameter. Other options include Low Vacuum, EDS compatibility, and multiple live image display, including picture in picture. A Stage Navigation System and SmileShot™ software with smart settings for routine imaging further enhance the capabilities of this small footprint SEM.

JEOL USA announced today that Boston College has selected the new JEOL MultiBeam Focused Ion Beam system and a Field Emission Scanning Electron Microscope for its nanofabrication clean room facility in Newton, Massachusetts. As a result of Boston College's continued investment in the sciences, the university opened its first clean room (class 1,000/10,000), which will be equipped with the JEOL models JIB-4500 MultiBeam and JSM-7001F Scanning Electron Microscope with lithography capabilities.

JEOL USA has announced that Boeckeler's RMC Products Division of Tucson, Arizona, a manufacturer of microtomes for sample preparation, will act as distributor for JEOL's unique sample preparation tool, the Cross Section Polisher. Please visit www.jeolusa.com for more information or call 978-535-5900.

MIS, Inc. is pleased to announce the launch of the newest PAXcam **Digital Microscope camera, the PAXcam2+.** The CCD sensor in the PAXcam2+ has the inherent ability to capture low-light images, and it also features an enhanced dynamic range that translates to more accurate color rendition and tonal qualities in captured images. The PAXcam2+ rounds out the PAXcam family of six digital microscope camera solutions from MIS, Inc. that address the performance, resolution, and price requirements of our customers. Benefits of the new PAXcam 2+ include an extended camera exposure range, low light sensitivity, and true and accurate color display and capture. All PAXcams have a new "continuous white balance" function, external mount for use as a macro camera, and USB-2 connectivity, which assures real time previewing and fast image capture. The PAXcam2+ has been customer tested and is being used for various applications, including microelectronics, semiconductor, LCD display manufacturing, materials sciences, and various life sciences applications. For more information, contact Gregg Kleinberg, Vice President New Business Development, at 630.279.4000, greggk@paxit.com.

Leica Microsystems introduces the **Leica CM1950 cryostat**, the latest addition to the industry-standard Leica cryomicrotomy product range. The Leica CM1950 platform includes a standard instrument plus a range of options to create a cryostat perfectly matched to a laboratory's specific needs. The Leica CM1950 was developed as the result of extensive customer consultation. With the Leica CM1950,

laboratories can be sure of a cryostat that meets the requirements for high-quality sectioning, unmatched user safety, and significantly improved workflow. Leica Microsystems introduces two significant, innovative cryostat features: the CryoZone™ cooling system and the optional vacuum waste removal system. The CryoZone™ system controls a zone of uniformly cool air in the critical areas of the cryochamber. The cool air circulates around the specimen, knife, and anti-roll guide to create the best conditions for consistent, high-quality sectioning. The optional vacuum system aids efficient workflow by keeping sections flat and wrinkle-free, and enhances user safety by removing waste material. For more information contact: news@leica-microsystems.com or www.leica-microsystems.com

EDAX Inc. has launched the **Apollo Series SDD, the next generation of silicon drift detectors for X-ray microanalysis.** "The Apollo Series SDD, is the perfect complement to our market-leading Genesis software, bringing all the advanced features for qualitative and quantitative analysis, mapping and particle analysis to the materials characterization scientist. The Apollo Series SDD fits seamlessly into the EDAX family of materials characterization tools, effortlessly integrating with our market-leading EBSD cameras and our technology leading WDS systems," comments Del Redfern, Product Marketing Manager for EDAX

EDAX Inc. has also introduced the latest generation of its highly successful **GENESIS EDS microanalysis software.** "GENESIS 5.2 software includes such innovative new features as Auto Shape --an automatic collection routine that includes a free drawing capability," explains Del Redfern, Product Marketing Manager for EDAX. "The Auto Shape is an automatic spectrum collection routine that allows the user to select points and/or shapes from an image to collect spectrum. The software saves and labels the spectrum collected from the multiple positions along with their position that is then laid over the image."

EDAX Inc. announced its latest advancements on **high-speed EBSD data acquisition.** "The Hikari once again raises the standard for high-speed EBSD pattern collection and orientation measurement," explains Del Redfern, Product Marketing Manager at EDAX. "The combinations of camera technology, software and computer architecture have enabled us to make notable increases in camera and collection speeds over the past 2 years. High-speed pattern acquisition and reliable and accurate pattern analysis provided by Hikari allows users to obtain consistent high-quality data in shorter times. This high level of performance is unequalled by any other EBSD product," notes Redfern. For further information about EDAX/TSL, visit: info.edax@ametec.com or Website: www.edax.com

AMETEK, Inc. announced that it has acquired **CAMECA SAS**, a manufacturer of high-end elemental analysis systems used in advanced laboratory research, semiconductor and nanotechnology applications. CAMECA, based in Paris, France, was purchased from an investment group led by the Carlyle Group for approximately €82 million (\$112 million). CAMECA has estimated annual sales of € 60 million (\$82 million). "CAMECA is an excellent acquisition that significantly broadens our technical capabilities in differentiated, high-end analytical instrumentation. Its global customer base includes many of the world's leading semiconductor manufacturers and academic, government, and industrial research facilities engaged in nano-science and other materials science research," states Frank S. Hermance, AMETEK Chairman and Chief Executive Officer. Contact: William J. Burke (610) 889-5249 for additional information.

Carl Zeiss SMT has designated its Japanese optical material supplier, **Asahi Glass Corporation (Asahi)**, as a **Carl Zeiss SMT Supply Chain Partner**. Asahi supplies high-quality quartz glass materials for lens production and is the third materials supplier to achieve this outstanding distinction. The three Supply Chain Partners of Carl Zeiss SMT are involved in a wide range of activities, including processes and developments as well as discussions on market and technology trends. This enables anticipatory, need-based development, the coordination of production capacities and the timely initiation of further enhancements.

Thermo Fisher Scientific Inc. announces the launch of the Thermo Scientific **HyperSep™ Retain™ Polymeric Solid Phase Extraction (SPE)** range. Featuring unique functionalized polymer chemistry, HyperSep Retain products deliver high recovery levels and high reproducibility. HyperSep Retain SPE products provide sample preparation options for a wide range of applications and provide



enhanced retention for a wide range of analyte types. The Thermo Scientific HyperSep Retain range offers benefits over silica-based SPE offerings. Fast method development can be achieved and problems associated with material drying out after conditioning are eliminated. With the addition of the HyperSep Retain polymeric-based range, Thermo Fisher now offers scientists an array of products in varying formats and phases to meet the demands of their specific chromatography analysis by providing faster throughput in chromatography analysis, easier method development, and enhanced selectivity in analysis. HyperSep Retain is available in three chemistries: a polar-enhanced polymer material for balanced retention of polar and non-polar compounds; cation exchange for enhanced selectivity of basic compounds and anion exchange for enhanced selectivity of acidic compounds. For more information on the new HyperSep Retain SPE range, please call +1 800-532-4752, e-mail analyze@thermofisher.com or visit www.thermo.com/columns.

Gatan's new ORIUS™ Model 830 SC200 CCD camera is the fastest digital CCD camera that performs like a TV (30fps). It allows users to capture gain corrected, in-situ events live. It is a 2k x 2k CCD (4M pixels) camera designed to deliver extraordinary resolution and TV readout speed for imaging applications in both life and materials science. The combination of HCR™ (high-contrast resolution) optical technology, and advanced CCD readout electronics gives the SC200 camera the best price-performance value. This bottom mount camera can also provide a high resolution view of the sample making it ideal for use in materials science imaging applications and life science applications such as small particles, cryo-TEM and viruses. The SC200 can output high quality (gain normalized) LIVE images that are corrected for cosmetic defects or shading. The exceptional anti-blooming performance also makes the SC200 an ideal camera for recording electron diffraction patterns. For complete product and ordering information, log onto: www.gatan.com/imaging. Contact: info@gatan.com, Website: www.gatan.com and www.magworldwide.com

MICROS Flexible Glass Stage: Sometimes with standard tables after many working hours you have the problem of scratched, ugly surfaces. From now on this sad fact can be changed easily. We offer a stage with an inserted ultra-hardened glass plate, which is flexible

and resistant against chemical fluids. Also, because of the frosted screen, it is now possible to make a preselecting of your specimens. An extra - safety glass and finish-machined edges guarantee save and aesthetic work. **MICROS Glass Flash Stage:** The same stage with an inserted flexible hardened glass plate can be connected to a high-tech light system. You can work on an integrated light disc, where you are able to make a fast macroscopical preselecting of the specimen. Now it is easier to decide about and/or examine bad-dyed specimens or to mark very small samples. The gentle light is on/off-switchable and is not getting warm. This transparent flash stage makes working on our high-class-microscope much more efficient.

“Sundew” MCXI600 Inverted Biological Microscope Has an innovative ergonomic design and an excellent optical system with LWD ICO Infinite PLAN objectives. They make the viewing field flatter and brighter and grant easier observation of living cells. A pre-centerable phase annulus allows to observe low contrast or transparent specimen. It comes with an Ergo tube as a standard and with its optional components it can be used for brightfield, phase contrast and fluorescence applications. For teaching purposes it can be equipped with a multi-viewing bridge. **“Gold” MCXI700 Metallurgical Microscope** With the same innovative ergonomic design as MCXI600, but MET ICO Infinite PLAN objectives and for reflected light observation only. Ergo tube is also standard, and both microscope can be used for micro photography and video with an additional photo/video port. Take a closer look at our microscopes and we are sure you will be delighted by their singular price/performance ratio! CONTACT MICROS Produktions- und Handelsges.m.b.H. Vienna, Austria, Email: office@micros.at or www.micros.at



Semrock, Inc., announces an important addition to its **Bright-Line™ optical filters for multiphoton biological imaging** with a unique filter optimized for Second Harmonic Generation (SHG) microscopy. This state-of-the-art short-wave-pass dichroic beamsplitter is ideal for SHG imaging as well as multiphoton fluorescence imaging using a femtosecond near-infrared laser. The new high performance filter has extremely low group delay dispersion for minimized pulse broadening to allow deep sample penetration – a 100 fs laser pulse broadens by much less than 1% after reflection off the filter. In addition, with its carefully controlled polarization dependence, it maintains a very high degree of linear polarization for both reflected laser light and transmitted signal light for all polarization orientations. Visit www.semrock.com for more details.

Navitar announces the release of its **new 2008 product catalog** featuring their complete product line of optical solutions for Machine Vision, Automation, Assembly, Imaging, Measuring, Inspection and Biomedical Sciences. The catalog features over 400 products including Navitar's new Double-sided Telecentric lenses and an expanded line of Megapixel, Compact, and Wide Angle fixed focal length machine vision lenses. Also included are detailed system diagrams, full color photos, performance specifications, and additional lens accessories for Navitar's signature product lines of high and low mag lenses. Contact Navitar today at 800-828-6778 or visit www.machinerevision.navitar.com/catalog_request to request your copy.