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for material science applications. We have a new promotion that offers trade-in value for old knives that have been sitting around the lab. The DDK line of **tungsten carbide knives** excel in plastic applications. The 16 cm tungsten carbide knife is the gold standard for bone sectioning, while the **triangular tungsten carbide knife** offers a durable replacement for glass. Our new **disposable tungsten carbide knives** are optimized for GMA work. DDK's sapphire knife is the best sectioning tool for vibrating microtome applications and our **disposable steel knives** are excellent for paraffin. We also offer a diamond wire saw, which can cut virtually anything and is often used for bone work in the laboratory. www.dddk.com, 800-222-5143

NanoSight Ltd., of Salisbury, UK, is the world leading provider of instruments for the optical detection and real time analysis of sub-micron particles. The Company supplies unique instruments for nanoparticle analysis in the sub-500nm region that offer significant advantages compared to existing light scattering techniques. The Company's proprietary knowledge and expertise has enabled the delivery of technologies for direct visualisation of individual nanoscale particles in suspension from which independent quantitative estimation of particle size, size distribution and concentration can be immediately obtained. **FIREFLY™**, the Company's lead product, is one of several metrology solutions currently under serious scrutiny with NPL as a potential next-generation characterisation standard. The Company has won a UK government nanotech grant for \$2M, and have a growing base of users worldwide including BASF, ICI, BP, Unilever and Roche. For more information, visit www.nanosight.co.uk.

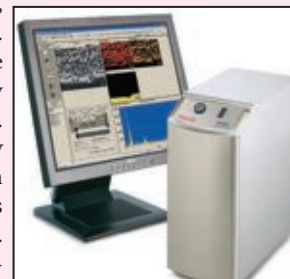
ElectroImage, the US distributor for the Ditabis Imaging Plate system for electron and X-ray imaging, introduced the new **Micron Vario Extended**. The new system scans the imaging plates at 7.5µm/pixel producing images as large as 12,000 x 10,666 pixels - more than 120 megapixels with 16 or 32 bit data. New options include systems that will accommodate 170mm x 100mm plates and a scanning option that doubles the bit depth to 33 bits and captures >99% of the recorded signal from the plates. For more information please go to <http://www.electroimage.com> or contact ElectroImage at 516-773-4305.

The Kurt J. Lesker Company is proud to announce the introduction of a new line of ion pumps. The **KJLC LION™ Series Ion Pumps** are one of the most extensive ion pump offerings in the industry. Nineteen standard models range in size from 3 L/s through 800 L/s and include tall and low profile versions able to fit into just about any footprint. The standard Diode and Noble Diode elements are complemented by the Noble 30 option. The Noble 30 combines the low-cost benefits of a Diode pumping element with the noble gas capabilities of the Noble Diode. Three controllers complete the offering with RS232 as standard I/O and the ability to control up to four pumps simultaneously at no additional cost. The KJLC pumps and controllers can even be configured to be compatible with **Varian ion pumps**. Contact us at: 800-245-1656 412-387-9200, www.lesker.com.

Geomagic®, a worldwide software and services firm, announces the release of **Geomagic Studio 9**. This latest release of the digital reconstruction software features three major areas of enhancement: 3D feature-based modeling, advanced color texture generation and greater versatility with user-defined patch layouts. Contact www.geomagic.com

Thermo Electron Corporation has improved its X-ray microanalysis system, **NORAN System SIX**, enabling superior productivity gains in high throughput microstructure characterization laboratories. Deployed on electron microscopes to provide chemical information in addition to the microscope's imaging capabilities, NORAN System SIX is now powered by the innovative new Direct-to-Phase software to perform energy dispersive spectroscopy (EDS) analyses concurrently with sample acquisitions. Thermo's NORAN System SIX compresses data acquisition to intelligent reporting in just one single step. Critical decisions are made by the micro-

analyzer itself throughout the acquisition, analysis and data interpretation process. The Direct-to-Phase software enables the system to terminate based on statistically and compositionally significant feedback. Alternatively, the analyst can visually observe the development of data and then decide when sufficient information is available for proper data interpretation. Leveraging the wealth of information collected in a spectral imaging dataset, where a complete EDS spectrum is recorded at every x-y point in the image, NORAN System SIX characterizes samples in terms of phases, not just elemental concentrations, enabling new compositionally unique features to be identified and mapped during the analysis. For more information call +1 800-532-4752, e-mail analyze@thermo.com or visit www.thermo.com/microanalysis



Gatan has launched **3View™**, a revolution in 3D microscopy, providing perfectly aligned image stacks. A specially designed ultra-microtome operates in situ within a variable pressure, Field Emission SEM, allowing automated acquisition of 3D ultrastructure by sequentially imaging the freshly cut, resin embedded block face. A finely focused electron probe and small interaction volume offer a spatial resolution an order of magnitude better than confocal microscopy, and approaching the nanometer scale. As there is no depth probing, this 3D resolution is maintained throughout the entire sectioning depth. Depending on the specimen and its preparation, <50nm thickness slice removal can be obtained. Similar fine depth resolution in the image contrast mechanism can be achieved with optimised injection conditions and Gatan's high sensitivity BSED detector. The highly stable ultra-microtome and stage allow sequential imaging with excellent registration and avoid the need for post processing re-alignment. Ultrastructural features can be followed through 1000s of image slices, and subsequent 3D reconstruction can be straightforward and trusted. The actuation of 3View's diamond knife, together with specimen advance and retraction, stage movements, SEM beam control and image acquisition are all controlled through a single software platform based on Gatan's industry-leading **DigiScan II™** and **DigitalMicrograph™**. 3View images can be exported for subsequent 3D rendering using 3rd party software. **Gatan Inc.** also recently launched a new addition to its range of imaging products for the SEM: the **XuM**. Originally developed by CSIRO and XRT Limited in Australia, the **XuM** utilises a scanning electron microscope (SEM) as a host instrument to enable x-ray imaging of the internal structure of objects with resolutions down to less than 100nm. X-ray images generated in the XuM take advantage of both absorption and phase contrast to reveal fine structure and edge definition in a wide range of sample materials from semiconductor devices to low density polymer composites and biological specimens. Using the XuM, the ability to perform 2D and full 3D tomography means that complex internal structures can be explored without ever needing to cross-section the sample. Visit www.gatan.com for more information.

Pacific Nanotechnology, Inc. first dedicated SPM system, based on the new **PNI Nano-R2™ platform** is a complete particle characterization system. It utilizes an atomic force microscope designed for capturing three-dimensional images of nanoparticles. This state-of-the-art laboratory SPM may be used in both EZMode™ and X'pertMode™ through the user friendly SPM Cockpit™ software platform. The AFM allows the user to visualize 2D and 3D topography as well as to measure the nanoparticle's average size, size distribution and 2D concentration. Preparation of the nanoparticles for study is simplified through provision of extremely flat activated substrates. The samples are first fixed (anchored) and then placed on the microscope stage for scanning. Analysis is performed using the NanoRule+™ particle

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characterization software package. Visit nanoparticles.pacificnano.com to learn more about PNI's philosophy, products and services.

Media Cybernetics announces the release of **Image-Pro Express Version 6.0** scientific image processing and analysis software. This major version release of Image-Pro Express offers new tools for image processing, measurement and analysis. Contact Kathy Hrach, Phone: 301-495-3305 x260, khkach@mediacy.com, www.mediacy.com

Carl Zeiss SMT has acquired 100% of the shares of **ALIS Corporation**, Peabody, USA for its Nano Technology Systems Division (NTS). ALIS' newly developed **Helium ion microscopy technology** will add an important building block to Carl Zeiss SMT's existing portfolio of charged-particle technologies aimed at nano-scale imaging, structuring and analysis applications. The acquisition of ALIS Corporation further expands Carl Zeiss SMT's global leadership position as enabler for industrial nanotechnology solutions and academic research. You can find the complete text under <http://www.zeiss.de/C1256A770030BCE0/WebViewALLE/FC4CD1-CB007B491DC12571B0003751CD> Carl Zeiss SMT's Nano Technology Systems division (Carl Zeiss NTS) and SII NanoTechnology Inc. (SIINT) jointly introduce the **NVision 40**, the latest member of the industry proven **CrossBeam®** family of combined scanning electron and focused ion beam workstations. **The NVision 40** is designed to meet even most ambitious demands in semiconductor, materials and life science applications. By combining the outstanding core technologies of **GEMINI®** electron beam technology, focused ion beam (FIB) and gas injection system (GIS) technology of both market leaders, **NVision 40** offers unprecedented product capabilities for cutting-edge nanoscopic imaging, structuring and analysis. You can find the complete text under <http://www.zeiss.de/C1256A770030BCE0/WebViewALLE/279544520F27CCE3C12571B9002BA756>

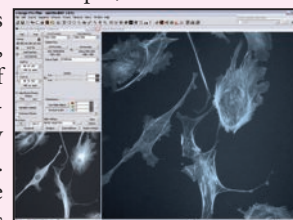
Microscope users who require an ultra-fast, sensitive camera with excellent color fidelity will benefit from the new 2-megapixel **Olympus DP20 microscope digital camera**. It displays 1600 x 1200 resolution images at 15 fps on a monitor, projector or PC. In addition, the camera's versatility, ultra-sharp images and outstanding color make it ideal for consultation, education, tumor boards, or with any application that requires frequent documentation, such as pathology, hematology, cytology and microbiology. The highly portable microscope camera can operate as a stand-alone image capture system with a microscope, since it does not require a PC for operation; it interfaces directly to a variety of monitors, or to a projector via RGB analog connection. Users can connect the DP20 to a PC via USB 2.0 and, using appropriate software, download image files or even control the camera. The camera's numerous resolution options allow maximum flexibility in setting up imaging protocols. When in use with a UXGA high-definition monitor, smooth full-resolution display is available at a real-time rate of 15 fps. When previewing images, there is none of the noticeable image lag that is associated with many high-resolution cameras. Framing and focusing are effortless. Both a 2x and new 4x electronic zoom with panning are included, and a continuous shooting mode captures a burst of 5 image frames in rapid succession. A calibrated scale bar, a grayscale mode and numerous basic measurement functions come with the camera, along with an under- and overexposure notification for people who want one-step, simple operation. An easy-to-use, ergonomic handset control unit allows streamlined, comfortable control of the system. The camera controller accepts Type I CompactFlash® cards for up to 4 gigabytes of storage. With optional **MicroSuite™ FIVE** software and the **Olympus NetCam**, DP20 users can share images easily with colleagues or students in other locations. Broadcasting images for consultation or training is simple. Up to 50 remote client computers can simultaneously log on and view a live or captured image using a standard web browser. The primary user can manually or automatically adjust the microscope and camera parameters; capture, annotate, and send images; and control access by remote users. Remote users can view live images at 800 x 600 or 640 x 480 pixel resolution, and

can see captured images either at full resolution, or compressed for faster transmission. For more information on the Olympus DP20 microscope camera, call 1-800-455-8236; visit www.olympusamerica.com/microscopes or email: olympusseg@econnections.com.

Omega Optical's extensive selection of **filter sets for imaging Qdot™ nanocrystals is now available from Fisher Scientific**, both on-line and from their domestic sales force. The product line includes filter sets for single and multi-color viewing of all Qdots including 525, 565, 585, 605, 655, 705, and 800. These sets were originally developed in collaboration with Quantum Dot Corporation (now Invitrogen) and are offered by Fisher to complement the Qdot conjugate product line which they also sell. For more information go to www.omegafilters.com.

FEI Company has released the **V600FIB**, an all-new focused ion beam (FIB) system designed to provide optimum flexibility for high-throughput applications including circuit modification, cross-sectioning, sample prep and failure analysis for semiconductor devices with designs down to 90 nm. The upgradeable platform of the V600FIB is designed to ultimately provide advanced circuit edit applications for designs below 65 nm, giving users the full range of capabilities they need today, and a cost-effective path for meeting future requirements. FEI Company has announced the global launch of its Certified Tools program featuring factory-refurbished FEI systems that are fully-tested and warranted to meet original factory specifications. With the Certified Tools program, customers will now have greater flexibility and added confidence as they plan capital equipment acquisitions. More information can be found on the FEI website at: www.fei.com.

A **new camera driver** is available for directly controlling **ProgRes®** microscope cameras from **JENOPTIK Laser, Optik, Systeme GmbH** with **Image-Pro®** image analysis software from Media Cybernetics. Developed by Jenoptik, the driver directly integrates the control for Jenoptik's ProgRes® microscope cameras into Image-Pro® image analysis software from Media Cybernetics. Complex procedures such as Time-Lapse, multi-fluorescence imaging, and automated image analysis are accomplished with ease. In addition, the macro programming capabilities of Image-Pro® are fully available now for ProgRes® camera operation. The driver already supports the new Image-Pro® version 6. Driver design efforts also set great value on camera speed: the new driver performs at high frame rates in live image mode and for Time-Lapse experiments. Unified graphical user interface for all camera models. The new driver supports all current ProgRes® series models. A unified graphical user interface for all nine camera models guarantees comfortable control. Optionally, the user can choose to operate his camera via Jenoptik's ProgRes® Capture Pro 2.0 TWAIN interface. Registered ProgRes® camera owners may download the new driver free of charge, as usual, from our website www.progres-camera.com. JENOPTIK Laser, Optik, Systeme GmbH E-mail: progres@jenoptik.com.



Leica Microsystems is pleased to present **Leica AF6000**, the successor to **Leica FW4000**. The **Leica AF6000** is a fully integrated system for advanced fluorescence imaging and provides solutions that evolve with changing research requirements. From overlaying multi-channel images to acquiring three dimensional and time lapse data, a wealth of features are included as standard for image documentation, quantification, enhancement, and analysis. Designed to completely harmonize the microscope, camera, and application, **Leica AF6000** is compatible with upright and inverted microscopes. For more information contact: Molly Lundberg, 847/405-0123, news@leica-microsystems.com

