

**nPoint, Inc.**, has announced an **enhanced scanning control mode for nanopositioning stages** that incorporates digital signal processing (DSP) for precision response at high scan speeds. Nanopositioners are key components in scanning probe microscopes (SPMs) including atomic force microscopes (AFMs) and related instruments used in nanotechnology. The enhanced scanning control mode is part of the overall nanopositioner controller. The controller incorporates advanced closed-loop control to increase scan speed for faster data collection in AFM and metrology applications and rapid response for critical nano-location applications. The new advanced scanning mode is available for all nPoint nanopositioning stages, including the nPoint iC(TM) AFM Upgrade Kit, which provides closed-loop control and metrology capability to scanning probe instruments currently in use. The new scanning control mode provides faster scanning with minimal phase-lag between the commanded and achieved position, maintaining positioning accuracy at high scanning speeds. The iC Upgrade Kit with the new controller can be easily integrated into an existing AFM without the need for modification or custom installation. The enhanced DSP Controller and iC Upgrade Kit are available now. CONTACT: Corporate, Katerina Moloni, VP Marketing of nPoint, Inc., +1-608-204-8756, katerina.moloni@npoint.com

**The Nanonics Imaging Ltd. MultiView 400™** is the only SPM system available with a free optical axis from both above and below the sample. This modular system can be moved easily between different host optical microscopes allowing for completely integrated microscopy. It is a fully comprehensive SPM platform with the widest range of potential upgrades of any AFM today, including unique options such as attachment to Raman and SEM system set-ups. Nanonics Imaging Ltd. Manhat Technology Park, Malcha, Jerusalem 91487 Israel, Tel: +972-2-678-9573, Web: www.nanonics.co.il

The latest addition to our line of digital ccd cameras, the **Cooke Corp. PixelFlyQE** now offers improved quantum efficiency with higher pixel resolution of 1390 x 1024. Designed to meet the most demanding scientific/ medical inspection and machine vision applications, this 12-bit **super-compact camera** features Digital Temperature Compensation enabling the PixelFly to maintain the same noise performance regardless of any ambient temperature fluctuations. It's compact design eliminates the need for a space-consuming thermal electric cooling unit. All camera functions are remotely controlled with imaging software. This work-horse is available in five CCD sensor types including VGA, SVGA, HiRes, UV and QE. Measuring just 2.5" x 1.5" inches, size does not compromise its performance with an exposure time of 1/100,000 to 10 seconds. Christine Haywood, Marketing Dept., COOKE Corporation, Tel. (248) 276-8820, http://www.cookecorp.com

**LW Scientific, Inc.** offers you several new ways to capture images through your microscope or stereoscope using your personal digital or 35mm camera -**LW Scientific camera adapters**. Before purchasing expensive video cameras, consider utilizing one of our exclusive adapters to connect nearly any camera to nearly any scope and most are compatible with all major brands of SLR cameras. Most adapters mount quickly and easily with thumb screws, and will attach to nearly any microscope or stereoscope. LW Scientific, 4727-G North Royal Atlanta Drive, Tucker, Ga. 30084, 1-800-726-7345.

**Oxford Instruments** goes live with **www.ebsd.com**. The new web site has been designed for all levels of user - from the beginner to the more experienced. It works through the basics of EBSD by means of an on-line tutorial, with interactive examples, definitions and models. It takes a guided tour through Oxford Instruments' own EBSD system, INCACrystal, using the unique Navigator panels to click through the software and hardware features. It clearly demonstrates the flexibility that INCACrystal offers. Information on applications for EBSD, and "Hints and Tips" complete the site.

**Leica Microsystems** is pleased to introduce the **Leica EM UC6 Ultracut**, a new **ultramicrotome** for ultra-thin sectioning and facing of biological and industrial samples. Designed with comfort in mind, the Leica EM UC6 is equipped with a **Leica MZ6 stereomicroscope** and **Ergo-Wedge** that allow the instrument to ergonomically adapt to the user's height and position. Ergonomics for fatigue-free operation are an integral part

of the overall design concept. Eucentric movement of the stereo viewing system allows examination of sections with lower water levels as well as cryosectioning, which is important for certain materials. The Leica EM UC6 offers fully motorized N-S movement of the knife stage, which is the prerequisite for the E-W measuring system and AutoTrim function. With AutoTrim, trimming can be performed automatically for the first time. The sample can be trimmed to a predetermined size and depth, and precise trimming can be stopped automatically in mid-cycle, which is ideal for morphological studies or trimming fibers. Leica is also first to provide a built-in anti-vibration base plate that prevents influence from external vibrations to ensure section quality.

**Leica Microsystems** continues to expand its popular DM Digital-Microscope line with the **Leica DM6000 B** fully automated **research microscope**. The Leica DM6000 B incorporates Leica's pioneering Intelligent Automation, which makes it easy for everyone in the lab to obtain the highest quality images. Only Leica allows the user to switch between brightfield, phase contrast, DIC, or fluorescence by touching a single button, and have all of the optical settings (such as illumination and field diaphragm settings) automatically recalled for every magnification. The Leica DM6000 B's automation goes beyond motorized z-drive, filter turret, and nosepiece, to include features such as fluorescence intensity control; fast shuttering of excitation, field and aperture diaphragms; and insertion of the proper components for DIC and phase contrast imaging. For more information on either product, contact: Pam Jandura, pam.jandura@leica-microsystems.com, www.leica-microsystems.com, phone: 847/405-7062

**Allied High Tech Products, Inc.** today announced the release of the latest generation of its **MetPrep 4(tm) 10"/12" polisher/grinder and AP-4(tm) power head**. The MetPrep 4(tm) offers features including touch pad function controls, a backlit 4-line LCD display, manual or programmable operation up to 10 steps, variable speed platen control from 50-400 RPM and quick change platen design. The AP-4(tm) power head features central pressure preparation of up to 10 samples, individual pressure preparation of up to 3 samples, and pneumatically applied sample force from 0-90 lbs. (central) and 0-26 lbs. (individual). The AP-4 head also has variable speed rotation of 10-150 RPM and conveniently flips-up for easy sample inspection and holder removal. Both products are manufactured by Allied utilizing corrosion-resistant machined aluminum and stainless steel construction. Specification data and quote/purchase information about these and all of Allied's products may be obtained at [www.alliedhightech.com](http://www.alliedhightech.com), from an Allied Product Application Specialist, or from Allied Customer Service. Call toll free (800) 675-1118.

**FEI Company** announced today that scientists at the company's nanotechnology center **have broken the one Angstrom image resolution barrier with a 200kV transmission electron microscope (TEM)**. FEI believes that this is the first time images can be directly viewed with a resolution of less than one Angstrom using commercially available technologies. The sub-Angstrom resolution was achieved using FEI's Tecnai(TM) F20 ST transmission electron microscope, using technologies which improve image resolution with advanced electron optics capabilities developed by FEI and by its partner, CEOS Company. This enables novel TEM techniques such as 3D reconstruction with tomography, scanning probe applications, or in situ observation of specimen responses to variations in temperature, stress or chemical environment, all with sub-Angstrom resolutions. CONTACT: Dan Zenka of FEI Marketing Communications, +1-503-330-5811, /Web site: <http://www.feicompany.com/>

**Gatan's new EELS Advisor simulation software** product has just been announced. EELS Advisor is based on the latest advances in the theoretical modeling of electron energy loss spectra. It encapsulates the complexity of the EELS technique and presents a clear and approachable interface for posing and answering common questions about EELS experiments. EELS Advisor is a new plug-in module for the Gatan Microscopy Suite (GMS) software system. As such, it can be easily added to existing GMS installations through purchase of the appropriate EELS Advisor license. EELS Advisor is available in both on-line and off-line variants and can be added to either type of GMS installation. It is a perfect complement to any installation that already includes Gatan's industry-leading EELS Analysis module. For more information, visit [www.gatan.com](http://www.gatan.com) or contact [info@gatan.com](mailto:info@gatan.com)

**Applied Physics Technologies, Inc.** has announced the **acquisition of the LaB6/CeB6 thermionic electron source product line from FEI Company**, Beam Technology Division of Hillsboro, Oregon. The LaB6/CeB6 product line was acquired by APTECH effective 1/1/2004. This change has many benefits such as better service, more direct communications, and increased technical support to users of these cathodes. APTECH is better positioned to develop new products, applications, and markets for these materials. Applied Physics Technologies, ph. (503) 434-5550

**Optellios'** Polarization Manager integrates the functionality of its flagship products, the **PC1000C Polarization Controller** and **PS2300B In-Line Polarization Analyzer** into a single instrument. This allows simultaneous monitoring and control of optical polarization. Incorporating an advanced control algorithm allows the output polarization to any state with accuracy greater than 1 degree. In addition, the PM3000A supports all of the advanced analysis routines developed for the PS2000 series of polarization analyzers, and is controlled from a PC via a serial port (or USB with adapter) with user-friendly Windows software. For complete product information and data sheet, please visit us at: <http://www.optellios.com/products.html>; Telephone (609) 671-9800

**Thermo Electron Corporation** introduces the new **Nicolet™ Continuum™ XL**, a research-grade FT-IR microscope that provides high performance infrared sampling, excellent visible-light microscopy and exceptional FT-IR imaging. The innovative design of the Nicolet Continuum XL adds imaging capability to the renowned Nicolet Continuum IR microscope, which incorporates advanced microscopy features, including simultaneous view and collect, dual remote sample masking, Reffachromat compensating objectives and visible contrast and illumination techniques. The Nicolet Continuum XL features an exclusive optical design that enables users to perform single-point collection and imaging on the same system without compromising the performance of either mode of operation. In single-point mode, dual remote sample masking provides optimum spa-

tial resolution, enabling pure spectra to be obtained from the smallest of samples. In imaging mode, high fidelity optics allow rapid collection of sharp images. The Nicolet Continuum XL is supported by new versions of OMNIC™ and Atlas software, which provide excellent visualization and image processing capabilities. Users are able to link spectra, video images and chemical images into a single organized window. The software supports the collection of single points, line and area maps when using a single element detector and images when using an array. For more information on the Nicolet Continuum XL, please call +1 800-532-4752 or e-mail [analyze@thermo.com](mailto:analyze@thermo.com).

The **Kurt J. Lesker Company** is proud to announce the **acquisition of Anatech Ltd's Ion Source product family**. The products include 3cm, 5cm, and 10 cm sources, complementary power supplies, and accessories. These robust, filamentless sources find application in sample cleaning, ion assisted deposition, mild etching, surface modification and numerous other uses. The KJL/Anatech patented ion sources use no thermionic emitter to generate a plasma, either filament or tip, and are inert and reactive compatible. As part of the acquisition, Kurt J. Lesker Company has moved all design and manufacturing to its headquarters near Pittsburgh, PA. Contact us at: 800-245-1656, 412-233-4200, [www.lesker.com](http://www.lesker.com)

**4pi Analysis, Inc.** has announced a **new version** of its highly successful **4pi Revolution® software package for EDX and Imaging applications**. This latest release incorporates new and improved tools and features for the acquisition and display of digital images and x-ray maps, including text annotation, save as displayed, magnification selector, brightness/contrast, image magnification linking and independent preview and acquire image sizes. 4pi's customers can update earlier versions of Revolution for free. The software is available for download on 4pi's web site and is available for Windows or Macintosh OS and OSX. Contact: Beth Gregory, 4pi Analysis Inc., 919.489.1757, [x11info@4pi.com](mailto:x11info@4pi.com)

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