

**Abreivity** announced today version 3.0 of **FileData Classifier(tm) (FDC) and FileData Manager(tm) (FDM)**, the eagerly awaited new release of their Information Classification and Management (ICM) Software. Version 3.0 fully addresses the complexities required to centrally control, but locally manage distributed enterprise file data. This major upgrade is the first ICM solution available with the ability to manage hundreds of terabytes of storage across multiple geographically distributed locations. With a unique combination of new content-aware discovery features, a comprehensive business value-based classification and tagging mechanism, a completely new file movement and policy engine, and enhanced reporting and trending capabilities, this release raises the bar in the data classification market. Contact: Eric Madison, 408-996-0111, eric@abreivity.com

**Thermo Fisher Scientific Inc.** has incorporated award-winning data management functionality into its **Nautilus LIMS™ version 8.0**. Now installed with Data Manager, Thermo Scientific Nautilus can capture, archive and store both derived and raw instrument data, permitting users instant access and manipulation of the data without the original software. Data Manager is a complete storage and retrieval system that understands and preserves analytical data, documents and PDF (Portable Document



Format) files. It is able to view, search and manipulate real data and its metadata without the original application. Designed to address long term storage issues by being platform and manufacturer independent. Thermo Scientific Nautilus 8.0 has been designed to give scientists a comprehensive instrument unified view of

all relevant data directly from the LIMS rather than at the lab bench via multiple software packages. To request a demonstration copy of Nautilus 8.0 and Data Manager, contact marketing.informatics@thermofisher.com or visit [www.thermo.com/informatics](http://www.thermo.com/informatics)

Thermo Fisher Scientific Inc., also announces that it is Web-enabling its laboratory information management systems (LIMS) offerings by utilizing **Microsoft's ClickOnce deployment technology** to create a solution that combines the rich functionality and performance of the desktop client delivered via the simplicity of a Web interface. For more information visit [www.thermofisher.com](http://www.thermofisher.com).

**FEI Company** has added a revolutionary new instrument, the **Titan3™ 80-300** to the Titan product family. Aptly named the Titan™ “cubed” because of its unique, fully enclosed profile, the system is designed to deliver the highest stability and performance in a commercial scanning/transmission electron microscope (S/TEM). The Titan3 takes the capabilities of FEI's powerful Titan S/TEM microscope, introduced in 2005, to



new levels of performance and enhanced operation, giving users the sub-Ångström imaging capabilities of the world's most powerful commercially-available microscope and a lower total cost of ownership for a high-end microscope. The superb ultra-high resolution S/TEM performance of this new system is achieved by its all-new design that allows--for the first time ever--the combination of two Cs-aberration correctors and a monochromator on a single instrument. The system's innovative enclosure significantly reduces environmental interference providing greater stability and eliminating the need

for many expensive lab improvements. This new Titan family system is targeted for a growing range of industrial, institutional and academic researchers who need to characterize the atomic-scale structure, chemistry and dynamics of individual nanostructures. With the aberration-free, sub-Ångström vision of the Titan3, scientists can study how atoms combine to form materials, how materials grow and how they respond to a variety

of external factors. The monochromator complements these capabilities by providing additional information about bonding states of atoms and about electronic properties on the nanoscale. These are the most basic parameters that science needs to understand to improve materials properties and to obtain a deeper understanding of the macroscopic behavior of nanotechnology devices. Such data can aid in the improvement of designs for everything from better, lighter, more efficient light sources, automobiles and airliners, to stronger buildings and new ways of harvesting energy. The Titan3 features a new, fully-digital remote control interface that improves ease of use and changes how users interface with the instrument. No longer will system operators have to work in dark remote labs. An all-new digital user interface affords users the freedom to operate the Titan3 remotely and in ambient conditions. A high-speed digital camera and smart user interface make operation easier and improves the handling of a wide range of applications. The Titan3 80-300 can be operated in the range of 80 to 300 kV for optimized imaging of a wide variety of materials from ultra-light carbon compounds to ultra-dense heavy metal samples. The modular design of the Titan column also offers greater planning flexibility when purchasing the Titan3. Base systems can be retrofitted in the field with probe Cs- and image Cs-correctors. More information can be found at: [www.fei.com](http://www.fei.com).

**Optronics\***, a manufacturer of innovative medical grade camera systems for microscopy, announces the introduction of **Microcast® HD, a state-of-the-art True High Definition Digital Microscope Camera System** with a 1080P digital output at 60 frames per second. Microcast® HD creates the ultimate cinematic microscope visualization experience. Powerful embedded software delivers superior color accuracy, detail and depth perception of microscope images. Utilizing true 3CCD high-definition progressive scan technology, Microcast® HD delivers image resolution of 1920 x 1080 (2 million) pixels with real-time frame rates that reflects natural human vision. Contact: Richard Crandall 800.796.8909 x. 3980, [rcrandall@optronics.com](mailto:rcrandall@optronics.com)

**Omega Optical** is releasing a **new catalog of fluorescence filter sets**. The 2007 catalog, Precision Optical Filters for Fluorescence Microscopy, includes fifteen (15) new high performance sets for fluorescent proteins, and ten (10) new sets for FRET applications. These new products complement an extensive selection of dye-specific filter sets for all single and multi-label microscopy applications, including Quantum Dots, M-FISH, Pinkel, Sedat, Ratio Imaging, Confocal, and Multi-photon. In addition, there are resources such as a fluorophore reference table, light source and detector spectral data, an explanation of filter nomenclature, guidelines for choosing the optimal filter sets, and a list of components organized by wavelength. To request a free copy of the catalog go to the “e-Literature” link on Omega Optical's website at [www.omegafilters.com](http://www.omegafilters.com)

**JEOL USA** announced today that the **University of Southern California (USC) has purchased three electron microscopes, including a newly introduced SEM-FIB** (a dual column focused ion beam system) for the university's new Center of Excellence for Nano-Imaging in Los Angeles, California. USC is the first U.S. customer to purchase the new JEOL LaB6 MultiBeam, the JIB-4500, high performance SEM and micromilling FIB. The new lab will also house a JEOL JSM-7001FLV low vacuum, field emission scanning electron microscope (SEM) and a JSM-6490LV low vacuum tungsten SEM. USC experts in the fields of nanotechnology, biology, materials, and engineering will use the new instruments as part of a shared core lab. USC is expanding research activities through new initiatives in Biomedical Nanoscience and Future Fuels and Energy (<http://www.usc.edu/research/initiatives>), emphasizing interdisciplinary collaboration, advancing science and meeting societal needs. The university's partnership with JEOL will



equip the lab with the most advanced instrumentation and applications support, as well as provide a demonstration and training facility that will be a center for advancing knowledge and research for both organizations. In addition to the three instruments purchased for the Center of Excellence for Nano-Imaging, USC purchased another three JEOL instruments this month. A JEM-2100 LaB6 Transmission Electron Microscope (TEM) and a JSM-6390LV SEM will be installed in the Doheny Eye Institute as a multidisciplinary microscope. A JEM-1400 TEM was purchased by the Zilkhi Neurosciences Center for the Medical School, and will be used for Cryo applications. For more information visit [www.jeolusa.com](http://www.jeolusa.com), or call 978-535-5900.

The new **Leica AM TIRF MC (Multi-color, Total Internal Reflection Fluorescence)** system allows the entire fluorescence excitation spectrum to now be used for real-time visualization of live cell dynamics. Leica's unique scanner sensor automatically matches the TIRF angle at all wavelengths to the required penetration depth, and positions the laser so that the TIRF penetration depth remains constant even when the wavelength is changed. Researchers using Leica's TIRF technology benefit from a unique level of convenience as well as from reproducible scientific results. The Leica AM TIRF MC integrates four solid-state lasers for the excitation of fluorophores at wavelengths from 405 to 632nm. The system features extremely short switching times and an ultra-high synchronized frame rate. For the scientist, this means excellent flexibility for experiments with multiple fluorophores. The system is particularly useful for exploring molecular interaction at cell membranes and molecular interaction of proteins and receptors involved in transport mechanisms. With the Leica AM TIRF MC, a scientist can examine single molecules near the cell membrane, study co-localization and vesicle transport, and combine TIRF and fast FRET analysis. For more information see: [news@leica-microsystems.com](mailto:news@leica-microsystems.com) or visit [www.leica-microsystems.com](http://www.leica-microsystems.com)

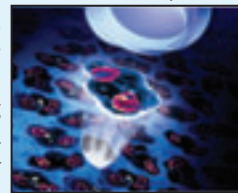
**Hitachi High Technologies America, Inc.** today announced the sale of the first unit of the **300 kV cold field emission gun HF-3300 TEM/STEM** to a U.S. institution. The HF-3300 will be delivered to the High Temperature Materials Laboratory Microscopy Group at the Oak Ridge National Laboratory (ORNL) in mid-October 2007. The HF-3300 microscope is a powerful analytical tool with high electron beam coherence, brightness, and the best synergy of energy resolution and beam current for atomic resolution imaging, electron holography, and analytical applications. The HF-3300 TEM/STEM is the newest field emission transmission electron microscope made by Hitachi High Technologies. The high brightness cold field emission electron source and 300 kV accelerating voltage are combined to give high spatial and energy resolutions together with high beam current and unique analytical capabilities. Double-biprism electron holography, spatially-resolved EELS, and high precision parallel nanobeam electron diffraction are newly introduced, in addition to highly sensitive EDS and EELS. These new analytical capabilities are expected to pave the way for elemental analysis, nanoscale chemical bonding state analysis, and high precision analysis of local crystalline structure, dopant profile and stress mapping. The FIB (focused ion beam) compatible holders enable an efficient sample preparation and no sample relocation between Hitachi FIB instrument and HF-3300 TEM. For further information, visit <http://www.hitachi-hta.com>.

**Imago Scientific Instruments®** announced a number of organizational changes. Timothy J. Stultz, Ph.D. has assumed the position of Chairman of the board. This follows Dr. Stultz's departure from the company as President and CEO. Dr. Stultz has assumed the position of President and CEO of Nanometrics Inc., a California-based publicly traded company. Tom Kelly, Ph.D., Imago's founder and CTO has assumed the position of CEO and CTO and will guide the company strategically. "Tim has done an excellent job of leading Imago during his four-year tenure as President and CEO," said Dr. Kelly. "We look forward to his continued

contribution as Imago's Chairman of the Board; we wish him all the best in his new role as President and CEO of Nanometrics, Inc."

One User Interface for all Cameras with EasyLab from **Imagic AG**. In a typical scientific lab environment, cameras and frame grabbers of many different manufacturers can be found to acquire image and related microscope data. This variety of hardware devices forces the user to get familiar with all of these proprietary user interfaces to control the imaging sources – a tedious and time consuming task. As a modular part of the Digital Image Management System ImageAccess and EasyLab, Imagic Bildverarbeitung AG provides an universal camera driver for the digital microscope camera families of Leica, Zeiss and Jenoptik, for Canon Powershot Compact Cameras and for Y/C analogue-to-digital converters. The intuitive user interface provides a complete set of generic camera functions to interactively control live image display and image acquisition. It dynamically activates camera specific features such as acquisition modes and operating parameters. For more information contact Ludwig Eckl E-Mail: [LEckl@liebmann.com](mailto:LEckl@liebmann.com), [ProgRes-camera@liebmann.com](mailto:ProgRes-camera@liebmann.com), Internet: [www.liebmann.com](http://www.liebmann.com), [www.progres-camera.com](http://www.progres-camera.com)

**Carl Zeiss MicroImaging GmbH** introduces the **PALM MicroBeam IV**, a system designed to cleanly extract even the smallest biomaterials from heterogeneous tissue and cell colonies. The patented Laser Microdissection and Pressure Catapulting (LMPC) process at the core of the PALM MicroBeam provides a pure and contact-free optical technique that is gentle enough to facilitate microdissection and manipulation of even living cells in culture. The PALM MicroBeam enables users to harvest ultra-pure biomolecules for downstream research. Researchers can refine raw materials right on the microscope slide or inside the culture dish by visual and automatic identification, outlining the relevant area for non-contact extraction via fully-automated laser ablation. After a clear separation between the wanted and unwanted material is established, a laser pulse delivers mechanical force to the sample, catapulting the specimen toward the receptacle for further viewing. The PALM MicroBeam boasts an ergonomic, intuitive design, affording users rapid, unimpeded experimentation in a variety of conditions. The system adjusts easily to a variety of source material, and the inverted configuration optimizes work with both membrane-coated slides, and glass slides with archived specimen. With the high-performance optics of the Axio Observer inverted research microscope and the AxioVision software for automatic object recognition, the PALM MicroBeam is at the forefront of life science research. Multichannel fluorescence and automated image analysis ensure that even the weakest fluorescence signals can be visualized brilliantly. Available in several configurations ranging from single experiment systems to high content, integrated imaging workstations, the PALM MicroBeam achieves optimal workflow for routine and challenging microdissection applications. For more information on the breadth of solutions offered by Carl Zeiss MicroImaging, please visit [www.zeiss.com/micro](http://www.zeiss.com/micro).



**Eastman Kodak Company** is enabling a new level of image quality in light starved scientific applications with the **KODAK KAI-04022 Image Sensor, a low-noise 4 megapixel Interline Transfer CCD** that is optimized for low-light imaging. The KAI-04022 Image Sensor builds on the capabilities of the popular KODAK KAI-4021 Image Sensor by adding a new low-noise amplifier that reduces sensor read noise by 25%. With this improvement, scientists working in applications such as fluorescence microscopy can more successfully detect and measure low-light signals, enabling more accurate and detailed analysis of their samples. For more information on Kodak's entire image sensor product line, please visit [www.kodak.com/go/imagers](http://www.kodak.com/go/imagers).

**Media Cybernetics** announces the release of **IQbase 2.5 scientific image management software**. This image management software enables organizations to effectively store, query, and share large numbers of images and related data. Users can collaborate within their organization and with outside partners by sharing image data through their network or via the Internet. With IQbase, users can perform powerful image searches based on keywords or using more detailed context sensitive search parameters. Images and data can be easily shared with others through the use of automatic PDF report templates, one-step export to PowerPoint tools, and web-based image searching and downloading. IQbase allows users to further explore their images with qualitative visualization tools like image overlays and annotations, as well as with quantitative graphs and charts for interactive data analysis. For more information about Media Cybernetics, visit [www.mediacy.com](http://www.mediacy.com).

**Anasys Instruments** announce the release of **VESTA, the first stand-alone solution for Localized Thermal Analysis (LTA) measurements at the micron scale**. This is ideal for the quality control of coatings; study of heterogeneous samples, and in-situ failure analysis applications for researchers in the polymer and pharmaceutical industries. This Easy-to-Use instrument is designed with an integrated optical microscope for the operator to identify features of interest down to 1.5 micron in size. The operator can just click on any feature of interest in the image to perform localized thermomechanical analysis (TMA) on the features of interest using one of Anasys' customised heated probes. VESTA enables materials characterization through the study of glass transition and melting temperatures of only the identified feature while the rest of the sample is unperturbed. Anasys provides a variety of fabricated thermal probes of different end radius (30nm up to 5 micron) to enable optimum interrogation of sample volumes from a few cubic microns to tens of cubic nanometres or sample masses of a few micrograms down to as small as a few picograms. Full details of the VESTA's specification and to obtain a data sheet, please visit the Anasys web site: [www.anasysinstruments.com](http://www.anasysinstruments.com)

**WITec** introduces the "**Ultrafast Raman Imaging Option**" for the **alpha300 R Confocal Raman Microscope**. With this option the acquisition time for a single Raman spectrum can be as low as 1.7 milliseconds. As a Confocal Raman image typically consists of tens of thousands of spectra, the new option reduces the total acquisition time for a complete image to only a few minutes. For example, a complete hyperspectral image consisting of 250 x 250 pixels = 62,500 Raman spectra can be recorded in less than two minutes. The latest spectroscopic EMCCD detector technology combined with the high throughput optics featured in the alpha300 R Confocal Raman Imaging System are the keys to this improvement. The new option reduces the overall experiment duration and delivers more valuable Raman data in a given time, thereby reducing the total cost of ownership of the system. The improvement in sensitivity can also be advantageous for delicate and precious samples requiring the lowest possible levels of excitation power. Time-resolved investigations of fast dynamic processes can also benefit from the ultrafast spectral acquisition times. The new Ultrafast Raman Imaging method is available as an optional feature of the alpha300 R confocal Raman Microscope and the confocal Raman imaging upgrades of the alpha300 AFM and SNOM series. In Confocal Raman Imaging, a complete Raman spectrum is acquired at each image pixel. By evaluating dedicated peak characteristics, Raman images can be generated, revealing information on the distribution of the sample's compounds, stress fields or crystallinity. Typical applications for this nondestructive technique can be found in bio-medical and pharmaceutical research, in semiconductors and materials science as well as in nanotechnology. For more information, please refer to <http://www.witec.de> or contact: [Harald.Fischer@WITec.de](mailto:Harald.Fischer@WITec.de)

**Andor Technology** launches a new tool for its fast growing Revolution laser microscopy solutions aimed at live cell imaging. **Revolution FRAPPA** is Andor's latest innovation in laser microscopy using a computer-steered laser beam to photo-bleach or photo-active a user-defined region in a live cell specimen. FRAPPA is a photo-bleaching module attached to Andor's live-cell-friendly spinning disc Revolution system. It uses a dual galvanometer scan head and can be configured in line with a CSU and/or camera. Under Andor iQ software control, the user commands FRAPPA to bleach or activate regions of interest with user-defined times, laser lines and powers. Laser switching is tightly synchronized using Andor's proprietary laser combiner multi-port switch (MPS). Andor FRAPPA offers extremely stable focus and ideal conditions for live cell work. Andor Technology has also just announced the launch of its **new iCam technology**, a combined firmware and software innovation that has been incorporated into Andor's EMCCD imaging cameras. iCam technology encompasses a set of unique innovations that empower the EMCCD camera to operate with complete acquisition efficiency through multi-dimensional microscopy softwares, showcased to great effect through their own iQ imaging suite. iCam technology will now be offered as a standard feature across iXonEM+ and LucaEM product lines. For further information please contact : Emma McClintock – Andor Technology, Tel: +44 28 9023 7126 or visit [www.andor.com](http://www.andor.com)

The **PD-10 Powder Dispersing System** is a unique instrument that disperses any type of dry powders on microscope slides or mini stubs. By creating a vacuum, high shear forces and a uniform deposition it eliminates overlapping particles and agglomeration problems that occur with the usual manual slide preparation. Contact Dennis C. Howley, **MCC/Ankersmid**, Tel: 973-887-7800 or [dchowley@mcc-online.com](mailto:dchowley@mcc-online.com)

**Molecular Devices, a division of MDS Analytical Technologies** and a leader in innovative solutions for drug discovery and life sciences research, announces, in partnership with VisiTech International, the release of **MetaMorph ICS<sup>®</sup>, a turnkey confocal microscope** optimized for high speed acquisition and analysis. At the core of the MetaMorph ICS microscope is the VT-Infinity3™ confocal array scanner from VisiTech International and Molecular Devices' MetaMorph<sup>®</sup> software, the industry standard automation and image analysis package. This unprecedented combination enables users to explore the area of live cell and functional imaging without the limitations inherent in other high speed imaging technologies. See <http://www.moleculardevices.com>

**attocube systems** has expanded its product line of highly stable and compact positioning stages by introducing the **ANT200/NUM. This linear, horizontal stepper positioner** features a center hole of 28 mm in diameter making it the perfect candidate for optical transmission experiments. Due to its compact design and dimensions of only 45 x 45 x 11 mm it can be easily integrated into existing microscopic setups and other instrumentation where space is limited. An optoelectronic encoder allows for ultra precise, closed loop operation with a sensor resolution of 50 nm. Loads up to 300 g can be easily moved over a travel range of 7 mm at room temperature and ambient conditions. See [info@attocube.com](mailto:info@attocube.com), [www.attocube.com](http://www.attocube.com)

**Navitar** has expanded their **Low Mag Video Lens line** to include twenty-seven new Megapixel, Compact and Wide-angle fixed focal length lenses. Perfect for Machine Vision applications, these new lenses have an innovative optical design and offer excellent resolution at an affordable price. New lenses include 1" and 2/3" Megapixel lenses, 2/3" compact fixed focal length lenses and 1/2" wide-angle lenses. With these additional lenses, Navitar now offers a complete range of video lenses for every industrial application. contacting Navitar at 800-828-6778, via their patented automated lens selector at [www.opticalwizard.com](http://www.opticalwizard.com), via the website at [www.navitar.com](http://www.navitar.com)