INDUSTRY NEWS



AutoQuant Imaging, Inc. has released Version 9.2 of their AutoDeblur–AutoVisualize image processing suite. Most notably, there are two new advanced development modules for image analysis: FRET and Ratiometrics. Researchers doing high-end protein-protein interaction and calcium and pH concentration research will find these modules indispensable in image analysis. Gold's Method has been added to AutoQuant's repertoire of deconvolution algorithms. They now offer all of the most popular algorithms. Gold's Method provides accurate results with very fast processing times. Also, there are calculators to help determine image spacings the level of spherical aberration present in the dataset. Finally, new display options have been added to the Time-Series Movie Maker to enhance movie making capabilities. AutoQuant Imaging, Inc. 877 25th Street, Watervliet, New York 12189 USA Phone: (518) 276-2148 Fax: (518) 276-3069 Email: chrisf@aqi.com, www.aqi.com

LW Scientifics' Epi-Fluorescent system for the M2 Infinity LabScope is an ideal tool for immunology and other specialized applications. Utilizing a 100 watt HBO mercury vapor light source, the Epi-Fluorescent system creates UV light at specific wavelengths for exciting fluorochrome-stained specimens. The light housing is mounted between the body and head of the microscope and includes a variable-control transformer box. For more information, log on to: www.lwscientific.com or write: LW Scientific, 4727-G North Royal Atlanta Drive, Tucker, Ga. 30084, 1-800-726-7345.

Nikon Instruments Inc. announced its fully upgraded Eclipse TE2000E2 inverted research microscope. The TE2000E2 provides greater precision and establishes new standards as a platform for inverted microscopy by incorporating an automatic objective drop and refocus, motorized lowering and return features, and remote fine focus. A five-way automated light path with five imaging ports caters to advanced research that requires image capture in 3D, including confocal microscopy and deconvolution processing. Nikon's TE2000E2 also incorporates Nikon's CFI60 optical system, offering the brightest, highest contrast, aberration-free microscope imaging at both the highest and lowest magnifications, with notably longer working distances and higher numerical apertures.

Nikon offers The Eclipse 80i incorporating the most advanced optical technology. Concentrating on stability and mechanical precision, the Eclipse 80i also achieves new levels of fluorescence performance, incorporating wide spectrum violet corrected (VC) Plan Apo optics. The new DIH digital head of the Eclipse 80i is an all-in-one unit that contains an integrated Epi-Fluorescence attachment with six filter cube positions and an integrated shutter, beam-splitting module, eyepiece tube, and dual ports for digital cameras, confocal attachments, and spectral detectors. Vastly improved fluorescence performance is enabled by Nikon's Hi-S/N fluorescence system, producing super-high signal-to-noise contrast ratios by employing Nikon's patented "Hi-S/N Noise Terminator" technology to extract the ultimate in low signal fluorescence imaging.

Nikon also introduces a new CFI60 Plan Apo "VC" series of objectives with expanded spectral correction range into the violet lines, improved aberration correction, and a design specifically for critical digital imaging applications. For more information visit the Nikon Web site at www.nikonusa.com or callNikon Instruments at 800-52-NIKON.

4pi Analysis, Inc. (www.4pi.com) has introduced a new, high-resolution, slow-scan charge-coupled device (CCD) camera product line that enables users of film-based transmission electron microscopes (TEMs) to acquire publication-quality images and prints without the need to learn new procedures. Digital images are acquired much like exposing sheet film. The new CCD camera is a breakthrough in usability, feature set, and performance. It is available for Windows 2000, Windows XP, Macintosh 9.x, and Macintosh OS X operating systems. The cameras utilize Class One Kodak sensors and high-quality scintillators. The cameras can be installed in either side-mount or bottom-mount ports and are offered in three resolutions: 1.5 Megapixels (1.5k x 1k), 4 Megapixels (2k x 2k), and 16 Megapixels (4k x 4k). All systems include computer, flat-panel display, printer, software, and installation. Applications include pathology, failure analysis, materials and biological research, and semiconductor manufacturing. Software highlights include a corrections feature utilizing flat fielding (dark frame and flat frame). Images can be exported to Microsoft Word or Photoshop, among others, and images are easily saved to different file formats, including TIFF, PICT, BMP and JPEG. Images can be annotated with text, automatic sequential numbering, comments, instrument parameters, and micron marker. Contact: Beth Gregory, 4pi Analysis Inc. 919.489.1757, x11 gregory@4pi.com

Soft Imaging System now offers fis (fast image sequence) - a software add-in for use with the analySIS imaging software. Examples of processes and reactions which take place very quickly can be found in just about all areas of research, development, quality assurance and control. For the latter, this might include chemical reactions or temperature-dependent changes or dynamic structural changes; in particular, fast image acquisition may be required for observing and analyzing cells and tissues. The add-in is also particularly attractive due to its ease of use. All the user has to do is enter the number of pictures to be acquired. The software then calculates the memory capacity required and how long acquisition will take. How long acquisition takes depends on the selected camera settings such as image size, resolution or exposure time and the current PC configuration.

The measurement of dynamic changes in fluorescence intensity over space or time can be of vital importance in the study of certain cellular reactions and processes. Soft Imaging System offers sim (stack intensity measurement), an analySIS add-in for executing such tasks. sim offers data processing, analyzing and graphical display for time-lapse stacks and Z stacks. sim is fully integrated with the analySIS imaging software and offers full software control of peripheral devices. The user defines which region(s) of the image stack are to be evaluated. Any ROI's (Regions Of Interest) that are defined apply to the entire stack. Stacks are evaluated according to either time or Z distance. The intensity F(i) of each ROI can be calculated via the mean or integral of the ROI area. Alternatively, the corresponding delta F/F function can be displayed. The calculated data is displayed and evaluated by the user within analySIS. CONTACT: Dr. Mike Bode, Soft Imaging System Corp. 12596 W.Bayaud Ave, Suite 300, Lakewood, CO 80228 Tel.: +1 (303) 234-92 70, and (888) FIND SIS, Fax: +1 (303) 234-92 71, www.soft-imaging.com

Digilab, LLC, a leading provider of molecular spectroscopy instrumentation and solutions, has joined forces with Chromaplex in developing a "Raman spectrograph engine" that will provide the foundation for several new Digilab product lines. The Digilab/Chromaplex partnership and development agreement supports the design and manufacturing of a continuum of products/solutions in the Raman Molecular Spectroscopy field. These products have been licensed exclusively to Digilab for global commercialization under the agreement. Customer Contact: 781-794-6644, Telephone: 800-225-1248 / Fax: 781-794-6600, Email: patty_lee@digilabglobal.com, Email: sales@digilabglobal.com

Optellios' is now offering the PS21000B, which is a complete high performance polarization measurement and analysis system, that system is capable of sampling data at 200 points/sec. The optical head is so small that it fits in the palm of your hand! The PS20100B is controlled via aRS232 using Optellios' serial user-friendly graphic interface. PS2000B features high accuracy (1% typical error), large dynamic range (>50dB), small wavelength dependence, normalized stokes vector, dynamic/configurable poincare sphere and vector tracer, and no moving parts. The PS2000B also has modules to perform PDL and PMD measurements. Quantities of >5 can be delivered 2 weeks ARO. Optellios manufactures high performance polarization detection and control components for a broad range of markets based on a common platform of very low power consumption, compact size and low cost. Products include: Polarimeter, Polarization Controller, Polarization Synthesizer, Tunable Polarizer, Polarization Scrambler, and Polarization Analyzers. Contact Information: Optellios, Inc., 250 Phillips Blvd., Suite 255, Ewing, NJ 08618, Phone: (609) 671-9800, FAX: (609) 671-9801, Toll Free: (866) 215-6608, Information: info@optellios.com

Media Cybernetics, the image informatics solutions provider has just announced a new partnership with the Smithsonian Institution's Center for Materials Research and Education.

IQbase, the image database program from Media Cybernetics has recently earned IBM's TotalStorage Proven Status. With IBM TotalStorage Proven status, new IQbase customers can expect smooth and reliable implementations of the two companies' platforms. Contact: Kathy Hrach, www.mediacy.com , 8484 Georgia Ave. Silver Spring, MD 20910, Phone: 301-495-3305 ext. 260 Fax: 301-495-5964 khrach@medi.

INDUSTRY NEWS

nPoint, Inc. announces the successful closure of its second round of funding. The private equity round was comprised of investments from angel investors in Madison and throughout the state of Wisconsin. nPoint possesses technologies to produce probes and devices used to image, measure, and move objects at the sub-molecular level. These nanopositioning devices are critical for a range of research, manufacturing, and test applications in the semiconductor, data storage, biotechnology, and nanotechnology industries. The National Science Foundation says that the nanotech industry is expected to approach \$1 trillion over the next decade. nPoint's ultra-precision positioners and motion controllers are key components of larger instrumentation, such as critical-dimension measuring tools, atomic force microscopes, ultra-precision machine tools, and advanced-imaging devices for biological research. Nanopositioning and control enables scientific interest in the infinitesimal and industrial fabrication of new electronic components and drugs. Contact John Biondi, 609 204 8751, www.npoint.com

Pacific Nanotechnology, Inc. has developed critical atomic force microscopy applications for the nanotribology (lubrication at the molecular level) field. In the semiconductor and data storage industries, tribological studies help optimize polishing processes and lubrication of data storage substrates. Many other industrial processes are beginning to require a detailed understating of tribology and lubrication at the nanometer level. Development of lubricants in the automobile industry depends on the adhesion of monomolecular layers to a materials surface. The AFM can be routinely used on all types of materials including ceramics, metals, polymers, semiconductors, magnetic and optical surfaces, and biomaterials. AFM investigations are usually made in ambient air, although it is also possible to make AFM studies in a vacuum or liquid environment. A technical applications note, "Atomic Force Microscopy for NanoTribology Applications," is available in PDF format at www.pacificnanotech.com/apps/tribology.pdf. Contact lara@technicalmarketing.com. Contact: Lara Torgesen+1-408-737-0285, or lara@technicalmarketing.com or Rhoda Becker of Pacific Nanotechnology, +1-714-258-0190, or rhoda@pacificnanotech.com.

LW Scientifics' Revelation III, is a dual binocular head, perfect for teaching or training, allows two technicians to view specimens simultaneously. Complete with 10X/18 wide field eyepieces and a variable halogen light source, this professional scope is ideal for universities and medical schools where rigorous hands-on learning occurs. For more information, log on to: www.lwscientific.com or write: LW Scientific, 4727-G North Royal Atlanta Drive, Tucker, Ga. 30084, 1-800-726-7345.

JEOL USA Launches a New Website that provides helpful tutorials on scanning electron microscopes, mass spectrometry, and nuclear magnetic resonance spectrometry. The site includes an updated Parts Online link to more than 100 different types of specimen holders JEOL offers for its SEMs. In addition to specifications and a brief overview of JEOL SEMs, TEMs, SPMs, analytical instruments, and semiconductor equipment, the site features Frequently Asked Questions about microscopy, galleries of images and presentations, and downloadable Delta software for NMR spectrometers. One can download numerous applications notes on mass spectrometry, such as identification of replication protein, analysis of explosives, and automated exact mass measurements. Visit our web site at: http://www.jeol.com

Molecular Imaging, Corp. announces PicoMAPS™, a Motorized Atomic Force Microscope (AFM) Precision Stage designed for surface characterization of large samples. PicoMAPS delivers fast, accurate positioning for imaging large specimens at atomic scale using Molecular Imaging's PicoSPM II™ or PicoLE™ microscopes. It allows investigators to precisely locate and identify an event and automatically re-position the sample to the area of interest. The PicoMAPS will allow investigators to image an area up to 200 mm in size. The PicoMAPS is very flat and provides accurate AFM imaging capability along with high-speed displacement over the entire sample plate. The automated tip approach feature prevents damage to delicate sample structures. A motorized optical zoom and focus are designed for automatic pre-approach between the SPM tip and the sample. The top-down design makes studying samples with varying heights easy. Additional information about Molecular Imaging available at: (http://www.molec.com)

