

IndustryNews

Cryo-SEM Systems Configured for the Application



Gatan's ALTO 1000 is a cryo-SEM that offers exactly the correct configuration of cryo-system for the user's specific applications and requirements. Five versions of ALTO 1000 are available, and the system's modularity and range of accessories means

that it can be both pre-configured and upgraded if research requirements change. The ALTO 1000 cryo-system has been designed to ensure maximum ease of use. Illumination and visibility during sample transfer are excellent, and the small volume of the preparation chamber ensures a quick pump-down.

Gatan, Inc.
www.gatan.com

EcoMet® Pro Touch-Screen Control Grinder-Polishers



Buehler's new EcoMet® Pro product family of grinder-polishers utilizes state-of-the-art color touch-screen controls. The innovative GUI (Graphical User Interface) provides information exchange and communication between the user and the machine's electromechanical system. The GUI has been designed to provide an intuitive, easy-to-use control interface for all

levels of operators and users. Additional capabilities include z-axis material removal and PriMet Satellite programmability for controlled dispensing of polishing suspensions.

Buehler, Ltd.
www.buehler.com

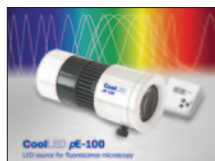
Olympus Offers cell[^]TIRF™ Microscope Illuminator



The Olympus cell[^]TIRF™ illuminator offers four motorized channels for simultaneous image capture, control of TIRF parameters, and instant setting and confirmation of the precise TIRF angle. The system allows easy transition back and forth to widefield fluorescence and a sleek, space-saving ergonomic design. The new system has four individually controlled motorized laser inputs for TIRF imaging. With the cell[^]TIRF system, each laser wavelength is optimally focused, and each angle is individually set, allowing different wavelengths to have the same penetration depth.

Olympus America Scientific Equipment Group
www.olympusamerica.com/TIRF

pE-100 Fluorescence LED Source



CoolLED is pleased to announce the launch of the pE-100 fluorescence LED source. This economical LED unit offers instant on/off and 0–100% intensity control. The pE-100 can be used on all microscopes with an external light source port for epi-fluorescent or transmitted light applications. Users can select their desired wavelength from over 20 different LED wavelengths offered by CoolLED. An optional cable can be supplied to accept an external TTL trigger for automation.

CoolLED
www.ccooled.com

Diatome Cryo-Immuno Diamond Knife

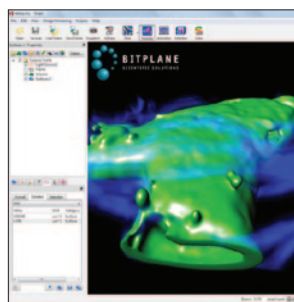


Diatome introduces the first cryo diamond knife with a diamond plateau. The Cryo-Immuno knife delivers cryosections from ultra-thin to semi-thin with ease. The diamond platform guarantees gentle section collection. The knife is available in a 35-degree angle so compression is minimized. This knife offers a considerable reduction of structural damage in tissues and cells simply by having the sections picked up

directly from the diamond plateau with a loop and sucrose/methyl cellulose droplet.

Diatome U.S.
www.emsdiasum.com

3D and 4D Image Visualization and Analysis



Bitplane specializes in 3D and 4D microscopy image visualization and analysis. Users can choose from seven extremely powerful, easy-to-use software modules that run on 32-bit and 64-bit Windows PC and Macintosh systems. Users can visualize, quantify, and track objects over time, analyze neurons, analyze co-localization, perform deconvolution, and align images.

BITPLANE, INC.
www.bitplane.com

X-Cite Optical Power Measurement System



EXFO's X-Cite XR2100 Power Meter and the X-Cite XP750 Objective Plane Power Sensor were designed specifically for measuring optical power at the specimen level to enable consistent and repeatable illumination throughout experiments. The XP750 fits on the microscope stage and offers the versatility of measuring output from an X-Cite illuminator or any other epi-fluorescence light source, including HBO/mercury, metal halide or xenon lamps, lasers, and LEDs. Power sensitivity may be at levels from 5 μ W to 500 mW and at wavelengths between 320 nm and 750 nm.

EXFO Life Sciences and Industrial Division
www.EXFO-XCite.com

miniVue Camera Adds Viewing Screen to Any Microscope

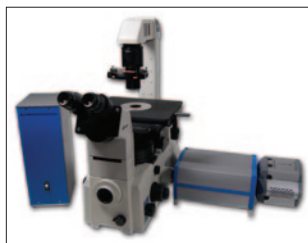


This all-in-one digital color camera simplifies applications and reduces clutter by eliminating the need for a workbench PC or monitor. Featuring a 3.1-megapixel CMOS camera and two-inch LCD screen, this unit attaches to any microscope trinocular head with

C-mount threading. Images on the high-resolution screen can be captured instantly with an included SD memory card and transferred to a computer or a printer via USB interface.

Aven, Inc.
www.aveninc.com

Hyperspectral Imaging Systems now have μ -Manager

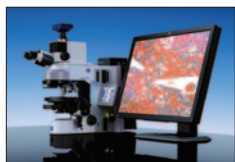


μ -Manager is a free, open-source application software platform for imaging and control of automated microscopes on multiple operating systems (Windows, Mac, and Linux) developed by the Vale Laboratory at UCSF. Bundled with ImageJ from the NIH, μ -Manager offers a flexible and powerful

image capture and processing package at no cost to the user. The HSi-300 and HSi-400 are currently integrated with the Andor iXon EMCCD family of scientific cameras and soon will be integrated with Hamamatsu and Photometrics cameras.

Optronic Laboratories LLC
www.olinet.com

Examining Living Specimens by Optical Sectioning



The VivaTome for fluorescence microscopes from Carl Zeiss is an optimal tool for developmental and cell biologists to examine the dynamics of living specimens without extensive prior knowledge of optical sectioning. VivaTome offers outstanding ease of use and excellent results. It is designed for applications where temporal resolution is a priority. This system provides clear, easy-to-interpret, and quantifiable results for biological specimens regardless of whether it is a cell structure, a tissue section, or a living organism.

CarlZeiss SMT, Inc
www.smt.zeiss.com

Motion Control and Microscope Automation



Applied Scientific Instrumentation showed their full line of submicron motion control and microscope automation products at the 2009 ASCB meeting, including closed-loop DC servo motor XY stages, piezo-Z stages, motorized Z drives, video and laser-based focusing systems, video microscopes, high-speed filter wheels, microinjectors, and a wide range of other devices. Of particular interest was their CRIFF unit, a laser-based feedback system for maintaining submicron focusing for days, and piezo-Z stages for fast and ultra-precise Z-axis focusing with nanometer resolution.

Applied Scientific Instrumentation
www.ASIimaging.com

Laboratory Applications Made Easy with UV Magnifier Lamp



The Spectroline® Q-Series UV magnifier comes in twelve models with different combinations of long-wave UV, short-wave UV, and white light enable lab technicians to select the right lamp for their particular application. Q-Series lamps come with one, two, or four long-wave UV tubes, and most models also feature either white-light or short-wave UV tubes. The high-resolution magnifier lens provides three-power magnification at an 8-inch (20 cm) focal length.

Spectronics Corporation
www.spectroline.com

JAI Introduces New 3CCD Progressive Scan Color Cameras



JAI recently announced the AT-140CL and the AT-200CL, 3CCD color camera series. The new 3-by-1.4-megapixel and 3-by-2-megapixel cameras draw upon JAI's expertise in prism-block technology to provide a larger sensor format and higher

resolution than previously available 3CCD RGB models. The CCDs are affixed to a newly developed prism block that splits the incoming light into red, green, and blue color channels. JAI's patented alignment process ensures the three sensors are aligned to within 1/4-pixel accuracy providing pixel-precise color values.

JAI, Inc
www.jai.com

TMC's STACIS® Family of Floor Vibration Solutions

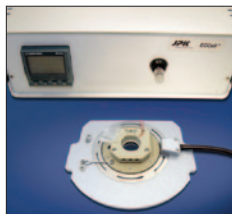


TMC has continually expanded its STACIS product line to solve specific vibration problems caused by ambient building

floor vibrations present in semiconductor manufacturing and other precision processes. In addition to the industry-standard STACIS® 2100, recent introductions to the STACIS product family include the STACIS® SEM-Base™ floor platform for scanning electron microscopes (SEMs) and STACIS® STAGE-Base™ frame-mountable, extended stroke active piezoelectric vibration cancellation system.

Technical Manufacturing Corporation
www.techmfg.com/portals/stacis_portal.htm

Electrochemistry Experiments with the NanoWizard AFM



Electrochemical experiments study redox reactions of substances at a solid-liquid interface. With atomic force microscopy, high-resolution images can be obtained in liquid as the electrochemical reaction progresses. The new JPK ECCell™ enables simultaneous AFM and electrochemistry with full environmental control. Uniquely,

the cell enables simultaneous fluorescence experiments to be carried out when the JPK NanoWizard® AFM is operated on inverted optical microscopes. The ECCell™ is compatible with a wide range of opaque and transparent samples.

JPK Instruments
www.jpk.com

Online Lens Selection Tool



Navitar's first-generation Optical Wizard® quickly established a place on the favorites list of engineers, end-users, and OEMs as the resource tool to use when needing a lens or complete lens system for machine vision or electronic imaging applications. The new

Optical Wizard® 2.0 expands on the existing functionality and offers a more appealing and streamlined look. The user-friendly interface and step-by-step process simplify the lens selection process and offers users 24/7 optical vision support and solutions.

Navitar, Inc.
www.navitar.com