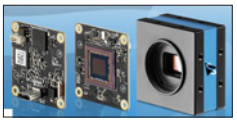
ProductNews

New 3 and 5 MP Board-Level Cameras



Sixteen new cameras have been added to The Imaging Source's USB 3.1 family. The cameras, available as color and monochrome variants, feature Sony's latest Pregius global-shutter CMOS sensors. These high-performance, back-illuminated sensors are extremely sensitive and outperform their CCD predecessors. The full-feature IMX 250 and IMX252 sensors deliver 75 fps (max.) and 119 fps (max.), with the cost-optimized IMX264/IMX265 sensors achieving 38 fps (max.) and 60 (max.) fps respectively.

The Imaging Source
www.theimagingsource.com

TMC Introduces CleanBench Aktiv™ Lab Table with Everstill™ Active Vibration Cancelation

TMC introduced CleanBench Aktiv™ lab table, providing advanced floor vibration control for laboratory workstations. Designed to isolate ultraprecision instruments from building floor vibration down to below 1 Hz, the CleanBench Aktiv lab table is ideal for optical microscopes, scanning probe microscopes, interferometers, and other surface metrology instruments. In the especially critical 1–3 Hz range, the Aktiv table provides vibration attenuation improvement up to a factor of 42 over air isolation tables.

TMC Vibration Control
www.techmfg.com

Bruker Introduces Next-Generation Multiphoton Microscope for Optogenetics

Bruker announced the release of the next-generation multiphoton, all-optical stimulation and simultaneous imaging platform for neurobiology applications. The Ultima 2Pplus features the best commercially available combination of advanced photostimulation experiments, including holographic stimulation, combined with simultaneous wide-field, enhanced-sensitivity imaging. In addition, the new Ultima 2Pplus anticipates future techniques by offering longer-wavelength 3-photon imaging (up to 1700 nm) for looking deep into living tissue, and an extended clearance stage designed for large-animal imaging.

Bruker Nano Surfaces Division
www.bruker.com/ultima

Princeton Instruments' New SpectraPro® HRS-750 Imaging Spectrograph

Princeton Instruments introduced the SpectraPro HRS-750, a new 750 mm focal length spectrograph and scanning monochromator that features an astigmatism-corrected optical design, a mechanical scanning range of 0 to 1500 nm, and exceptional resolution of 0.05 nm or better. This versatile instrument is the latest addition to Princeton Instruments' popular SpectraPro HRS series of spectrographs and monochromators, which also includes the SpectraPro HRS-300 and the SpectraPro HRS-500.

Princeton Instruments
www.princetoninstruments.com

pco.edge 4.2 bi Camera

Unique technology comes from evolution, combining existing and new technology. The pco.edge series combines its attributes with modern back-illuminated sensor technology, resulting in the pco.edge 4.2 bi. The adjustable cooling system allows the use of air or water to cool the sensor down to −25 °C. At this temperature, dark current is reduced to 0.2 e-/pixel/s. High-quality images with quantum efficiency up to 95% are guaranteed.

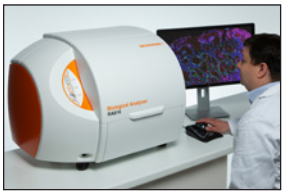
PCO-TECH Inc.
www.pco-tech.com

CleanAire II Ductless Hoods Available in 24″, 30″, 35″, and 47″ Models

CleanAire II Ductless Hoods are designed to meet DH I requirements as defined by SEFA 9. This hood features a built-in carbon filtration system to adsorb non-toxic fumes and odors. The hood is equipped with an integral blower, vapor proof light, fan, and light switches. The hood superstructure is constructed of chemical- and flame-resistant, non-metallic, no-rust composite resin with a molded one piece seamless interior fume chamber.

HEMCO Corporation
www.hemcocorp.com/caii.html

Renishaw's New RA816 Biological Analyser



The Renishaw RA816 Biological Analyser is a compact benchtop Raman imaging system. This easy-to-use instrument enables the rapid collection of detailed information from a range of biological samples, including tissue and biofluids. The RA816 Biological Analyser rapidly obtains detailed information on the distribution and amount of biochemical species within biological samples, including tissue biopsies, tissue sections, and biofluids. It brings together the biochemical analysis power of Raman spectroscopy and advanced optical and spectroscopic imaging technologies.

Renishaw plc
www.renishaw.com/raman

Tomocube Adds 3D Fluorescence Imaging to Holotomography Microscopy

The HT-2 from Tomocube is the first microscope to combine both holotomography and 3D fluorescence imaging in one unit. Capable of simultaneously capturing high-resolution 3D optical diffraction tomography and 3D fluorescence images, the new microscope enables long-term tracking of specific targets in live cells while minimizing stress. The capability to easily deliver holotomography and fluorescence correlative analysis in 2D, 3D, and 4D will enable researchers and clinicians to better understand, diagnose, and treat disease.

Tomocube, Inc.
www.tomocube.com

Bruker Launches New Dimension XR Family of Scanning Probe Microscopes

Bruker announced the release of the Dimension XR™ family of scanning probe microscopes. These new systems incorporate major AFM innovations, including Bruker's DataCube nanoelectrical modes, AFM-SECM for energy research, and the new AFM-nDMA mode, which correlates polymer nanomechanics to bulk dynamic mechanical analysis. Building on two of the world's most utilized AFM platforms in scientific publications, the Icon® and FastScan®, Dimension XR SPMs are available in three configurations optimized for nanomechanics, nanoelectrical, and nanoelectrochemical applications.

Bruker Nano Surfaces Division
www.bruker.com/DimensionXR

New Livecyte 2

Livecyte 2 was introduced at the 2018 ASCB conference in San Diego and scheduled for launch in Q1, 2019. Livecyte revolutionized live cell imaging, as the first commercially available instrument to exploit ptychographic phase imaging to generate quantitative, high-contrast images, without the need for perturbing labels. This latest version, Livecyte 2, delivers both hardware and software improvements, with greater versatility to monitor and analyze cell behavior at the individual cell level, allowing users to automatically follow thousands of cells in plates up to 96 well format.

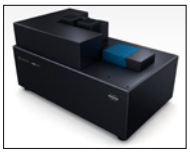
Phase Focus Limited
www.phasefocus.com

JAI's latest Spark Series Camera Provides 12.4 Megapixels over USB3 Vision interface

JAI has introduced the SP-12401-USB, a new 12.4-megapixel camera in its Spark Series of high-resolution area scan cameras. Two models are offered: a monochrome model (SP-12401M-USB) and a color model (SP-12401C-USB). Both models are built around the Sony Pregius™ IMX304 CMOS imager, which features 3.45-micron pixels and a dark noise rating of less than 2.5 electrons for excellent image quality even under low-light conditions.

JAI Inc.
www.jai.com

Bruker Introduces Advanced Illumination for Next-Generation Lattice Light-Sheet Microscopy



Bruker announced the release of the Luxendo InVi SPIM AIM next-generation lattice light-sheet microscope, which features an advanced illumination module for lowest phototoxicity light-sheet fluorescence microscopy of live samples. The new module enables the user to interactively customize the light-sheet shape to tailor the system to a particular specimen's requirements. A variety of illumination patterns, including single- or multiple-variable Bessel beams, lattice light sheets, and structured illumination, provide a much greater range of single-instrument research possibilities.

Bruker Nano Surfaces Division
http://luxendo.eu

Vented Hood Table Top Workstation Model 24000

Typical uses include histology, microprocessor, venting for hot plates, microscope stations, student workstations, sample weighing stations, and handling pharmaceuticals. Constructed of chemical-resistant, lightweight advanced composites, it can be easily moved as procedures or workflow change. Dimensions are 24″ wide × 15″ deep × 24″ high. A molded chemical-resistant work surface is recessed to contain spillage, and a three-inch diameter outlet collar is provided for duct connection.

Hemco Corp
www.HEMCOcorp.com/ductless.html

Motorized Miniature Translation Stage Newly Released by PI

The L-408 linear stage strikes a good balance of load capacity, precision, and low cost. It has applications in research and industry including optics, bio-tech, and assembly of miniature components and photonics instrumentation. Its new compact X-axis linear stage provides precise motion and reliability with anti-creep crossed roller bearings. Driven by a high-resolution leadscrew with 0.5 mm pitch, minimum incremental motion of 0.1 microns (100 nm) is achieved over a travel range of 1 inch (25 mm).

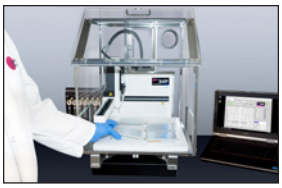
PI (Physik Instrumente) L.P
www.pi-usa.us

EMCRAFTS SEM Now Available

Electron Optics Instruments announces that it will now serve as the sole U.S. distributor of EMCRAFTS scanning electron microscopes, providing new SEMs and introducing their new desktop SEM the "Cube II." EMCRAFTS serves as a leader in the electronics field, building and servicing SEMs since the late eighties. They have experienced exponential growth in the way technology has grown and advanced to optimize the efficiency and accuracy of electronics from the clarity of image to the physical device diminishing in size.

Electron Optics Instruments
www.electronopticsinstruments.com

New Features for EM Specimen Prep with mPrep™ Automated Processor



With new integrated fume hood and improved software, the mPrep™ ASP-1000 v4.0 is more convenient and easier to use. This all-in-one system for TEM and SEM sample preparation reduces specimen touches while providing fast, consistent results. Whether processing biological tissue, performing immunogold labeling, staining grids, or preparing samples for 3D EM imaging, the multifunctional mPrep ASP-1000 delivers accurate results.

Microscopy Innovations LLC
www.microscopyinnovations.com