### **ProductNews**

#### OL Series 730E Radiometer/Photometer



Gooch & Housego announces the release of the OL 730E Radiometer/Photometer. This newest model in the OL Series 730 line boasts a smaller footprint and reduced cost while providing similar research-grade precision and accuracy.

The OL 730E has an internal preamplifier and a sensitivity of  $1\times 10^{-14}$  amperes. It may be virtually controlled via a USB interface and boasts a response time as fast as 0.1 seconds and a full-scale range of  $2\times 10^{-10}$  to  $2\times 10^{-3}$  amperes.

Optronic Laboratories LLC www.goochandhousego.com/products/systemsu

## TILL Photonics Will Introduce "VoiceCoil," the Fastest Microscope z-drive in the Industry



TILL Photonics introduced its new microscope z-drive that combines the range of a stepper motor-driven coarse drive (22 mm) with piezo precision at exceptional speed. The VoiceCoil offers 20 nm pp accuracy at full range. A 10 ms settling time for a 2  $\mu$ m step allows z-stacks that

are only limited by camera speed. TILL's VoiceCoil z-drive works like a dynamic loudspeaker, where the coil moves the membrane of the speaker.

TILL Photonics—now FEI Company www.fei.com

## New 3-D Process Improves Form Accuracy of Diffractive Optics



Taylor Hobson and Precitech combined their expertise in precision optical measurement and developed a new process to measure, analyze, and correct for diffractive form errors in three dimensions. Precitech designs and manufactures ultra-precision machine tools for

turning, milling, and grinding. Our machines produce rotationally symmetric, asymmetric, freeform, and sculpted geometries. We achieve form tolerances in the sub-micron range and nanometer surface finishes when equipped with diamond tooling.

Precitech Nanoform www.precitech.com

#### Bruker Introduces Novel TERS-Ready AFM System

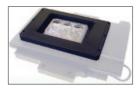


Bruker announced the Innova-IRIS, an integrated system for correlated atomic force microscopy and Raman spectroscopic imaging. Its combination of ultra-low closed-loop noise, no-drift mechanical stability, and wide-open optical access make the Innova® AFM a suitable platform for challenging

tip-enhanced raman spectroscopy (TERS) research. With hardware integration designed to accelerate a TERS setup, and an IRIS software module that offers automated mapping, the system transforms our AFM and Raman instruments into a proven TERS-enabled research platform.

Bruker Corporation www.bruker.com

#### Prior Scientific Introduces the NZ400 NanoScan Piezo Z Stage System



The NZ400 produces rapid Z sections and live-cell 3D images of specimens grown in well plates, large petri dishes, or mounted to glass slides. With the ability to create a stack of images using multiple objectives in the Z axis with

nanometer precision at a high speed (typically 50 frames per second), the NanoScan complements any 3D-imaging application.

Prior Scientific, Inc. www.prior.com

## FEI Introduces New Correlative Workflow Solution for Life Sciences



FEI announced a new correlative workflow solution for research scientists. FEI's MAPS (Modular Automated Processing System) provides a fast and efficient correlative workflow that enables researchers to see both large-scale context and small-scale detail in one overview. The first

application of the MAPS software is for cell biologists, where the system's capabilities improve the typical workflow in a cell biology microscopy laboratory.

FEI Company www.fei.com

## The CRAIC Technologies MP-2<sup>™</sup>: An Advanced Microscope Photometer for Cytophotometry



The CRAIC MP- $2^{\rm TM}$  is an all solid state system designed for photometry of microscopic samples in many fields, including biology and cytophotometry. This rugged instrument can measure the reflectance, transmittance, or fluorescence photometric values from microscopic sample areas rapidly and accurately. With its advanced design, the CRAIC MP- $2^{\rm TM}$ 

microscope photometer includes a sensitive detector with an effective operating range from the ultraviolet to the visible and into the near infrared region.

CRAIC Technologies, Inc. www.microspectra.com

# Olympus DP73<sup>®</sup> 14-Bit Microscope Camera Offers 17.28-Megapixel Image Capture, Higher Sensitivity, Exceptional Color, Ease of Use



The latest in the popular line of Olympus DP cameras, the Olympus DP73, delivers the highest combination of bit depth (14-bit) and pixel resolution (17.28 mb), for ultra-high resolution and exceptional color reproduction. A powerful 3-CCD mode enhances normal pixel-shifting optical technology so the camera delivers ultra-high-quality brightfield and widefield

fluorescence images without the interpolation artifacts seen in other Bayer mask cameras.

Olympus America Inc. www.olympusamerica.com/DP73

#### **CRAIC Technologies Introduces Kinetic** Microspectroscopy for the 20/20 PV™ **UV-visible-NIR Microspectrophotometer**



CRAIC Technologies announces the addition of kinetic spectroscopy capabilities to its flagship product: the 20/20 Perfect Vision<sup>TM</sup> UV-visible-NIR microspectrophotometer. With the kinetic spectroscopy package, this system is able to monitor the full range spectra of a

microscopic sample area over time and plot the results. Analysis of samples can be done by absorbance, reflectance, and even optical emission from the deep UV to far into the near infrared spectral regions.

CRAIC Technologies, Inc. www.microspectra.com

#### Introducing the HF6NTK Nikon Turret Upgrade Kit from Prior Scientific

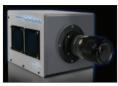


Prior Scientific's new HF6NTK Nikon Turret Upgrade Kit is for new or existing Nikon Model Ti-FLC-E motorized six-position turrets. The kit enables users to upgrade

their Nikon Model Ti-FLC-E turret so the unit can be controlled by the Prior ProScanTMIII controller, therefore making the system compatible with most major imaging software packages. The HF6NTK combined with the ProScanTMIII controller controls the Ti-FLC-E at speeds of up to 300 ms between adjacent cubes.

Prior Scientific, Inc. www.prior.com

#### PHOTONIS Introduces xSCELL Digital Scientific Camera with 1000 Frames per Second

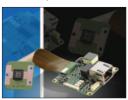


PHOTONIS USA has introduced its new xSCELL Digital Scientific Camera. xSCELL is designed to address the unique combination of high-speed imaging, low light levels, and low dark noise requirements, such as in fluorescence

imaging, spinning disk confocal microscopy, high-throughput screening, and gene sequencing. The xSCELL Digital Scientific Camera features 1000 fps at a resolution of 1024 × 1024, with readout noise less than 2 e-rms and quantum efficiency of 65 percent.

PHOTONIS USA, Inc. www.xscellcamera.com

#### Small MXG Board-Level Cameras Provide Flexibility in Cramped Installation Spaces



For applications where every cubic millimeter of space counts, Baumer has introduced MXG board-level cameras designed for individual integration into almost any small installation space. The cameras will be available in the first quarter of 2012. MXG cameras feature a

 $28 \times 28$  mm sensor board that is connected to the system circuit board via flexprint, allowing the user to individually adjust the cameras to environmental conditions.

Baumer Group www.baumerelectric.com/usa

#### **Andor Technology Introduces Performance** Enhancements to Neo sCMOS 'Interline Displacement' Technology



Andor Technology plc announced enhancements to the Neo camera, based on scientific CMOS (sCMOS) technology. Enhancements include faster frame rates, better image quality, hardware pixel binning, flexible region of interest capability (with single-pixel granularity), accurate

timestamp, and improved global (snapshot) exposure performance. Neo's 5.5-megapixel sCMOS sensor, with 6.5 µm pixel size, achieves an unprecedented 1-electron read noise at 30 fps. The dual-amplifier architecture offers a dynamic range of 30,000:1.

**Andor Technology** www.andor.com

#### Deep-Cooled, 640 x 512 InGaAs Camera



Princeton Instruments is pleased to introduce the PIoNIR:640, the world's first scientific-grade camera to use a deep-cooled InGaAs (indium gallium arsenide) focal plane array. The PIoNIR<sup>TM</sup> is specifically designed for use in challenging

low-light near infrared (NIR) or shortwave infrared (SWIR) imaging and spectroscopy applications that require high sensitivity from 0.9 µm to 1.7 µm. Available data acquisition software includes LightField<sup>TM</sup>, which affords complete control over all PIoNIR:640 hardware features via an intuitive user interface.

Princeton Instruments www.princetoninstruments.com

#### **NEW PELCO® CDMS Critical Dimensions Magnification Standard**



The economically priced, fully featured PELCO® CDMS calibration standards have been developed for easy, quick, and precise magnification calibration over a wide magnification range for SEM, FESEM, FIB, and CD-SEM. They are manufactured using

a conductive ultra-flat silicon substrate with precise Cr and Au/Cr deposition, providing excellent contrast in both SE and BSE imaging mode without charging. Features are easy to detect, and sizes smaller than 10 µm are nested for quick navigation.

Ted Pella, Inc. www.tedpella.com

#### afm+, a New AFM Platform from Anasys for **Analytical Measurements**



The Anasys Instruments afm+ offers three analytical capabilities. For Nanoscale Thermal Analysis (nano-TA), the afm+ allows the user to obtain transition temperatures on any local feature of a sample or to obtain a transition temperature map. Transition temperature

Microscopy TODAY

microscopy (TTM<sup>TM</sup>) is used to quantify and map thermal transitions in heterogeneous materials. Finally, the afm+ is fully upgradeable to perform nanoscale infrared spectroscopy for measuring and mapping chemical composition on the nanoscale.

**Anasys Instruments** www.anasysinstruments.com