#### **ProductNews**

#### New Environmental Scanner for the Cypher™ AFM the Highest-Resolution Fast-Scanning AFM



The Cypher Environmental Scanner is a modular and customizable platform with sample temperature control in a wide spectrum of environments. The Environmental Scanner is designed around a sealed cell that can sustain moderate positive pressures and uses chemically inert materials, such as fused silica

and FFKM, to provide a controlled environment while maintaining accurate and distortion-free imaging.

Assylum Research www.AsylumResearch.com

#### Bruker Introduces Proprietary IRIS TERS Probes



By enabling Tip-Enhanced Raman Spectroscopy (TERS), the new IRIS TERS Probe tips provide users a complete path to nondestructive, label-free chemical detection at the nano scale. As sharp, solid-metal cones, IRIS TERS Probes are designed to deliver the highest Raman enhancement, which

translates to highest sensitivity and spatial resolution. Together with Bruker's Innova-IRIS system, and third-party research Raman systems, IRIS TERS Probes can create the highest-performance, complete commercial TERS solution.

Bruker Corporation www.bruker.com

#### Unleash the Light Within: Olympus LV200 Microscope Sets Standard for Bright Luminescent Imaging of Live Cells



A benchtop commercial microscope system designed to acquire very low-light bioluminescence images has now been introduced in North America by Olympus America. The LV200 stand-alone microscope system is already being used to capture images of living cells and tissues by researchers in Europe and Japan. When used with some of the latest luminescence probes,

it can provide sub-second imaging with exceptional clarity and brilliance.

Olympus America Inc., Scientific Equipment Group www.olympusamerica.com

#### High Performance Artemis™ Raman Microscopectrometer from CRAIC Technologies



The CRAIC Artemis™ Raman microspectrometer, designed to be added to many different types of optical microscopes, offers very high sensitivity, high resolution, a broad spectral range, rapid sampling times, and allows for the measurement of Raman

spectra from microscopic samples or microscope sampling areas of large samples, such as semiconductors. The CRAIC Artemis<sup>TM</sup> can also be added to a CRAIC Technologies microspectrophotometer to add Raman to UV-visible-NIR absorbance, reflectance, and fluorescence microspectroscopy and imaging.

CRAIC Technologies, Inc. www.microspectra.com

## Ten New Key Laser Wavelengths for EdgeBasic™ Long Pass-Edge Filters



Semrock announces expanded wavelengths for the EdgeBasic<sup>TM</sup> family of long pass-edge filters with the addition of ten popular laser wavelengths to the nineteen currently offered. Our EdgeBasic filters provide a superb combination of exceptionally steep edge locations (from 325–1319 nm) with extended blocking at and below

the laser line, which is combined with consistent and extended high transmission pass bands.

Semrock, Inc., a Unit of IDEX Corporation www.semrock.com

### Andor Technology Offers Outstanding Image Quality and Versatility with the New Revolution WD



The new Revolution WD spinning disk confocal solution sets new standards in live cell confocal imaging. It offers spinning disk confocal to research fields, using sample

types previously unable to obtain maximum benefit from this live cell imaging technology. The addition of the WD to the Andor Revolution portfolio brings increased flexibility and breadth to Andor's solutions and more choice than ever to researchers imaging live samples.

Andor Technology www.andor.com

# Two Cameras in One: Olympus DP80<sup>®</sup> Dual CCD Microscope Camera Offers Both Color and Monochromeimaging in a Single Unit



Olympus offers a dual-sensor microscope camera that combines digital color technology

with the high sensitivity of monochrome imaging, switching quickly and easily between color and monochrome acquisition. The multifunctional Olympus DP80® dual-CCD digital camera offers a full 12.5 megapixels of color imaging for brightfield microscopy applications in one sensor, along with 14-bit, high-sensitivity, low-noise monochrome imaging designed for fluorescence imaging in a separate imaging sensor.

Olympus America Inc., Scientific Equipment Group www.olympusamerica.com/DP80

#### New PyLoN-IR, Controllerless, Liquid Nitrogen Cooled Spectroscopy Camera Has Fastest Spectral Rate and Reduced Dark Current



Princeton Instruments introduced the PyLoN®-IR, controllerless, cryogenically cooled CCD camera for spectroscopy. The PyLoN-IR is a linear InGaAs photodiode array camera and is designed for quantitative near-infrared and short-wavelength infrared applications that demand the highest possible sensitivity, including photoluminescence and Raman spectroscopy. PyLoN-IR replaces PI's OMA V InGaAs

detector linear photodiode array camera. PyLoN-IR's liquid nitrogen cooling greatly reduces dark current that occurs from thermal energy.

Princeton Instruments www.princetoninstruments.com

### FEI Announces New Helios NanoLab 450 F1 DualBeam for Semiconductor Failure Analysis



FEI announced its new Helios NanoLab<sup>TM</sup> 450 F1 DualBeam<sup>TM</sup> system designed to provide semiconductor manufacturers with faster, better images of their device architectures. A new STEM detector delivers improved contrast between materials, and the new flip stage and rotating nanomanipulator support advanced preparation techniques for complex device architectures, such as finFETs and

three-dimensional memory structures. Ultimately, faster, better answers cut development costs, accelerate process ramps, and get products to market sooner.

FEI Company www.fei.com/helios

### Linkam Scientific Instruments Reports on the Launch of Their New Cryo-Correlative Cooling Stage



Linkam has developed a stage for cryo-correlative light/electron microscopy imaging of cells at cryo temperatures. The correlative stage can hold samples at a stable –196°C enabling scientists to study TEM grid samples at 100× magnification, identifying areas of interest, and facilitating the

movement of these analyzed grids to the TEM. With automated liquid nitrogen control, heated optics, and a digital display, the unit is a compact and efficient system for this work.

Linkam Scientific Instruments www.linkam.co.uk

#### Molecular Devices Introduces Real-Time Super-Resolution System for MetaMorph Software



Molecular Devices<sup>®</sup> today announced the release of MetaMorph<sup>®</sup> Super-Resolution System with synchronized image acquisition and processing, enabling analysis of object details smaller than 250 nanometers in fixed and live cells. The new system features real-time image processing with

its GPU-accelerated hardware, expanding the capabilities of optical microscopy in research. It supports numerous scientific applications, from time-lapse studies to 3D investigations.

Molecular Devices, LLC www.moleculardevices.com

#### Desktop SEM Features EDS and 60,000× Imaging



The JEOL NeoScope combines  $10\times-60,000\times$  high-magnification imaging and comprehensive elemental analysis into a compact, lightweight desktop Scanning Electron Microscope. The all-new NeoScope offers

full-featured Energy-dispersive X-ray Spectroscopy with SDD technology for advanced analytical applications. This simple-to-use benchtop SEM features multi-touch screen operation, automated operating parameters, selectable low and high vacuum, and three selectable accelerating voltages. Ideal for QC and fast, easy analysis and imaging, the NeoScope is represented in the U.S. by Nikon Instruments.

JEOL USA, Inc. and NIKON Metrology Inc www.jeolusa.com and www.nikonmetrology, Inc.

### Bruker Releases NanoLens™, AFM Zoom Option for 3D Optical Microscopes



Bruker announced the release of the unique NanoLens<sup>TM</sup> Atomic Force Microscope (AFM) accessory for ContourGT<sup>®</sup> 3D optical microscopes. Designed for fast installation on a new five-position, fully automated turret, the compact NanoLens delivers unprecedented high-resolution imaging capabilities without sacrificing measurement speed in optical modes. With NanoLens, users

can perform nanometer-scale surface and material property analysis on the same system that provides the industry's most repeatable and versatile 3D optical microscopy measurements.

Bruker Corporation www.bruker.com

### FEI Unveils Broad Correlative Microscopy Solution Set for Cell Biologists



FEI announced a suite of solutions for correlative light and electron microscopy. New methods in correlative microscopy from FEI bring data from different imaging techniques together automatically in minutes, giving cell biologists the precise information they need, when they need it. Scientists believe that correlating information from the cellular down to the molecular level

will lead to breakthrough discoveries that improve their understanding and treatment of diseases, such as cancer, AIDS, and Parkinson's.

FEI Company www.fei.com/correlative-microscopy

### Aven Auto-Focus Mighty Scope Offers Aim-and-View User Ease



A newly upgraded Auto-Focus Mighty Scope from Aven, Inc. expands the magnification tool's focusing options for diverse inspection needs. This handheld instrument has a continuous focusing mode that lets operators keep a product or specimen in sharp view automatically, even as working distance and magnification change. This

is particularly useful for laboratory work and inspecting different areas of a sizable sample. A single-focus mode is available for situations when the Mighty Scope remains stationary.

Aven, Inc.
www.aventools.com/sales-info.html

### The Thermo Scientific™ Nicolet™ iS™50 FT-IR Spectrometer



The Thermo Scientific<sup>TM</sup> Nicolet<sup>TM</sup> iS<sup>TM</sup>50 FT-IR spectrometer is the first research-grade FT-IR with one-touch operation. This flexible system can be upgraded from a simple FT-IR bench to a fully automated multi-spectral range system that can

acquire spectra from the far-infrared to visible. Users can initiate ATR, Raman, TGA, and NIR modules at the touch of a button, performing multiple techniques without manually changing system components. Its software is designed to take the guesswork out of interpretation.

Thermo Fisher Scientific, Inc. http://www.thermoscientific.com/ecomm/servlet/productsdetail\_11152\_L10476\_82243\_14876864\_-1?ca=iS50