### **ProductNews**

#### Hand-Held zipScope Magnifies Up to 200x



Enlarged images and videos are captured conveniently with zipScope models introduced this year by Aven, Inc. The compact wireless and USB microscopes allow computer screen viewing and storage of inspection, medical, and research records. Each version has a 1/2-inch

color CMOS image sensor, 8 white LEDs, and anti-slip coating. The zipScopes feature automatic exposure and white balance and digital magnification up to 200× (hard-wired) or 120× (wireless).

Aven, Inc. www.aveninc.com.

#### JAI Adds New Interlaced Color Cameras



JAI today announced the release of color versions of its TM-77X and RM-67X lines of small interlaced CCD video cameras targeted primarily at defense and homeland security applications. The new camera models are

the TMC-773 and TMC-775-NTSC color cameras with 1/3-inch and 1/2-inch sensor formats, respectively-and the RMC-673 and RMC-675—the PAL versions of these cameras. The new color cameras provide high sensitivity and image quality with signal-to-noise ratios of better than 50 dB.

JAI Inc. www.jai.com

### Measurement Software Makes Aven's HD Camera an All-in-One Tool

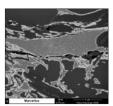


Precise, immediate measurement of parts is simplified with a new HD microscopy camera with built-in calibration software. The 1.3M color inspection camera has a VGA cable for a monitor connection. Point-and-click measurement data and images can be saved on a built-in SD card. It

records linear, circular, or angular measurements in millimeters or inches, as well as a radius or between parallel lines.

AVEN. Inc. www.aveninc.com

### FEI Unveils Novel Solution for Natural Gas Extraction in Unconventional Reservoirs



FEI announced a novel solution for analyzing the production characteristics and potential of unconventional gas reservoirs. The Helios NanoLab<sup>TM</sup> DualBeam<sup>TM</sup> system images kerogen, porosity, and microstructures in three dimensions (3D) with nanometerscale resolution. The data are essential to

determining the production potential of the reservoir, optimizing extraction procedures, and designing simulators of the nanoscale pore structure.

FEI, Inc. www.fei.com

### Agar Scientific Offers Broad Range of Substrates for SPM Use

Agar Scientific is pleased to announce their broad range of sample substrates for use by the SPM community. SPM researchers are often faced with the challenge of obtaining substrates for their work quickly and cost-effectively. Agar offers an easy, one-stop solution, offering a broad range of different materials to the needs of applications for all researchers. HOPG and mica plus precious metal substrates of gold, silver, and platinum are available.

Agar Scientific Limited www.agarscientific.com

### **New Mitutoyo USB Input Tool**



Mitutoyo America Corporation announces the availability of a new USB input device that streamlines the interfacing of Mitutoyo Digimatic® hand measurement tools with PCs. When connected to a PC's USB port, the USB Input Tool is automatically recognized as a keyboard device. No special software is required. A USB keyboard signal converter translates Digimatic display values

to keyboard signals. This enables the direct inputting of data into the cells of off-the-shelf spreadsheet software, such as Excel®.

Mitutoyo America Corporation www.mitutoyo.com

### JAI Adds GigE Vision Interfaces to its 3-CCD Color Cameras



JAI announced that it has begun shipping the AT-140GE and the AT-200GE, the latest in its industry-leading 3-CCD color camera series.

The company had previously launched versions of these cameras with Camera Link digital interfaces. The new models feature the same 1.4-megapixel and 2-megapixel resolution as the Camera Link models but come equipped with GigE Vision serial interfaces able to operate via standard Ethernet cabling and network hardware.

JAI. Inc. www.jai.com

### Buehler's AbrasiMatic 300 Abrasive Cutter Now Available with Optional X-Bed



Buehler's AbrasiMatic® 300 abrasive cutter now features the optional X-Bed for increased convenience when sectioning. The accompanying digital display tracks x-axis travel. The new X-Bed adjusts using a handle wheel on the front of the machine; operators can quickly and easily position/ reposition samples without unclamping them from

the table or vice. After making the first cut, operators can then set the digital display to zero and subsequent x-axis table movement is then displayed in 0.1-inch increments.

Buehler www.buehler.com

### rlQ<sup>™</sup>—The Smart Way to Determine the Refractive Index of Glass Trace Evidence



CRAIC Technologies, Inc. joins with Laboratory Imaging, s.r.o., to introduce rIQ<sup>TM</sup> (Refractive Index Quantification): the intelligent solution for the analysis of glass trace evidence. rIQ<sup>TM</sup> is the result of a collaboration between CRAIC Technologies and Laboratory Imaging. rIQ<sup>TM</sup> combines sophisticated image analysis software, advanced optical design, and electronics to enable criminalists in modern forensic laboratories

to measure the refractive index of multiple glass fragments simultaneously, quickly, and with the highest accuracy.

CRAIC Technologies, Inc www.microspectra.com

## Automated UV-visible-NIR Spectroscopy of Microscopic Features with the 20/20 PV™



CRAIC Technologies introduces the automated version of its 20/20 Perfect Vision<sup>TM</sup> UV-visible-NIR microspectrophotometer. This system is designed to be fully programmable with touchscreen controls so that it can automatically analyze microscopic samples with UV-visible-NIR spectroscopy and microscopy. Imaging and spectroscopic analysis of samples can be

done by absorbance, reflectance, and fluorescence from the deep UV to far into the near infrared.

CRAIC Technologies, Inc. www.microspectra.com

### JEOL Cold FEG TEM Enables "Flash & Go"TM

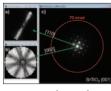


The JEOL ARM200F TEM with Cold Field Emission Gun offers higher brightness and narrower energy spread for ultra-high imaging resolution of 78 picometers with an energy resolution of better than 0.3 eV. Unique "Flash & Go"<sup>TM</sup> capability allows the user to resume observation and analysis just seconds after a flash. A newly developed

vacuum system evacuates the area around the Cold FEG source to the order of  $1 \times 10^{-9}$  Pa, resulting in unprecedented emission stability.

JEOL USA www.jeolusa.com

#### QED for DigitalMicrograph



HREM Research Inc. released QED (Quantitative Electron Diffraction) that was introduced at IMC17 in Rio, Brazil. QED is a patented procedure developed by Christoph Koch at the Max Planck-Institute for Metals Research, Stuttgart, Germany, to acquire

Large-Angle Rocking-Beam Electron Diffraction (LARBED) and/or Precession Electron Diffraction (PED) patterns by controlling the tilt angle and position of a collimated electron beam. Compensating the beam shift induced by aberrations of the illumination system enables QED to collect electron diffraction data from nano-sized samples.

HREM Research Inc www.hremresearch.com

# Innovative Radiometer/Photometer with Interchangeable Sensors



Spectronics Corporation has introduced the AccuMAX<sup>TM</sup> Series of digital radiometers/photometers, which provide accurate readouts for UV irradiance, visible illuminance, and luminance light readings.

The readout units are specially calibrated for use with a full line of interchangeable sensor detectors. When equipped with a sensor detector, the AccuMAX readout unit can satisfy nearly any laboratory or life science application, including fluorescent inspection and UV dosing. Single-wavelength sensor detectors are available in both standard range and extended range.

Spectronics Corporation www.spectroline.com

### EDAX Introduces Apollo XIT SDD Series for Transmission Electron Microscope



EDAX Inc. has released the Apollo Silicon Drift Detector (SDD) Series for TEM. The new series includes the Apollo XLT with a Super Ultra Thin Window (SUTW) and the Apollo XLTW, a windowless version. The Apollo XLT SDD Series

offers superior collection efficiency with a uniquely designed 30-mm<sup>2</sup> sensor for TEM applications. The windowless version further maximizes the collection efficiency and improves sensitivity up to 500% for low-energy X-rays.

EDAX, Inc. www.edax.com

### Navigation System for SEM and EPMA



JEOL offers a new point-and-shoot sample navigation system that makes finding precise areas of interest on a sample both fast and easy for SEM and EPMA users. The Sample Navigation System combines Stage Navigation Software with an external digital camera that eliminates the need for a dedicated port and can serve as a hub for multiple

instruments. The user simply records an image of the sample and then navigates to the precise stage location.

JEOL USA www.jeolusa.com

### Optical MEMS Scanning Micromirrors Smaller, Faster, More Robust and Less Power-Consuming Than Conventional Optical Scanning Systems

Lemoptix silicon-based, magnetically actuated MEMS micromirror technologies are best-in-class replacement solutions to traditional galvanometer and rotating mirrors, bringing outstanding performance and space reduction. The company has developed a unique expertise in the areas of the mechanical and electrical design of MEMS scanning mirrors, magnetic actuation optimization, and mirror optical properties. Lemoptix micromirrors, made of single-crystal silicon, demonstrate very high robustness and long-term stability.

Lemoptix in North America www.merictech.com/micromirrors.htm