

### **ProductNews**

### New Basler Video Recording Software Available for the Basler PowerPack for Microscopy



Camera manufacturer Basler is now offering a software solution to enhance the possibilities of microscopic imaging. Taking single images, recording videos, as well as image or video sequences, becomes very simple and intuitive. The recording software even offers camera

control features to improve image quality, to set up different options for recording, and to use hardware trigger signals. Basler Video Recording Software enables the capture of slow-motion videos.

Basler AG www.baslerweb.com/VideoRecordingSoftware

### New Precision Linear Motor Stage Family with Magnetic Direct Drive and Absolute Encoders



The new V-508 PIMag® family of high-dynamics linear motor stages consists of 18 models of compact linear positioning stages with high-force 3-phase linear motors and crossed-roller guides. The V-508 family is offered with 80 mm, 170 mm, and 250 mm travel range. Two motor options are available: ironless for the highest resolution and

smoothest motion, and iron-core for highest force, acceleration, and velocity up to 1m/sec.

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

# Scalable Platform for Imaging and Spectroscopic Analysis of Nano-Objects with SEM and Dual SEM/Focused Ion Beam Microscopes



HORIBA Scientific announced four new detectors in its CLUE Series for scanning electron microscopes (SEMs) and dual SEM/focused ion beam (FIB) microscopes. The CLUE (Cathodo-Luminescence Universal Extension) series is designed for use in materials science, mineralogy, geology, life sciences, and forensics applications.

They interface with any SEM, are fully automated, are modular for easy upgrade, and offer the widest spectral range available (UV-Vis-IR).

HORIBA Scientific, a Division of HORIBA Instruments, Inc. www.horiba.com/scientific/products/cathodoluminescence

## New Generation of ZEISS EVO Scanning Electron Microscope Introduced



ZEISS is now offering a new generation of its high-performance scanning electron microscope (SEM): the new instruments of the ZEISS EVO family come with a variety of improvements regarding usability, image quality, and seamless integration into multimodal workflows. With its comprehensive range of available options, the ZEISS EVO family can be tailored precisely to requirements in life sciences, material sciences, or routine industrial quality assurance.

Carl Zeiss Microscopy www.zeiss.com

#### Andor Adds Dragonfly 200 to its High-Speed Confocal Imaging Platform



Andor announced the launch of Dragonfly 200. Dragonfly integrates Andor's industry-leading cameras with patented illumination technologies and optimized optical design to deliver image quality characterized by low noise, wide dynamic range, high resolution, and exceptional sensitivity. Up to twenty times faster than conventional confocal microscopes,

Dragonfly is a highly productive imaging platform, with superior spatial and temporal resolution, often revealing previously undetected information in microscopic specimens.

Andor, an Oxford Instruments company www.andor.com/dragonfly

#### SEM Chamber Plasma Cleaning System



Rave Scientific introduced its new ibss GV10x plasma cleaning system to mitigate chamber and sample contamination. The GV10x Downstream Asher's ability to remove carbon contamination is superior to the traditional methods of contamination elimination. The GV10x is an inductively coupled design. This guarantees much less energy and heat on the sample surface during cleaning,

maintaining the true morphology of the sample. The GV10x design works at low pressure, enhancing the down streaming effect of radicals.

Rave Scientific

ravescientific.com/about-sample-preparation/plasma-cleaners

### New High-Resolution Addition to Basler's Microscopy Camera Portfolio



Basler's Microscopy ace 12.2 MP camera delivers up to 15 frames per second and features the latest rolling shutter CMOS sensor IMX226 from Sony's STARVIS line. This innovative sensor works with a new technology, using back side illuminated pixels, and offers very low dark noise of three

electrons, combined with a quantum efficiency of over 80%. The camera delivers detailed images even in low-light conditions.

Basler AG www.baslerweb.com/MicroscopyPowerPack

### The High-Performance Apollo II™ Raman Microspectrometer from CRAIC Technologies

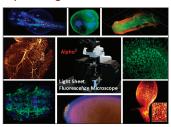


CRAIC Technologies introduced the new Apollo  $II^{TM}$  Raman microspectrometer, designed for routine research. The Apollo  $II^{TM}$  is reliable, robust, and powerful. It features high sensitivity, high resolution, a broad spectral range, and rapid sampling times. The Apollo  $II^{TM}$  can be added to

a CRAIC Technologies 20/30 PV<sup>TM</sup> microspectrophotometer to give it the ability to collect Raman microspectra<sup>TM</sup>, in addition to UV-visible-NIR absorbance, reflectance, and photoluminescence microspectroscopy and imaging.

CRAIC Technologies, Inc. www.microspectra.com

#### Alpha3 Light Sheet Fluorescence Microscope



Alpha3 is a new generation of light sheet microscopy systems providing optimum imaging performance with the ease of use and sample handling of a standard research microscope. The Alpha3 modular configuration allows for easy adaptation to experimental constraints and enables fast and reproducible

sample mounting with an innovative chamber and holders design. From *in vivo* imaging to clearing, this cost-effective light sheet microscopy system delivers high throughput 3D imaging from single cells to whole organisms.

PhaseView www.alphalightsheet.com

#### New FlowCam® Nano with Oil Immersion Technology



New instrumentation, featuring Nano-Flow  $^{TM}$  particle imaging, provides digital images of particles ranging in size from 300 nm to 10  $\mu$ m. Using patented, oil immersion technology for enhanced optical resolution, the new FlowCam Nano from Fluid Imaging Technologies automatically reveals protein agglomerates, silicon

oil droplets, glass shards, and other opaque, transparent, and translucent sub-visible particles with the high-resolution imagery needed for identification.

Fluid Imaging Technologies, Inc www.fluidimaging.com

#### DENSsolutions Heating Facilitates in situ TEM Studies

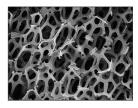


DENSsolutions specializes in building solutions that allow TEM microscopists to carry out dynamic studies *in situ*. Their latest heating Nano-Chip will help researchers achieve innovative results by providing a platform that

provides higher stability, better homogeneity, faster settling time, higher temperature for EDS, and easier sample loading. The new heating Nano-Chip lets you easily capture and correlate structural and chemical changes, at any temperature, no matter when and how fast they happen.

AXT Pty Ltd www.axt.com.au

#### New Field Emission Scanning Electron Microscope ZEISS GeminiSEM 450



With ZEISS GeminiSEM 450, users benefit from high-resolution, surface-sensitive imaging and an optical system that supports them in obtaining the best analytical results, especially when working with low voltages. High-throughput EBSD analysis and low-voltage EDS deliver excellent results due to ZEISS Gemini

450's ability to precisely and independently control spot size and beam current. The ZEISS GeminiSEM 450 is the ideal platform for the most demanding imaging and analytical analysis.

Carl Zeiss Microscopy www.zeiss.com

#### New Imaging Software ZEISS ZEN 2 Core



ZEISS ZEN 2 core is a powerful tool for image analysis and interactive control of microscopes. As a lab infrastructure solution, ZEISS ZEN 2 core is reflecting multi-modal workflows in connected lab environments with a single general user

interface (GUI). Correlative workflows connect light, digital, and electron microscopes for more meaningful analysis. With the help of database interfaces, one can use standardized workflows and exchange consistent analysis data between different microscopes, offline workstations, and laboratory sites.

Carl Zeiss AG www.zeiss.com

#### Save 90% of the Time when Doing Materials Analysis



The new DM6 M LIBS microscope for materials analysis from Leica Microsystems allows you to analyze the two main characteristics of a specimen in one work step: microstructure and composition. The microscope has an integrated laser spectroscopy function and delivers the chemical composition

of any microstructure that you see in the field of view within a second. Compared to typical electron microscopy analysis, this solution saves you up to 90% of the time.

Leica Microsystems GmbH www.leica-microsystems.com

#### Compact Spectrometers for Light Source Characterization



A series of compact smart spectrometers with integrated CCD linear array detectors from Spectrolight provide a turnkey solution to measuring the spectral behavior of light sources, analytical samples,

and tunable filters from the UV through the NIR (200 nm-1050 nm). All models provide both adjustable-slit and fiber-coupled input options and 2,048 element detectors. This delivers optical resolution from 0.3 nm to 7 nm (FWHM) at sampling speeds up to 1 kHz.

Spectrolight, Inc. www.spectrolightinc.com

#### GE Launches DeltaVision Ultra Microscopy System for Imaging and Analysis of Cell Biology



DeltaVision Ultra is a high-resolution widefield deconvolution microscope optimized for imaging and analysis of cellular and subcellular processes, up to 50 mm beyond the coverslip and down to 250 nm in size. DeltaVision Ultra offers scientists several important benefits, including a custom light path that maximizes light efficiency and reduces phototoxicity and photobleaching, an optimized stage that enables imaging of a variety of sample types, and the capacity for multi-well scanning.

GE Healthcare Life Sciences www.gelifesciences.com/deltavisionultra