

IndustryNews

RPMC Lasers Announces Inventory Strategy to Mitigate Customers' Supply Chain Issues



RPMC Lasers Inc. has developed a new supply chain and inventory strategy to help soften the blow from the continuing worldwide supply chain issues. With the increasing chaos and uncertainty in the shipping industry, RPMC is hoping to do its part to ensure that customers get the products they need by shortening lead times wherever possible.

RPMC
www.rpmclasers.com

Olympus Makes it Evident

OLYMPUS

EVIDENT

Olympus Corporation has announced the completion of the separation of its Scientific Solutions business to a wholly owned subsidiary, Evident Corporation.

Following the divestiture of its imaging business, this move further signifies the company's long-term strategy to cement its position as a major player in the med tech industry. The proposed split was first announced in June 2021. Evident, a newly established, wholly owned subsidiary headquartered in Japan, continues to operate independently under the Olympus umbrella.

Evident Corporation
www.evidentscientific.com/en

CytoViva Newly Designed Website



Since 2005, CytoViva has helped hundreds of research and industry laboratories solve critical problems at the nanoscale with its state-of-the-art hyperspectral microscope technology. Research applications supported by CytoViva range from nanotechnology to digital pathology. The website features CytoViva's enhanced darkfield optical and hyperspectral microscopy systems that are used in hundreds of labs around the world.

CytoViva
www.cytoviva.com

Inscoper scanFRAP for Live Cell Imaging



The Inscoper scanFRAP (fluorescence recovery after photobleaching) is a turnkey system developed for photomanipulation and optogenetics experiments in microscopy. Based on galvanometric mirror and optimized control technologies, this multi-purpose solution offers users capabilities for a wide range of *in vitro*, *ex vivo*, and *in vivo* applications and can be combined within multidimensional acquisition sequences in the same software environment.

Inscoper
www.inscoper.com/scanfrap

Nanosurf Changes in Leadership



In the last 13 years, under the leadership of CEO Urs Matter, Nanosurf has undergone a huge phase of development and growth. The Nanosurf Board decided the following changes to the management structure would be beneficial: as of June 1st, Dominik Ziegler will become the new CEO, and James Berwick will take on the role of COO. The newly created Chief Operating Officer role will focus heavily on the operational performance of the business, as the evolution of Nanosurf's growth-story continues.

Nanosurf
www.nanosurf.com/en

Olympus Discovery Center Inaugurated at the University of Maryland (UMD)



Housed in A. James Clark Hall, a new Olympus Discovery Center advanced microscopy facility fosters bioscience discovery. The inauguration of the Center at UMD equips its bioengineering scientists with crucial imaging tools to expand and progress their research. Providing a suite of powerful, high-performance microscopy systems, the new facility enables observation deep into living tissue to encourage ground-breaking study of cellular and subcellular events.

Evident Corporation
www.evidentscientific.com/en

Cryo-EM Tool Kits



MiTeGen has created a series of cryo-EM lab tool kits that are designed to provide labs with everything they need to start using cryo-EM with their samples. The cryo-EM tool kits range from the Basic Kit, which is designed for labs just starting out in

the preparation of their own samples, to the Complete Lab Tool Kit for larger research labs.

MiTeGen
www.mitegen.com/cryoem

Alluxa Introduces PVD Process



Alluxa's innovative, next-generation SIRRUSTM plasma physical vapor deposition (PVD) platform offers full spectral coverage from ultraviolet (200 nm) to infrared (14 μm). The proprietary process enables optical filters with the steepest edges, highest transmission, and deepest blocking available while maintaining high-performance, precision wavelength control, and extremely uniform coatings.

Alluxa
www.alluxa.com

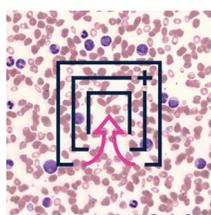
Navitar Upgrades Manufacturing Facility



Navitar, a global provider of industrial and life science imaging solutions, announced that they have made upgrades to their Rochester, New York manufacturing facility, increasing production capacity. This major building upgrade included the construction of a new shop housing a Haas VF4-SS super-speed vertical machining center and ST-20 Y-Axis lathe for in-house fabrication of key parts to help fulfill customer orders amid supply chain disruptions. Navitar has also expanded its MTF testing capabilities with a new OpTest® Lens Measurement System from Optikos.

Navitar
navitar.com

Scpio Labs Raises \$50M to Take a Deeper Look into Our Blood Cells



Scpio Labs, provider of the world's first Full-Field™ digital cell morphology solution, announced a \$50M investment for its end-to-end hardware and software platform for digitizing, quantifying, and analyzing hematology samples. The Series C round included OurCrowd, Aurum Ventures, Mizrahi-Tefahot Bank Invest, and Ilex Medical, with the participation of strategic investors operating in the field.

Scpio Labs
scpiolabs.com

Super-Resolution Module for All Microscopes



CrestOptics believes that super-resolution should be accessible for all scientists to progress their research. To this end, they have developed DeepSIM, the first super-resolution module that is compatible with any existing upright or inverted microscope in combination with spinning disk confocal or as a stand-alone unit. DeepSIM is as easy to use as a confocal, enabling scientists to access deep data from any type of samples.

CrestOptics
crestoptics.com

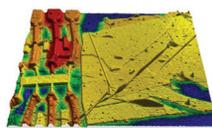
CEOS and DECTRIS for Excellent Energy Resolution



CEOS is now offering a DECTRIS ELA hybrid-pixel electron detector integrated in their CEFID energy filtering and imaging device. The CEOS CEFID is attractive for electron energy loss spectroscopy (EELS) applications; its small non-isochromaticity (NI), as well as its long-term stability and reliable reproducibility of optical alignments, guarantees excellent energy resolution. Specifically optimized for EELS, the DECTRIS ELA detector allows one to fully exploit CEFID's performance.

DECTRIS
www.dectris.com

HORIBA and Digital Surf Partner to Launch graphYX Software Range



HORIBA Scientific and Digital Surf, creator of the Mountains® software platform for image and surface analysis in microscopy and metrology, announced the release of graphYX, a new software range for users of HORIBA's Raman spectroscopy solutions, comprising two product levels, graphYX and graphYX-3D. graphYX is included in HORIBA's LabSpec 6 software suite, which allows users to highlight features by combining multimodal images from SEM, Raman, CL, AFM, NanoRaman, EDX, EBSD, FTIR, and other techniques.

Horiba and Digital Surf
www.HORIBA.com
www.digitalsurf.com

Microscopy Australia Announces New Modules and Updates for its Online Microscopy Training Site, MyScope



A new cryo-electron microscopy module covers cryo-TEM, sample preparation, single-particle analysis, cryo-electron tomography, sub-tomogram averaging, electron crystallography, cryo-SEM, and cryo-FIB. This module includes a selection of interactives, complementing the text and image content to help engage learners with important concepts. Also, an updated TEM simulator includes different types of samples with a sample-specific series of alignments and activities, such as diffraction, HRTEM, and STEM.

MyScope
myscope.training

ZEISS Opens the Microscopy Customer Center Bay Area



The ZEISS Innovation Center California in Dublin, CA (ZMCC BA) is a high-tech building designed to promote customer and employee collaboration. Unique to the industry, the ZMCC BA houses electron, light, and X-ray microscopes all in one location. It is supported by resident application experts in life science, materials research, and electronics. The ZEISS experts review customers' microscopy requirements and discuss their specific applications to provide the best solutions for their microscopy needs.

ZEISS
www.zeiss.com/zmcc-bay-area

Organized Storage and Transport for Cryo-EM Specimen Grids



Cryo Pucks G2 from Electron Microscopy Sciences are available individually or in a variety of Starter Sets and Advanced Sets. They are complemented by a full range of tools, equipment, and accessories, including barcode readers and dewars.

Electron Microscopy Sciences (EMS)
www.emsdiasum.com

ProductNews

New LEDs for Optical Microscopes



Bunton Instruments announced two new LED illuminators for optical microscopes. Expensive, obsolete mercury arc lamps can be replaced with bright, efficient, and economical blue and green LEDs that are made in the USA. An adapter for existing microscopes is included at no charge during the introduction period, which expires at the end of 2022. These LED lamps are about the same price as five (5) 100-watt mercury burners.

Bunton Instrument Company
www.buntgrp.com

Introducing ATIK's New Camera



This camera is the latest addition to ATIK's growing portfolio of CMOS imaging solutions and the second member of the Apx series. The 26-megapixel sensor is perfect for large-format imaging, breaking through the boundaries of what is traditionally expected from a CMOS sensor. ATIK Cameras also produces the ACIS Series, with a versatile range of sensors and cooling features perfect for long-exposure microscopy.

ATIK Cameras
www.atik-cameras.com

NoviSight Software Transforms 3D Cell Analysis



Olympus NoviSight 3D analysis software is for life science research, specifically cell analysis. NoviSight software can improve the entire experiment process, from compound selection to animal experimentation and clinical trials in humans. NoviSight technology combines 3D imaging with powerful algorithms to create software capable of analyzing a whole cell model in three dimensions. Used with Olympus confocal laser scanning microscopes, its cell analysis software provides images of the cell cluster down to the nuclei.

Evident Corporation
www.evidentscientific.com/en

Bruker's New Confocal Microscope



The Ultima Investigator Plus is the newest addition to the Ultima line of multiphoton microscopes for *in vivo* fluorescence imaging. With an expanded field-of-view, optimized optics for two- and three-photon imaging, and an enhanced close-coupled collection path, Investigator Plus enriches scientists' ability to image deep and see more within challenging specimens. New proprietary electronics and software allow for multi-region scanning for quick imaging between different targeted locations.

Bruker Fluorescence Microscopy
www.bruker.com/en/products-and-solutions/fluorescence-microscopy/multiphoton-microscopes

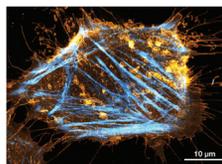
Two New FE-SEMs from Hitachi



Hitachi High-Tech, the pioneer of FE-SEM technology, is launching two new state-of-the-art instruments: the SU8600 UHR cold-field-emission and the SU8700 UHR thermal field-emission analytical scanning electron microscopes. The SU8600 and SU8700 technologies offer great flexibility, made possible by the highest resolution imaging, analytical performance, and automation, all on a common platform.

Hitachi High-Tech America
www.hitachi-hightech.com/us/products/science/microscopes

New STAR Membrane Dyes with a Special Linker Designed for Natural Behavior



abberior offers new membrane dyes. These probes make it possible to visualize the plasma membrane without disturbing the cell. abberior has developed a special linker that minimizes the impact of the label on the membrane to maintain its mobility and diffusivity. Also, it's a super-efficient probe to be used at ultra-low nanomolar concentrations.

abberior
abberior-labels.com/products/star/#popup8106

Universal Sample Holder Kit for Multi-User Environments



Designed for a multi-instrument environment, the EM-Tec U2 universal SEM sample holder and SEM stub adapter kit will hold a wide variety of SEM samples, up to a diameter of 42 mm. Samples can be flat, round, block, or oddly shaped. Included in this kit is a useful selection of SEM stub adapters, which enables using the kit on virtually any SEM. Holders are fully compatible with FEI/Philips, JEOL, Hitachi, Tescan, Zeiss/LEO, and other brands of SEMs.

Rave Scientific
ravescientific.com

Monarc CL Detector: Redefining What's Possible with SEM-Based Cathodoluminescence



Built upon a groundbreaking optical design, Monarc[®] dramatically boosts sensitivity and spectral resolution, empowering the most complete cathodoluminescence (CL) analysis to date with unique wavelength- and angle-resolved capabilities. Monarc CL detectors provide the fastest time to the best data, the easiest operation for all users, the most accurate correlation with other signals, and unique capabilities, including WARCL, ARCL, and polarization filtering.

Gatan/Ametek
www.gatan.com

Demonstration Hood



The HEMCO Demonstration Hood is ideal for classroom experiments and demonstrations because of its viewing visibility from all four sides. An instructor can perform a science demonstration while the class can gather around and observe safely. It can also be used as an individual student workstation or vented storage enclosure. A hinged viewing window or optional horizontal sliding glass panels allow for easy access and user safety. An integral exhaust

blower exhausts fumes and odors safely, and a vapor-proof light is factory-installed.

HEMCO Corp.
www.hemcocorp.com

XXL Sample Chamber for the UltraMicroscope Blaze



Sample size should not prevent a comprehensive 3D view of a complex biological system. The new XXL chamber is an upgrade for the UltraMicroscope Blaze Light Sheet Imaging System, providing the largest possible sample space available on the market. It enables imaging of cleared specimens as large as an entire adult mouse model, without any sectioning.

Miltenyi Biotec
www.miltenyibiotec.com

New Opportunities with the Agilent 5400/5420 and 5600LS



Concept Scientific Instruments (CSI) has developed technology to keep existing modes and add new advanced modes to AFMs. The Galaxy Dual

controller adds features to those commonly available on an existing AFM, creating new opportunities for AFM users. The controller improves AFM performance via intuitive software and new imaging modes. The controller is fully compatible with the Pico SPM (STM) Multimode 5100 and 5500 AFM bases, and the 5400, 5420, and 5600LS systems.

Concept Scientific Instruments (CSI)
www.csinstruments.eu

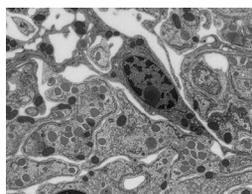
JEOL USA Unveils New E-Beam Metal Additive Manufacturing System



JEOL provides technology leadership in both electron microscopy and e-beam lithography with new Additive Manufacturing technology for 3D printing. The company has introduced a new PBF-style EBM system, the JAM-5200EBM, which significantly improves quality and manufacturing time to produce stronger and lighter parts for a variety of applications. Benefits include a cathode life of over 1,500 hours, a clean, helium-free environment, and JEOL's extensive service network.

JEOL USA
www.jeolusa.com

ZEISS Sense Backscattered Electron Detector



Scanning electron microscope (SEM) imaging can present challenges, especially for non-conductive biological samples. Rapid imaging with the desired resolution requires high electron doses and accelerating voltages, which can cause charging effects and sample damage that compromise image quality. The ZEISS Sense BSD combines high-resolution ultrastructural imaging with a new degree of efficiency and image quality, making TEM-like imaging possible with an SEM.

ZEISS
www.zeiss.com/microscopy

EDAX Introduces the Clarity Super EBSD Analysis System



EDAX has launched the Clarity Super EBSD Detector, the world's first and only commercially available EBSD detector, with unparalleled performance as low as 3 kV. This direct detection system is ideal

for beam-sensitive perovskite, ceramic, or semiconductor materials that are difficult to analyze using conventional EBSD systems.

EDAX
www.edax.com/clarity

World's Fastest 4K-UHD High-Speed Camera System



Photron USA, Inc. of San Diego introduced the Fastcam Nova R5-4K, the world's fastest 4K-UHD camera system. The Fastcam Nova R5-4K brings together unique CMOS image sensor technologies and extensive high-speed

digital imaging expertise to provide an ultra-high-resolution, high-speed camera with excellent light sensitivity and large internal memory, allowing it the flexibility to be used in a wide variety of applications.

Photron
www.photron.com

A New Benchmark in Microscopy



Electron Microscopy Sciences is excited to offer the Em1 Portable Microscope. Revolutionary in design, portability, and application, with a price that's accessible to everyone, the Em1 sets up in seconds for use in numerous industries and fields of study, from tropical disease diagnosis and forensic sciences, to laboratory or classroom settings.

Electron Microscopy Sciences (EMS)
www.emsdiasum.com/microscopy/products/digital/portable_microscope