

## IndustryNews

### Angstrom Scientific is New NenoVision Distributor



Angstrom Scientific Inc. will spearhead NenoVision's sales, marketing, and growth in the US market. Angstrom's experience in multiple SEM-related *in situ* correlative techniques and their experience in the US SEM marketplace over many years make

them an ideal partner. They are poised to make significant inroads into the correlative AFM/SEM market, which will provide unique analytical capabilities and has applications in many areas of materials, semiconductor, and biological markets.

Angstrom Scientific  
www.angstrom.us

### Covalent Metrology Expands its Capacity and Capabilities



Covalent Offers EELS and EFTEM Analysis with New JEM-F200 S/TEM from JEOL

Covalent Metrology, a leading North American analytical services provider, has significantly expanded its capacity and capabilities for scanning transmission electron microscopy (S/TEM). The company has completed installation of a cutting-edge JEOL JEM-F200 with a cold-field-emission gun (CFEG) source and Gatan imaging filter for electron energy loss spectroscopy (EELS)

and energy-filtered TEM (EFTEM). Companies working with semiconductors, batteries, and nanomaterials will benefit from the new services that can help design, optimize, and accelerate manufacturing processes.

Covalent Metrology  
covalentmetrology.com

### The LabSquad Offers Multiple Levels of Service



LabSquad, a division of Copia Scientific, offers multiple levels of support for several vendors including system inspection, periodic maintenance, and parts

replacement. They follow OEM procedures and will perform operational verification. LabSquad also offers annual service contracts and can provide wider coverage for systems from numerous vendors, saving time and travel expenses. Also, they offer depot repair for smaller instruments.

The LabSquad  
www.thelabsquad.com

### Synthon Installs TESCAN VEGA SEM for Drug Discovery and Development



A TESCAN VEGA scanning electron microscope (SEM) has been installed at Synthon, an international, science-centered pharmaceutical company that specializes in developing, manufacturing, and out-licensing complex high-quality generic and hybrid medicines.

Synthon will use the SEM for drug analysis at its R&D and manufacturing facility in the Czech Republic. The SEM features a low-vacuum mode equipped with a gaseous secondary electron detector (GSD) for pharmaceutical applications.

TESCAN  
www.tescan.com

### Pfeiffer Vacuum Opens New Leak Detection and Vacuum Technology Facility in Indianapolis



Pfeiffer Vacuum, provider of vacuum and leak detection solutions, has opened a new 40,000 square foot facility located at 4037 Guion Lane, Indianapolis. The new facility serves

North American customers in all technological applications related to leak detection and high-vacuum technology, focusing on semiconductor, medical device, consumer electronics, pharmaceutical, automotive, and industrial applications.

Pfeiffer Vacuum  
www.pfeiffer-vacuum.com/en

### CytoViva's Help through the Years

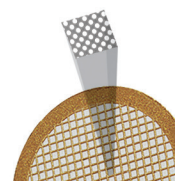


Since 2005, CytoViva has helped hundreds of research and industry laboratories solve critical problems at the nanoscale with its state-of-the-art hyperspectral microscope technology.

Research applications supported by CytoViva range from nanotechnology to digital pathology. CytoViva provides hyperspectral imaging solutions from the visible to near-infrared range, which are specifically designed to work with all modalities of optical microscopy. This includes CytoViva's patented enhanced darkfield microscope optics, fluorescence, and standard brightfield microscopy.

CytoViva  
www.cytoviva.com

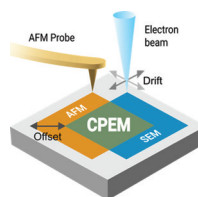
### EMS Acquires the C-flat Line of Products from Protochips



Electron Microscopy Sciences is pleased to announce the acquisition of the Holey Film TEM Grids line of products from Protochips, the industry-standard for cryo-EM and SPI, which includes C-flat™, Au-flat™, and CD-flat™ grids. Customers can expect a seamless transition.

Electron Microscopy Sciences (EMS)  
emsdiasum.com

### NenoVision Implements Artificial Intelligence into AFM-in-SEM Measurements



NenoVision has launched CPEM Plus, an extended software functionality employing artificial intelligence for automatized correlation of images acquired by the AFM-in-SEM LiteScope. It deals quickly and efficiently with habitual problems connected with AFM-in-SEM measurements, such as e-beam drift, or the

offset between the e-beam and the AFM tip. The CPEM Plus functionality results in an effective workflow, saving time on routine tasks related to manual image correlation.

NenoVision  
www.nenovision.com

## Vision Engineering Reinforces UK Manufacturing Base with Milturn Acquisition



Vision Engineering, a leading designer and manufacturer of high-quality visual instrumentation and supplier of machined components/sub-assembly services, has announced the acquisition of Milturn Precision Engineering of Hinckley, Leicestershire, a precision engineering specialist. The acquisition of Milturn fulfills a strategic objective to improve Vision Engineering's global position as a leading designer and manufacturer, by adding scale and capability to the company's existing UK and USA manufacturing base.

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Vision Engineering  
www.visioneng.com

## HÜBNER Photonics Expands into Ultrafast Lasers



HÜBNER Photonics, manufacturer of high-performance lasers for advanced imaging, detection, and analysis, proudly announces the expansion of its technology portfolio to include short-pulse femtosecond fiber lasers, with the recent acquisition of VALO Innovations GmbH, Hannover, Germany. The proprietary fiber laser technology of VALO Innovations delivers market-unique short-pulse performance with pulse lengths of <math><50\text{ fs}</math> and peak powers of >2 MW, being very attractive for applications in bioimaging, spectroscopy, and micro-machining.

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HÜBNER Photonics  
hubner-photonics.com

## Alpes Lasers SA



Frequency combs are laser devices that emit light in a wide spectrum consisting of equidistant peaks in frequency space. They are used in spectroscopy, lidar, and biomedical applications. Alpes Lasers, a major producer of frequency combs in the mid-infrared, launches a dissemination campaign on frequency combs at the website <https://qombina.eu>, a central repository of information on mid-infrared frequency combs.

Alpes Lasers SA  
www.alpeslasers.ch

## Higher-Power Femtosecond Fiber Lasers to Image Better, Deeper, and Faster



What is the best laser type for multiphoton microscopy? Multiphoton excitation requires high peak power pulses. Previously, wavelength-tunable Ti:Sapphire lasers dominated this area, using a conventional pulse regime, typically with a 100–150 femtosecond pulse duration, 80 MHz repetition rate, and watt level average power with wavelengths such as 800 nm, 920 nm, and 1040–1080 nm. Recently, femtosecond pulsed fiber lasers have become the optimal solution due to their relatively low fluence that limits damage to living samples.

RPMC Lasers Inc.  
www.rpmclasers.com

## Dr. Annette Rinck Appointed President



Leica Microsystems, a leading manufacturer of microscopes and scientific instruments, has announced the appointment of Dr. Annette Rinck as its President. Annette joins Leica from Honeywell, where she has spent the past seven years, most recently as General Manager of global brands and companies within the Building Management Systems division. Previously, Annette built her career in commercial portfolio management and marketing leadership roles at Eaton, Caterpillar, and BMW. She holds a Ph.D. in Applied Economics/Communication Science.

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Leica Microsystems  
www.leica-microsystems.com

## WITec Jubilee Celebrates 25 Years of Innovation



WITec GmbH marked a quarter-century since its founding with a party on Friday, July 1, 2022. The Ulm, Germany-based company hosted old friends and new colleagues for an evening of reflection, fellowship, and fun. The event, "WITec Jubilee – 25 Years in Focus," began with founders Joachim Koenen and Olaf Hollricher recounting the origin of the firm and its progression from a start-up to a globally recognized leader in Raman microscopy.

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WITec GmbH / Oxford Instruments  
raman.oxinst.com

## Super Optical International Announces Historic Sale of Company



Lyric Optical, d.b.a. Super Optical International, an industry-leading provider of optical equipment, including the FastGrind "All-In-One" Modified Lens Surfacing System, has announced the completion of a 100% sale of the company to Andy Hawes. This sale comes one year before Lyric Optical's 100th anniversary.

Super Optical  
superoptical.com

## Hitachi High-Tech "Sustainability 2030" Declaration



The Hitachi High-Tech Group has made a declaration to contribute to the realization of "a sustainable global environment," "healthy, safe, secure lives," and "sustained development of science and industry." The company stated that they will keep growing with their customers and partners by utilizing their Observation, Measurement, and Analysis systems, based on a sound management foundation, which enables diverse human resources to actively participate and thrive.

Hitachi High Technology  
www.hitachi-hightech.com

## ProductNews

### New Spatial Light Modulator Paves the Way for Better, Faster Photo-Stimulation and More



Meadowlark Optics has launched a new 1024×1024 high-speed Spatial Light Modulator (1K×1K SLM, for short). The product offers several key advancements, including increased user control over system timing, internal memory to eliminate latencies, and ultra-fast response times, combined with the phase stability required by the most demanding research and applications.

Meadowlark Optics  
www.meadowlark.com

### 21.5" Video Displays Ideal for Microscopy

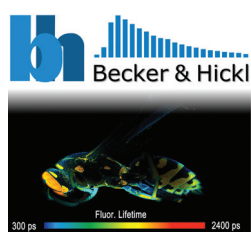


The new ZBVM-21.5 Series monitors and ZBMT-21.5 Series P-Cap touch screens from TRU-Vu Monitors are well-suited for microscopy applications. Both provide incredible image quality, enabling quick and accurate image diagnosis and decision-making. Both series feature sleek a Zero-Bezel enclosure with an all-glass

IP65 waterproof front face. They also feature digital video inputs, tabletop-based and rear VESA mount holes, built-in speakers, Auto Re-Start after power loss, and a 3-year warranty. All monitors are TAA- and NDAA-compliant.

TRU-Vu Monitors  
tru-vumonitors.com

### Becker & Hickl Fluorescence Light Microscopy



Becker & Hickl, known for highest precision in fluorescence lifetime microscopy, has now launched a new time-tagging module that solves several problems at once. It offers three detection channels, can handle photon rates of over 100 MHz, and still provides unsurpassed time stability while maintaining high-time resolution. This makes it well-suited for all kinds of FLIM, FRET, fluorescence correlation spectroscopy, and quantum system applications.

Becker & Hickl  
www.becker-hickl.com

### Dust Protection+: Upgrade of the Basler MED ace Camera



Basler has optimized the Dust Protection MED Feature Set of the MED ace camera series into Dust Protection+. Additional and stricter inspections of selected components for dust and other particles during camera assembly, and of the finished camera during final review, ensure even greater cleanliness resulting in higher image quality. Since the camera price remains stable, customers with special cleanliness standards benefit in two respects.

Basler AG  
www.baslerweb.com/medical

### Resonon's Hyperspectral Imagers

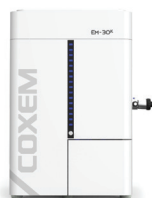


Resonon, a leader in hyperspectral imaging, has released the Pika IR-L and Pika IR-L+ hyperspectral imagers. They are smaller, nearly three times lighter, and boast improved spectral resolution compared to the current generation of NIR imagers, thereby enabling more precise, spatially resolved NIR spectroscopy.

more precise, spatially resolved NIR spectroscopy.

Resonon  
resonon.com

### COXEM Introduces the EM-30K Tabletop SEM



Coxem has announced their latest tabletop SEM, the EM-30K. It offers high-quality imaging at frame rates of up to 13 fps and the ability to image under variable vacuum conditions. It is the ideal tool for applications ranging from materials science and energy research to life sciences and biological imaging. It includes both secondary electron and 4-quadrant backscattered electron detectors. A built-in

digital camera aids in sample loading and navigation, while a large stage with motorized X, Y, and Z axes accommodates a wide range of samples.

COXEM  
www.coxem.com

### HEMCO C-Frame Tables



HEMCO's C-Frame laboratory benches are designed to support demonstration hoods, VSE enclosures, and lightweight laboratory equipment. They are available in sizes 30", 36", and 48" wide with a height of 36". Construction consists of 1"×2" 16-gauge rectangular tubing with welded construction and four casters. The white powder-coated finish provides protection

and resists chemicals, and the epoxy resin worksurface measures ¾" thick×24" deep.

HEMCO  
www.hemcocorp.com

### FLEX PRO™ from CRAIC Technologies



FLEX PRO™ is a multi-functional tool able to acquire micro-scale images and spectra from the deep UV to the NIR. Recently redesigned, it is capable of transmission, reflectance, fluorescence, Raman microspectroscopy, and a host of other applications. As such, FLEX PRO™ is a powerful addition to the laboratory.

CRAIC Technologies  
www.microspectra.com



## Bruker Offers High-Value Life Science, Materials Research, and Applied Market Solutions



Recent Bruker launches include: 1) the HYPERION II FT-IR / IR Laser Imaging Microscope, a flexible research platform, combining FT-IR microscopy with QCL IR laser imaging; 2) the TGA II FT-IR module that enables advanced gas analysis by hyphenation of thermogravimetry (TG) and FT-IR spectroscopy; and 3) PoN mass spectrometry for accelerated measurements without chromatography to bring the power of mass spectrometry (MS) to new food, beverage, forensics, industrial, security, environmental, and pharmaceutical applications.

Bruker  
www.bruker.com

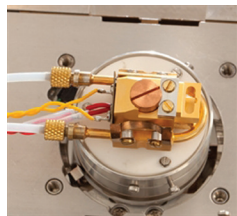
## See How to Add Raman Spectroscopy to Your Microscope



Expand research capabilities by adding spectroscopy to a microscope to perform micro and nano material characterization, all without compromising its imaging functionality, with standard microscopy spectroscopy (SMS) by HORIBA. SMS systems add techniques including photoluminescence, Raman, and time-correlated single photon counting (TCSPC) to any standard microscope. The SMS-Raman system adds Raman spectroscopy to any standard microscope, combining imaging with chemical specificity provided by Raman spectroscopy.

HORIBA  
www.horiba.com/scientific

## Quorum Technologies Delivers High-Quality Solutions for Cryo Sample Preparation



Quorum Technologies offers their new PP3010 cryoSEM preparation system for SEM, FE-SEM, and FIB-SEM. The new PP3006 CoolLok Cryo Transfer offers rapid transfer and cryo temperature observation of specimens in an SEM and FIB-SEM. The latest PP3005 SEMCool Non-Airlock Cooling System is for cryo applications where airlock exchange of a specimen into the microscope is not required.

Quorum Technologies  
www.quorumtech.com

## EMS's New Portable Microscope



EMS is now offering the world's most versatile portable microscope, the EM1. Revolutionary in design, portability, and application, with a price that's accessible, 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)  
emsdiasum.com

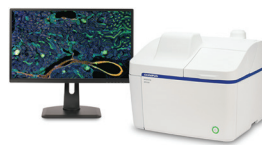
## Automated Biological Specimen Prep 5x–10x Faster



Microscopy Innovations has introduced next-generation automated biological specimen preparation with the mPrep ASP-2000™. In addition to walk-away convenience, one-touch sample handling, minimal reagent use, and reproducibility of results, the ASP-2000 uses thermal control for precise reagent temperature monitoring. The mPrep ASP reduces processing time, for example, kidney samples process in 45 minutes, with no reduction in quality. Accelerate TEM, SEM, 3DEM, and immunogold labeling sample prep.

Microscopy Innovations LLC  
www.microscopyinnovations.com

## Easily Acquire Expert-Quality Images with the APEXVIEW™ APX100 All-in-One Microscope



Built with renowned Olympus optics, intuitive software, powerful AI, and suite of smart features, the APX100 system combines the ease of use of an all-in-one microscope with publication-quality images to make life science research more efficient. Designed for labs and imaging core facilities, the microscope's small footprint, built-in anti-vibration mechanism, and light-shielded optics enable the system to be placed virtually anywhere, even in a brightly lit room.

Evident/Olympus  
www.olympus-ims.com/en/evident

## The SingleShot™ Objective System



The SingleShot™ Imaging System offers resolving power with a much larger field-of-view (FOV). Samples can be captured with fewer stitched images, saving time and money with more accurate data. Developed for semiconductor inspection, it provides extraordinary results for the medical community. The Single Shot system provides double the FOV of traditional microscopes, allowing imaging of a complete sample with half as many stitched images. The increased data flow results in a more efficient and effective process.

Navitar  
navitar.com

## Agilent BioTek Lionheart with WFOV Camera



Agilent BioTek Lionheart FX and Lionheart LX automated microscopes are compact systems for a broad range of imaging workflows. They offer up to 60x air, and 60x and 100x oil immersion magnification, with fluorescence, brightfield, color brightfield, and phase contrast channels for maximum application reach. The new wide field-of-view (WFOV) camera provides fast automated imaging in microplates and slides, enabling researchers to get the answers they need quickly.

Agilent BioTek  
www.agilent.com