

## IndustryNews

### Olympus Corporation Agrees on Transfer of Evident to Bain Capital



Olympus Corporation and Evident Corporation, a wholly owned subsidiary of Olympus, announced that Olympus concluded an agreement with Bain Capital Private Equity transferring all shares of Evident to Bain. This

move allows Olympus to strengthen its management base by allocating resources to medical research, with a focus on the endoscopic solutions and therapeutic solutions businesses. Olympus said that Bain Capital has a deep understanding of Evident's business value and growth potential.

Olympus Corporation  
[olympus-global.com/news/2022/nr02396.html](http://olympus-global.com/news/2022/nr02396.html)

### Thomas Scientific Acquires North Central Instruments



Thomas Scientific has finalized acquisition of the Twin Cities-based North Central Instruments (NCI), a leading regional provider of lab equipment and cleanroom supplies. This move marks the company's first foray into the Midwest and is a step

forward in their efforts to better compete with market leaders Thermo Fisher and VWR.

Thomas Scientific  
[ThomasSci.com](http://ThomasSci.com)

### Calibre Scientific Acquires Agar Scientific

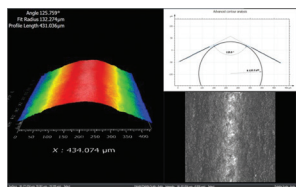


Calibre Scientific, a diversified global provider of life science reagents, tools, instruments, and other consumables for lab research, diagnostics, industrial, and biopharmaceutical communities, has acquired Agar Scientific. Agar Scientific, founded in 1978 by Alan Agar, specializes in electron microscopy consumables and accessories and provides

quality test specimens, TEM grids, and EM filaments. The company continues to grow and welcomes this next step in its development.

Calibre Scientific  
[calibrescientific.com](http://calibrescientific.com)

### Zygo Corporation Collaborates with Digital Surf



Zygo Corporation and Digital Surf, creator of the Mountains<sup>®</sup> software platform for image and surface analysis in microscopy and metrology, announced the release of Mx<sup>™</sup> with Mountains<sup>®</sup> Advanced Contour. This is a new software package for users of Zygo Corporation's range of optical profilers. Combining Zygo's coherence scanning interferometry (Z-CSI) powered by Mx<sup>™</sup> and Mountains<sup>®</sup> Advanced Contour module creates a flexible and repeatable solution and serves the requirements of customers dealing with tight CD specifications.

Zygo and Digital Surf  
[zygo.com](http://zygo.com), [digitalsurf.com](http://digitalsurf.com)

### Leica Releases New AI Image Analysis Solution



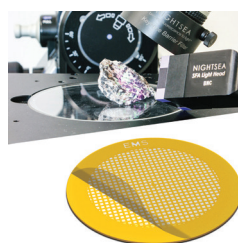
MICROSYSTEMS

Leica Microsystems, a leader in microscopy and scientific instrumentation, has released a new version of its AI-powered image analysis solution, Aivia 11, featuring a deep learning-based cell segmentation algorithm that offers advanced insight creation capabilities

for all levels of users. Aivia 11 is based on the innovative Cellpose deep learning segmentation algorithm, which offers several pretrained models for the precise detection of cells from a wide range of image types.

Leica Microsystems  
[leica-microsystems.com](http://leica-microsystems.com)

### EMS Acquires NIGHTSEA and C-flat<sup>™</sup>



Electron Microscopy Sciences announced two acquisitions: NIGHTSEA, a proven innovator of complete and economical solutions — light sources and matched filters — for viewing and imaging fluorescence, and the C-flat<sup>™</sup> Holey Film TEM Grids line of products, the industry standard for cryo-EM and SPI, which includes C-flat<sup>™</sup>, Au-flat<sup>™</sup>, and CD-flat<sup>™</sup>.

Electron Microscopy Sciences  
[emsdiasum.com](http://emsdiasum.com)

### RPMC Lasers Announces Revamped Knowledge Center

RPMC's Knowledge Center has well-established "Blogs" and "Whitepapers" sections, with articles covering everything from improving diode lifetime to optical alignment tips to application-specific laser source requirements. FAQ pages improve the user experience by quickly answering some of the more common questions, so one can be more informed while in the research phase. The Press Releases page compiles major company announcements, from exclusive agreements to tradeshow exhibitions to significant website updates.

RPMC Lasers  
[rpmclasers.com](http://rpmclasers.com)

### Tomocube Launches a High-Resolution Holotomography Microscope with an Incoherent Light Source



The HT-X1 microscope is ideally suited for high throughput automated screening applications with its ability to image multi-well plate formats in a large field-

of-view with a laser autofocus system and very high-performance 0.95 NA objective. Core imaging facilities will also value its integrated gassed incubator for long-term, time-lapse studies and its software-driven approach, allowing multiple users to access its formidable performance simply and quickly through its intuitive user interface, TomoStudio X.

Tomocube  
[tomocube.com](http://tomocube.com)

## Institute for Factory Automation and Production Systems (FAPS) Installs TESCAN AMBER X Plasma FIB-SEM



TESCAN has installed the AMBER X focused ion beam-scanning electron microscope (FIB-SEM) at the Institute for Factory Automation and Production Systems in Germany. The AMBER X offers a combination of plasma

FIB with ultra-high resolution field emission SEM for multiscale materials characterization. FAPS is using the FIB-SEM for research to improve a variety of products including automotive, printed electronics, battery and additive manufacturing, renewable energy, and medical technology.

TESCAN  
tescan.com

## 3D Software for 2D Microscopes

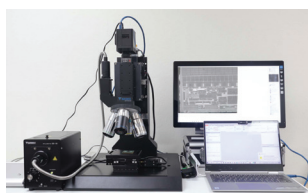


Edge 3D software and Prior Scientific focus drive transforms 2D microscopes into a 3D image analysis system. Edge's Panfocal software controls the microscope focus and USB camera to automate Z-stacking and produce 3D images with

3D measurements. The system is compatible with most fluorescence, transmitted, and reflected light microscopes.

Edge 3D  
edge-3d.com

## New Features for Seiwa IR Microscope Include Stitching, Motorization, and Automation



Seiwa Optical America's new fully automated IR Microscope combines motorized Z-focus and an automated X-Y stage, allowing stitching of images with different extended exposure, field, and focus parameters. The new system allows topography imaging for 3D views and measurements.

Seiwa Optical America  
seiwaamerica.com

## Covalent Metrology Installs New CFEG TEM Equipped for High-Resolution EELS and EFTEM



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

Covalent has added a JEOL JEM-F200 S/TEM to streamline analysis and permit imaging of more sample types, including beam-sensitive and magnetic materials. Clients working with semiconductors, batteries, nanomaterials, and more will benefit from atomic-scale imaging and EDS mapping, along with new energy-filtered TEM (EFTEM) and high-resolution EELS services that can help to

design, optimize, and accelerate manufacturing processes.

Covalent Metrology  
covalentmetrology.com

## Park Systems Announces Opening of Eastern Applications Laboratory

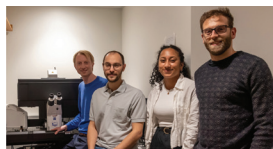


Park Systems, a world-leading supplier of atomic force microscopes, announced the opening of their new Eastern Regional Lab at Northeastern University's 14-acre Innovation Campus in Burlington, MA. The new

facility is located on Boston's Route 128 high-tech corridor, 15 miles north of the city in Building V, a new \$70 million, mixed-research building with 40,000+ square feet available for co-located university, industry, and government research partners.

Park Systems  
parksystems.com

## Super-Resolution Live Cell Imaging to Study DNA Looping in 3D



Dr. Anders Sejr Hansen and his team at the Massachusetts Institute of Technology seek to understand the 3D folding of the genome in order to understand how distal enhancers find and loop to their target genes and regulate their expression. Using the Zeiss LSM 900 with Airyscan, they recently published

new data in this area using live cell super-resolution microscopy.

ZEISS  
zeiss.com/microscopy

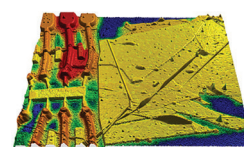
## Vision Engineering Acquires Miltorn Precision Engineering



Vision Engineering, a 64-year-old British designer and manufacturer of high-quality visual instrumentation and a significant supplier of machined components/subassembly services to other industrial sectors, has announced the acquisition of Miltorn Precision Engineering, of Hinckley, Leicestershire, a precision engineering specialist.

Vision Engineering  
visioneng.com

## HORIBA and Digital Surf Partner to Launch GraphYX Software



HORIBA Scientific and Digital Surf, creator of the Mountains<sup>®</sup> software platform for image and surface analysis in microscopy and metrology, released graphYX, a new software package 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 sample features by combining multimodal images obtained from SEM, Raman, CL, AFM, NanoRaman, EDX, EBSD, FTIR, and other techniques.

HORIBA and Digital Surf  
horiba.com, digitalsurf.com

## ProductNews

### CleanAire II Ductless Hoods

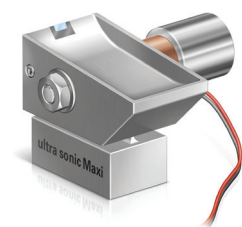


CleanAire II Ductless Hoods are designed to meet DH I requirements as defined by SEFA 9 and feature a built-in carbon filtration system to adsorb non-toxic fumes and odors. They are equipped with an integral blower, vapor-proof light, fan, and light switches. The hood superstructure is constructed of chemical and flame-resistant, non-metallic, composite resin with a

molded one-piece seamless interior fume chamber. A vertical sliding clear acrylic sash protects the user and contains the process fumes.

HEMCO  
hemcocorp.com/caii.html

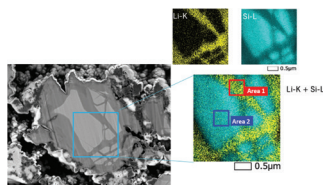
### DIATOME ultra sonic Maxi



The ultra sonic Maxi is a new wider ultrasonic knife specifically for serial sectioning in biological applications. The knife comes in 3.0 mm and 4.0 mm sizes with 35° angle.

DIATOME  
diatomeknives.com

### New Gather-X Windowless EDS from JEOL



JEOL has introduced its latest energy-dispersive spectrometer (EDS), the Gather-X. This new windowless EDS answers the need for higher sensitivity and low-energy X-ray detection in the scanning electron microscope (SEM). It can

collect the entire EDS range produced from the IT800 series field emission SEMs including low-energy X-rays down to lithium. It is fully embedded in JEOL's latest SEM Center software with Live Analysis and can be run in combination with a standard JEOL EDS.

JEOL  
jeolusa.com

### AFM-3000: Fully Automated System for 300 mm Semiconductor Wafer Inspection



Atomic force microscopy (AFM) is an excellent system for monitoring the topography of semiconductor wafers. SEMILAB has designed a fully automated, noncontact, non-destructive AFM metrology system. Besides measuring structures formed on semiconductor wafers up to 300 mm with a resolution of a

few nanometers, the AFM-3000 can provide complementary information for scanning and transmission electron microscopy to better understand process variations and structural deviations on the wafers in 3D.

SEMILAB  
semilab.com

### Award-Winning *in situ* TEM Solutions

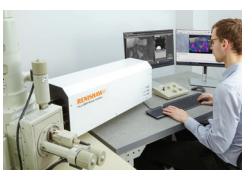


DENSolutions' award-winning systems for *in situ* and operando TEM are powered by innovative MEMS devices, allowing researchers to precisely apply a variety of external stimuli (heat, gas, biasing, liquid) without compromising microscope performance. All four user-friendly platforms — Climate, Stream,

Wildfire, and Lightning — are designed for maximum versatility and reproducibility, enabling microscopists to never miss a thing.

Nanoscience Instruments  
nanoscience.com

### Renishaw Launches the inLux SEM Raman Interface



Renishaw, the pioneers in combining Raman spectroscopy with scanning electron microscopes (SEMs), has launched the inLux SEM Raman interface. Adding the inLux interface to a SEM enables *in situ* Raman spectroscopy, which provides highly specific chemical and structural characterization to complement SEM information. The inLux interface is compatible with SEMs from all major manufacturers and can be easily added to new and existing SEMs on site.

Renishaw  
renishaw.com

### Spicer Consulting Limited Launches SC28 Monitoring System



The new SC28 system is designed for continuous, long-term monitoring of the room environment for electron microscopes. The SC28 enables long-term, uninterrupted monitoring of magnetic fields, vibrations, and acoustics, as well as temperature and humidity, within the lab and semiconductor fabrication facilities. This system is purpose-designed to monitor the environment for electron microscopes, ebeam lithography tools, and other electron beam instruments.

Spicer Consulting  
spicerconsulting.com

### Pfeiffer Vacuum Introduces New Multi-Stage Roots Pumps ACP 90



The ACP 90 line of pumps is designed for oil- and particle-free applications in the pressure range between atmosphere and  $3 \times 10^{-2}$  hPa. These pumps meet requirements where clean and dry vacuum is needed, like drying, sterilization, coating,

and semiconductor and R&D applications. With their unique design, these pumps are robust and can withstand frequent pump-downs. Highly valuable materials render the pumps more resistant to light corrosive gases.

Pfeiffer Vacuum  
pfeiffer-vacuum.com

## Hyperspectral Imaging from CytoViva



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 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  
cytoviva.com

## Armadillo Offers a Variety of Optical Products



Armadillo SIA, a leading global provider of specialized optical fibers, sub-assemblies, and hybrid photonic solutions, has introduced two silica, multi-mode optical fiber products. The

Optran® UV NCC, ultraviolet non-circular core fibers, suitable for 190–1200 nm, and the Optran WF NCC, water-free non-circular core fibers, suitable for the 300–2400 nm spectral range, are ideal for a range of applications requiring exceptional homogeneous power distribution.

Armadillo SIA  
armadillosia.com

## Metro *in situ* Counting Camera for $\leq 200$ kV



The Gatan Metro *in situ* camera is ideal for imaging, diffraction, and *in situ* transmission electron microscopy (TEM) below 200 kV. By enabling counting capabilities at low accelerating voltages (60–200 kV), imaging sensitive samples and low-dose studies is now within reach. Imaging beam-sensitive specimens allows analysis of higher-

quality diffraction patterns with virtually no background. Data are stored *in situ* as 2k video at  $\leq 41$  fps and  $512 \times 512$  video at  $\leq 492$  fps.

Gatan  
gatan.com

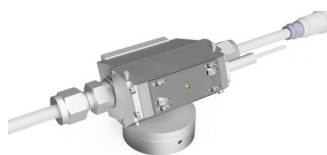
## Wire Saw for Biomedical Applications



The PELCO® Precision Wire Saw™ can cut a variety of materials while minimizing damage from the cutting process by using a gentle lapping action. This gentle action, combined with high precision and low kerf damage, makes the Diamond Wire Saw ideal for sectioning biomedical devices where precise positioning of the cut is critical while minimizing mechanical damage and material waste.

Ted Pella  
tedpella.com

## New Alemnis High-Temperature Module for EBSD (HTME-1000)

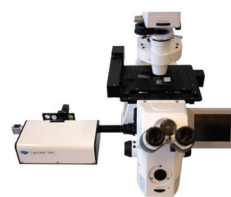


Alemnis AG has just launched a new heating stage for EBSD analysis of samples at temperatures up to 1000°C. The HTME-1000 is a compact and robust system based on the established HTM technology developed by Alemnis for

high-temperature nanoindentation *in situ* in the scanning electron microscope (SEM). The cooling shield design incorporates water cooling and a dedicated aperture, which optimizes the EBSD diffraction pattern and minimizes heat radiation toward the detector.

Angstrom Scientific  
angstrom.us

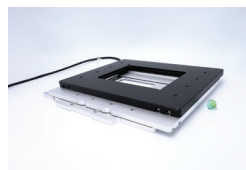
## Lyncée Tec Provides Automated Systems for High-Content Screening Applications



Lyncée Tec's automated microscope and camera allows label-free measurement of cell morphology and dry mass, two unique biomarkers for the cell's physiological state. Key applications of the system include cytotoxicity studies, imaging of cardiomyocytes, hematology, lipid droplet quantification, 4D tracking, and fluorescence correlation.

LyncéeTec  
lynceetec.com

## UpNano Customizes SmarAct Stages



UpNano uses a customized SmarAct SOM-180150, a high-resolution piezo microscope stage with a travel range of  $120 \times 100$  mm, to identify 3D structures via 2-photon polymerization. In a photo-sensitive liquid material, only the areas to be polymerized are selectively aligned

in the laser focal plane. The stage's motion accuracy combined with the 2-photon polymerization (2PP) technology offers much potential and enables innovative scientific applications, for example, in bio-mechanics such as tissue engineering.

SmarAct  
de.smaract.info/upnan

## MiTeGen Now Offers an Entire Line of IC Biomedical Cryogenic Equipment



MiTeGen's selection of cryogenic Dewars, dry shippers, refrigerators, freezers, and other equipment provides the reliability required to consistently work at extremely low liquid nitrogen temperatures without fear of sample loss or warming. MiTeGen has a full line of cryogenic equipment to store or ship crystals, grids, diagnostic, genomic, or biologic samples.

MiTeGen  
mitegen.com