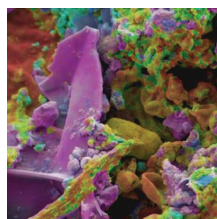


IndustryNews

Imaging ONEWORLD Microscopy Webinars



Imaging ONEWORLD covers topics including sample preparation, labeling strategies, experimental workflows, and “how-to” image and analyze. The webinars examine inspiring new scientific ideas and facilitate collaborations, with speakers also available for questions and answers. The organizers, CRUK CI core facility staff,

Gurdon Institute, MRC-LMB, and NPL are also able to continue the discussion and provide advice on your imaging projects.

Imaging ONEWORLD/Royal Microscopical Society
www.rms.org.uk/resources-downloads/online-microscopy-talks.html

Park Systems Hits 1 Trillion KRW Mark at KOSDAQ



ParkSystems, world leading manufacturer of atomic force microscopes (AFM), announced the company stock valuation exceeded 1 trillion KRW (almost \$1 billion USD) at the end of KOSDAQ on April 20, 2021. Park Systems issued 1

million shares for its initial public offering on December 17, 2015 at KOSDAQ, a NASDAQ equivalent in Korea. Since the IPO, the company has progressed as a global leader in AFM, leading in semiconductor advanced automated AFM systems.

Park Systems
www.parksystems.com

JEOL USA, Inc. Welcomes New Managing Director, Hidetaka Sawada



JEOL USA, Inc. welcomes a new Managing Director, Dr. Hidetaka Sawada, to its Peabody, Massachusetts office. Dr. Sawada is a world-renowned expert in aberration corrected electron microscopy. Most recently he served as General Manager of the Technical and Development group in the Electron

Microscopy Business Unit of JEOL, Ltd. in Akishima, Japan.

JEOL USA, Inc.
www.jeolusa.com

WITec GmbH Joins Oxford Instruments



The management team of WITec GmbH is proud to announce that WITec was acquired by Oxford Instruments plc, a UK-based company that has a great reputation in the scientific community, and in the future will be part of their

Materials Analysis Group. WITec's founders Dr. Joachim Koenen and Dr. Olaf Hollricher will continue as Managing Directors, and the well-established WITec brand will be retained in the new organizational structure.

Oxford Instruments
www.oxinst.com/news

Pfeiffer Vacuum's New Diaphragm Pumps for a Clean, Dry Vacuum



Diaphragm pumps work without oil. They're ideal for all tasks and numerous applications where a clean, dry vacuum is needed, including laboratories, analytical systems, leak detection, and research and development. With the MVP 030-3 C DC, Pfeiffer Vacuum has now introduced a new corrosive gas version of the diaphragm pump. It features a gas

ballast valve and excellent chemical and condensate compatibility.

Pfeiffer Vacuum
www.pfeiffer-vacuum.com

PerkinElmer Supports JUMP-CP Consortium



PerkinElmer provides PhenoVue™ Cell Painting Kits for the Joint Undertaking in the Morphological Profiling-Cell Painting (JUMP-CP) consortium. The consortium, spearheaded by the

Broad Institute of MIT and Harvard and including leading pharmaceutical companies, non-profit research organizations, and PerkinElmer as a supporting partner, is focused on creating and sharing the world's largest, public cell painting data set.

PerkinElmer
www.perkinelmer.com

Vision Engineering Achieves ISO Accreditation



Vision Engineering, a 63-year-old British leading designer and manufacturer of high-quality visual measurement and inspection technologies, has attained ISO and EN ISO medical device accreditation from the British Standards Institution

(BSI) and is now a BSI-accredited contract manufacturer of mechanical, electronic, electrical, and optical medical assemblies and components.

Vision Engineering
www.visioneng.com

SEMTECH's Universal Control Console for SEMs



The SEMView8000 from SEMTECH Solutions replaces the original equipment manufacturer's scanning electron microscope operator's console. Whether SEMTECH supplies the SEM column or an existing working column is used, the SEMView8000 delivers outstanding

performance. It is designed and manufactured at SEMTECH Solutions and comes complete with a SEM control board to operate the column, Win10™ SEM graphical interface, and a 64-megapixel imaging frame grabber.

SEMTECH Solutions
www.semtechsolutions.com

Carl Zeiss Microscopy, LLC Revolutionizes Quantitative Petrography

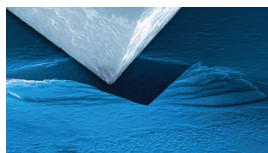


Carl Zeiss Microscopy, LLC is introducing a new groundbreaking solution for petrographic analysis. ZEISS Axioscan 7 expands the possibilities of automated petrography by combining unique motorized polarization acquisition modes with unprecedented

speed and a rich software ecosystem for visualization, analysis, and collaboration. Fully automated acquisition now comes with unprecedented speed across even the largest sample collections. Coupled with trusted ZEISS optical quality, this ensures consistent and reproducible imaging and analysis.

Carl Zeiss Microscopy, LLC
www.zeiss.com/microscopy/int/about-us/press-releases.html

Bruker PicoIndenter for SEM and TEM



As the world leader in nanomechanical testing systems, Bruker makes it easy to conduct *in situ* mechanical experiments in a SEM or TEM with the Hysitron PI Series PicoIndenter. The unique transducer

design delivers unmatched stability throughout an experiment, resulting in precise data even at the nanoscale. Video capture from the microscope enables real-time monitoring and direct correlation of mechanical data to microscope imaging.

Bruker
www.bruker.com/picoindenters

New EMS Carbon Rod Shaper

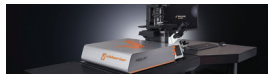


The EMS Carbon Rod Shaper is an ergonomic and space-saving electric carbon and graphite rod sharpener that provides easy, consistent, and efficient rod shaping for high-capacity labs. Its cutting head consists of two tungsten carbide blades and a top guide bearing.

To use, fit the carbon rod of your choice into the holder and simply insert into the top guide bearing to produce precisely cut tips. Carbon dust is automatically removed by vortex into an internal dust collector, which can then be easily removed for cleaning.

Electron Microscopy Services
www.emsdiasum.com/microscopy/products/vacuum/carbon.aspx#70305-25

Live-Cell STED Microscopy

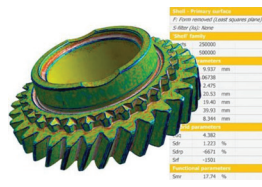


A light-based imaging technique, STED microscopy visualizes nanoscale structure and dynamics

within living and unperturbed cells and tissue. Abberior STED microscopes offer adaptive illumination schemes, which minimize the exposure of the sample to laser light without compromising the ~30 nm super-resolution capabilities afforded by STED microscopy. Systems can be equipped with live-cell imaging chambers to maintain a live-cell-compatible environment and autofocus to keep a specimen in focus for the entire experiment.

Abberior
abberior-instruments.com/products/facility

Official Launch of Mountains® 9 Surface and Image Analysis Software



Are you analyzing data from profilers or microscopes (SEM, AFM, etc.)? Brand-new Mountains® 9 surface and image analysis software could help you get a lot more out of your data. Version 9 has just been released and comes packed with new features

including a new-look interface, surface texture analysis on freeform surfaces (shells), and analysis of multi-channel cubes of compositional data. It also brings new optional modules and a new product branch for correlation and spectroscopy, MountainsSpectral®.

Digital Surf
www.digitalsurf.com/free-trial

TESCAN Announces New Delayering Capability



A new TESCAN Delayering Module that enables automated gas-assisted top-down delayering using TESCAN SOLARIS X and AMBER X Plasma focused ion beam (FIB) instruments has been released. TESCAN Delayering Modules provide rapid access to deeply buried features and support physical failure analysis through the combination of inert Xe plasma FIB ions and unique, proprietary gas chemistries that have been developed specifically for today's advanced technology nodes. They provide artifact-free, site-specific trenches with maximum planarity and homogeneity without altering a device's electrical properties.

TESCAN
www.tescan.com

In Situ Hybridization with ONCORE Pro – Ready-to-Use Automated HPV Probes



The ONCORE Pro automated slide staining system can be used for fully automated *in situ* hybridization (ISH)

applications, including human papilloma virus (HPV) probes. The ONCORE Pro features ready-to-use probes and ancillary reagents for HPV types 6, 11, 16, 18, 31, and 51. The end-user can choose to run HPV probes individually or as a cocktail.

BioCare Medical
biocare.net

Akoya Biosciences Partners with Premier Microscope Providers



Akoya Biosciences will be partnering with Nikon, CrestOptics, Andor, and Carl Zeiss Microscopy, LLC to develop new spatial

biology applications through the Imaging Innovators (I²) Network. Through this collaboration, Akoya plans to further expand the integration of the CODEX® system with the latest and most advanced microscopy platforms to provide a more streamlined user experience, new workflows, faster acquisition speeds, and deeper resolution to pave the way for collaboration on new spatial biology applications.

Akoya Biosciences
www.akoyabio.com

ProductNews

3D Surface Profiler from Keyence



The VK-X3000 Profiler combines three measurement technologies: laser confocal scanning, focus variation, and white light interferometry. For the first time material texture, shape, and surface condition features ranging from nanometers to micrometers to millimeters can be measured with a single device.

Keyence

www.keyence.com/ss/products/measure-sys/vl-500

New TacticID® Mobile for Field Identification



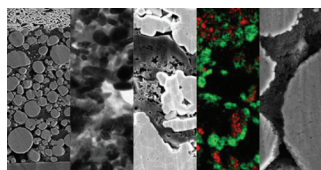
The TacticID Mobile offers 1064nm Raman performance in a compact package with a highly responsive, large touch screen. Designed for first responders to identify suspicious materials where they are encountered, it has features for excellent evidence traceability. Photos and location can be saved with each identification result, and users can add time-stamped notes. All this can be downloaded directly from the device and stored in

the secure database. Custom libraries are available, and users can add libraries.

BWTEK

bwtek.com/products/tacticid-mobile

Gatan Electron Microscopy Products for Battery and Energy Storage Research



Scanning electron microscopy (SEM) and transmission electron microscopy (TEM) are vital characterization techniques for energy storage materials research that provide insight into material microstructure, composition, and performance. Gatan products enable SEM and TEM analysis of air- and beam-sensitive battery and energy storage materials via 1) rapid, high-quality broad ion beam specimen preparation, 2) specimen handling and transfer in an air-free or cryogenic environment, 3) low-dose imaging and spectroscopy, and 4) quantitative chemical analysis and mapping.

Gatan/AMETEK

www.gatan.com/resources/research-applications/batteries-energy-storage

New Cryogenic Vials from Electron Microscopy Sciences



CRYO-LOK vials are ideal for storage or transport of material at extremely low temperatures. External threads provide a smooth and uniform inner surface that eliminates the problem of airborne contamination and/or sample loss. The screw top incorporates a molded-in sealing ring, which assures a tight, leak-proof seal. Vials are graduated in 0.5ml increments, have a conical bottom with slotted skirt, and can be used in the

vapor phase of liquid nitrogen.

Electron Microscopy Sciences (EMS)

www.emsdiasum.com/microscopy

Protochips Launches AXON Studio

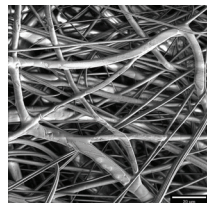


One of the biggest issues in electron microscopy today is the amount of data generated at the TEM. It's common for one dataset to include thousands of 16 MP images and exceed 1 TB in size. AXON provides the user with a well-aligned stack of images with all experimental, TEM, and camera metadata saved for further analysis. It allows searches for sorting and identification of important sections of the data and exports stacks of images relevant to the experiment.

Protochips

www.protochips.com

TESCAN's New MultiVac Module



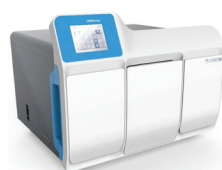
TESCAN's MultiVac module adds low vacuum and variable pressure capability to Tescan SEMs. Varying the in-chamber atmosphere is an established technique for mitigating charge, imaging samples in their native states, and, in combination with a gaseous secondary electron detector (GSE), enabling high magnification topographic imaging at low keV or low beam

current. MultiVac's GSE enhances contrast and enables high-resolution imaging at low keV and current for detailed topographic characterization.

Tescan

www.tescan.com

Automated Imaging Platform Combining Fluorescence and Brightfield Microscopy



DEPArray™ PLUS is an automated image platform that combines fluorescence and brightfield microscopy to digitally sort target cells with 100% purity. This proprietary technology allows the gentle sorting of single rare cells from different samples such as enriched blood, FFPE tissues, and forensic

mixtures. The image gallery provides high-resolution information to review, select, and sort target cells for subsequent molecular characterization. New features include 9 expanded fluorescent channels, improved automation, faster single cell recovery, and enhanced user experience.

Menarini Silicon Biosystems

www.siliconbiosystems.com/deparray-plus

HEMCO Introduces ECOFLOW Line of Fume Hoods



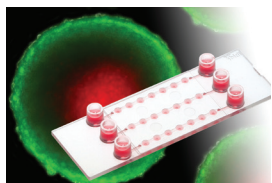
EcoFlow Fume Hoods are offered in 24", 30", 36" and 48" wide models and are economical and space-saving. The hood size makes it ideal for additional hood space applications and student workstations and requires less exhaust air. An adjustable sliding sash is made of 3/16" thick shatterproof Plexiglas and allows easy access into the fume chamber. Many accessories and components including work

surfaces, base cabinets, plumbing, and electrical services are available.

HEMCO Corporation

www.hemcocorp.com

Innovative Flow Chamber Created by ibidi



The μ -Slide Spheroid Perfusion is the latest, innovative flow chamber created by ibidi. It is ideal for the long-term culture and high-end microscopy of 3D cell aggregates, such as spheroids, organoids, or tissue. Throughout an experiment, perfusion guarantees a fresh medium supply to the cells. The μ -Slide Spheroid Perfusion consists of 3×7 flat-bottomed wells that are connected through a channel above. Each well forms its own niche where the specimen is cultured.

ibidi
ibidi.com

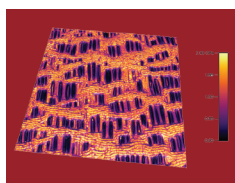
Doubling the Resolution of Structured Illumination Microscopy



Structured illumination microscopy (SIM) is an established grid-based illumination technique that allows imaging at resolutions beyond the diffraction limit of optical microscopy. The ZEISS SIM² is a groundbreaking image reconstruction algorithm that increases the resolution and sectioning quality of SIM data. With SIM² on the ZEISS Elyra 7, life science researchers can now double the conventional SIM resolution and discriminate the finest subcellular structures of living and fixed samples no more than 60 nm apart.

Carl Zeiss Microscopy, LLC
www.zeiss.com/microscopy/us/home.html

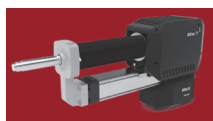
Oxford Instruments Asylum Research Releases Fast Force Mapping (FFM)



Oxford Instruments Asylum Research announces the release of a Fast Force Mapping (FFM) mode for the Jupiter XR atomic force microscope (AFM). FFM mode enables imaging of sample topography while simultaneously acquiring nanomechanical information including elasticity, adhesion, and hardness. When used in conjunction with the conductive AFM probe holder, sample conductivity can also be characterized. Asylum Research AFMs are employed across many different industrial and academic research fields including energy storage, polymers, semiconductors, and 2D materials.

Oxford Instruments/Asylum Research
afm.oxinst.com/FFM

Introducing the EDAX EDS Powered by Gatan



Gatan and EDAX offer a highly intuitive and easy-to-use energy dispersive spectroscopy (EDS) tool for (scanning) transmission electron microscope (STEM) applications. It offers fully integrated data acquisition and signal processing, coupled with features to guide setup and analysis. The EDAX Elite T silicon drift detectors maximize collection efficiency and optimize light element performance, while the Gatan DigitalMicrograph software is the industry standard for TEM/STEM experiment control and analysis across the range of imaging and analytical techniques.

EDAX/Gatan/Ametek
www.gatan.com/products/tem-imaging-spectroscopy/edax-eds-powered-gatan

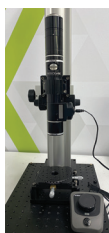
Getting Started with Cryo-Electron Microscopy Just Got Easier



The Thermo Scientific™ Tundra™ Cryo-TEM expands the possibilities of biochemical research without prior microscopy experience and at a more affordable price point. Explore the resources and services we offer every step of the way to ensure the maximum value from your investment. The Tundra Cryo-TEM offers laboratories a cost-effective, easier-to-use cryo-EM for single-particle analysis techniques.

ThermoFisher Scientific
www.thermofisher.com/us/en/home/electron-microscopy/life-sciences.html

Navitar Releases Coaxial Illuminator and Controller for Resolv4K® Wide Angle FOV Zoom and Fixed Imaging Lens System



The Resolv4K system, available as zoom or fixed magnifications, maximizes the use of a larger format and resolving power. The systems offer excellent visible wavelength axial color correction, and other wavelength options include proprietary visible to NIR and SWIR coating options. They are ideal for defect and character inspection, especially on flat, highly reflective surfaces such as wafers, integrated circuits, and polished metal sections.

Navitar
navitar.com

New Camera from Coburn Technologies



The HFC-1 provides eye care professionals with the highest precision in retinal imaging through its advanced autodetection and enhanced visualization technology. Automated tracking and shooting allow the camera to adjust modes quickly and stably on its own while measuring differing pupil sizes. Its 20-megapixel high-definition camera captures images with reduced motion artifact and has the capability to enlarge images to study fine details. It includes a variety of image modes that aid in examination of glaucoma, edema, pigmentary abnormalities, and more.

Coburn Technologies
www.coburntechnologies.com

Nikon's BioPipeline Live High Content Imaging System



The BioPipeline system provides users the resolution, flexibility, and power of a research inverted microscope, with the ease-of-use and automation of traditional box-system plate readers. With confocal modalities, 3-dimensional high content at the highest resolution can be acquired. And with space for 44-well plates, multiple users can take advantage of time-resolved live imaging applications.

Nikon
www.microscope.healthcare.nikon.com/products/high-content-imaging/biopipeline-live