

IndustryNews

New Phasefocus Website



Phasefocus™ announced the launch of a new corporate website. With a fresh look and feel, the new site has been designed to improve the end-user experience, providing simple, logical navigation, allowing visitors to rapidly locate and access a large amount of product and application information from a single location. Visitors to the site can now browse the wide range of Livecyte™ applications, where they can view an extensive selection of related videos, technical application notes, and associated product documentation.

Phasefocus
www.phasefocus.com

Asylum Research Announces New Nanotribology Application Note

The Oxford Instruments Asylum Research application note, “Nanotribology with the AFM,” describes the latest AFM technology for quantitative measurements of friction, adhesion, superlubricity, and related behavior. Example results are presented for biomedical devices and MEMS/NEMS and include measurements made on layered polymer films and brushes, epitaxial films, and 2D materials. Results are presented from the Asylum Research Cypher and MFP-3D AFMs. With advanced performance capabilities, Asylum AFMs can be configured for many environmental control and advanced scan modes.

Oxford Instruments Asylum Research, Inc.
afm.oxinst.com

Covalent Metrology Announces Collaboration with EDAX, Inc.



Covalent Metrology, a new analytical service lab based in Silicon Valley, announced today that it will collaborate with EDAX, Inc., a business unit of AMETEK, Inc., on the application of energy dispersive spectroscopy (EDS) for the quantified characterization of a wide variety of materials. Covalent undertook an extensive evaluation of competitive offerings and selected the EDAX 70 mm Octane Elect Super EDS System, equipped with advanced APEX software.

Covalent Metrology and EDAX, Inc.
www.covalentmetrology.com and www.edax.com

Increase Efficiency and Accelerate Drug Discovery Research with Olympus Novisight™ 3D Cell Analysis Software

Olympus Corporation announced the U.S.-only launch of a new 3D cell analysis technology with the ability to accurately analyze 3D cell cultures down to the nuclei. To develop a solution to meet this need, Olympus combined its 3D imaging technology with powerful algorithms and a new method to analyze the whole cell model in 3D. The result is Olympus's new Novisight™ software with True 3D cell analysis technology.

Olympus Corporation
Olympus-LifeScience.com

2018 Nikon Small World in Motion Winners

First place was awarded to Dr. Elizabeth Haynes and Jiaye “Henry” He for their video of a zebrafish embryo growing its elaborate sensory nervous system. The video reflects a time lapse of 16 hours and uses gentle light sheet technology to capture the whole zebrafish embryo in 3D, at a high temporal resolution. This year's second place winner was Dr. Miguel A. Bandres, whose video shows a laser propagating inside a soap membrane.

Nikon Instruments Inc.
www.nikonsmallworld.com

Thermo Fisher/Cryo-EM Announcement

Thermo Fisher Scientific is announcing another installation of its Krios G3i Cryo-Transmission Electron Microscope (Cryo-TEM) for the Cambridge Pharmaceutical Cryo-EM Consortium. The consortium is comprised of major pharmaceutical companies, the Medical Research Council Laboratory of Molecular Biology (MRC-LMB), and the University of Cambridge. Thermo Fisher has partnered with the consortium for the past two years. Due to overwhelming demand for the technology, this new microscope will go beyond therapeutic research to include applications of cryo-EM in materials research.

Thermo Fisher Scientific
thermofisher.com

Jenoptik Announces the Appointment of Robin Swain as Sr. Director of the Silicon Valley Application Center



Jenoptik announced the appointment of Robin Swain as Sr. Director of the Silicon Valley Application Center effective immediately. In Mr. Swain's new role, he will be responsible for developing and executing new business strategies to accelerate Jenoptik's growth, as well as head up the Applications Center in Fremont, California, which serves its West Coast customers' unique engineering and product development needs.

JENOPTIK | Optical Systems
www.jenoptik.us

Hyperspectral Imaging Helps Conservation of Outdoor Bronze Statue by Auguste Rodin

Outdoor bronze statues make an important contribution to our culture; however, the urban atmosphere is corrosive, with sulfur oxides and acid rain causing the formation of copper sulfates, brochantite, and antlerite. Both compounds are green, giving the corroded bronze its typical hue, and are formed through complex electrochemical processes. Detection of these two compounds provides valuable information on the general condition of bronze sculptures and guides their preservation.

IM Publications Open LLP
www.impopen.com

Conference Review: 15th Confocal Raman Imaging Symposium

From September 24–26, 2018, researchers, engineers, and scientists were invited to the 15th Confocal Raman Imaging Symposium in Ulm, Germany, to discuss the latest developments in confocal Raman microscopy. Presentations from the fields of nanotechnology, geosciences, materials science, and life sciences provided an illuminating overview of the most recent research results attained with confocal Raman imaging. The program was supplemented by poster sessions and demonstrations of modern confocal Raman and correlative microscopes.

WITec GmbH
www.raman-symposium.com

IMC19 Brings the Future of Science into Focus

Critical discoveries and research that will help to transform health, science, and industry are set to be the lasting legacy of the 19th International Microscopy Congress (IMC19), according to leaders of the scientific world. Held every four years, IMC19 saw more than 2,100 of the world's top scientists and researchers from 48 countries come together at ICC Sydney to network, collaborate, and discover the latest high-tech instrumentation and systems in microscopy and microanalysis.

International Microscopy Congress (IMC)
imc19.com

Miltenyi Biotec Acquires Microscopy Specialist LaVision BioTec

Miltenyi Biotec announced that it has acquired the high-end microscopy specialist LaVision BioTec GmbH, a leading global specialist for advanced light-sheet and multiphoton microscopy solutions for life science applications. Since its foundation in 2000, LaVision BioTec has developed innovative products that successfully address the high-end microscopy market for applications in neuroscience, oncology, immunology, and developmental biology. With its Ultra-Microscopes, LaVision BioTec launched the first commercial light-sheet microscopes, allowing imaging of large cleared tissue samples.

Miltenyi Biotec GmbH and LaVision BioTec GmbH
www.miltenyibiotec.com and www.lavisionbiotec.com

Olympus Deep Learning Technology Used to Help Create AI-Based Pathology Diagnostic Tool

Olympus used gastric biopsy specimens collected for diagnosis at the Kure Medical Center and Chugoku Cancer Center to develop deep learning technology, which consisted of a multi-resolutional convolutional neural network (CNN). The deep learning technology's unique CNN was developed by Olympus and is designed to analyze the features of pathology sample images. Using the CNN, the deep learning technology was used to identify the area of ADC tissues on images.

Olympus
Olympus-LifeScience.com and TrueToLife.com

JENOPTIK Further Expands Manufacturing Capacity

Jenoptik, an industry leader in high-performance optical systems and healthcare and industry solutions, announces the newest expansion of its manufacturing operations in Florida. With the additional optical assembly area adding 8,100 square feet, the total production, engineering, and administrative footprint of the facility now totals 70,875 square feet. Construction on the new assembly building will be completed in November 2018. The flexible manufacturing space offers a contamination-controlled environment and can be configured as required for future projects.

JENOPTIK | Optical Systems
www.jenoptik.us

Organizing and Managing Digital Classrooms Efficiently

ZEISS Labscope Teacher expands the existing ZEISS Labscope installation. It puts the lecturer in charge of all connected microscopes in the network of the digital classroom while they move freely around the classroom. It lets the teacher define working groups, send group-specific tasks, and share digital information such as documents or presentations, thereby fostering teamwork. The master device makes it easy to keep everybody on track. The lecturer only needs to define the classroom layout once.

ZEISS Research Microscopy Solutions
www.zeiss.com/newsroom

Oil Industry Supply Company Uses the Deben SEM Motorized Stage in Their Benchtop SEM

Deben reports on how Scale Protection has used their SEM motorized XY stage in a Hitachi Benchtop SEM continuously for the past four years for the analysis of particulates collected on filters from water extracted from drill wells. To be representative, the analysis requires that sufficient particles are analyzed by SEM/EDS. This is only possible with the Deben stage, which makes random selections of areas on the filter.

Deben UK Limited
www.deben.co.uk

First Integrated Cryo-Electron Tomography

To investigate complex biological mechanisms, researchers require structural information of target molecules within their subcellular context. To achieve this, the target molecules and their cellular environment need to be accurately resolved at sub-nanometer resolution. Leica Microsystems and Thermo Fisher Scientific have collaborated to create an integrated Cryo-Electron Tomography workflow that responds to these research needs. Safe, fast, and contamination-free sample transfer between instruments ensures navigation to the cellular target regions and reliable results at sub-nanometer resolution.

Leica Microsystems Inc.
www.leica-microsystems.com