## **IndustryNews**

## Linkam's CMS196V3 Stage Enables Cryo-Correlative Fluorescence and Electron Microscopy



Electron microscopy (EM) gives restricted insight into biological and chemical processes due to its limitations in staining and sample preparation processes. Fluorescence microscopy is a sensitive method used to detect biological, chemical, and genetic processes and events inside living cells.

Cryo-CLEM (Correlative cryo super-resolution light and electron microscopy) brings it all together, combining the individual advantages from both fluorescence microscopy and EM by imaging the same sample location with both techniques and superimposing the complementing information.

Linkam Scientific www.linkam.co.uk/cms196

### Nikon introduces Clarify.ai for NIS-Elements

NIS-Elements Clarify.ai is a new microscopy tool in Nikon's growing suite of artificial intelligence (AI). Clarify.ai uses new Nikon technologies executed on graphic processing units (GPUs) to leverage fast and efficient clarity in images normally corrupted by blur due to out-of-focus light. It leverages deep learning, a type of artificial intelligence. It is pre-trained to recognize fluorescence signal emitted from out-of-focus planes and to remove this haze component from the image, resulting in improved signal-to-noise (S/N) ratio.

Nikon

www.healthcare.nikon.com/en/news/topics/20200714001.html

## Olympus and Metal Analysis Group to Deliver API RP 578 Training

Olympus and Metal Analysis Group announced a collaboration to offer API RP 578 global training courses for alloy verification and positive material identification (PMI) experts who want to sharpen their skills, advance their careers, or earn their certificate of completion. Using the right alloy component is critical to help prevent accelerated corrosion or part failure. API RP 578 provides guidelines for a material and quality assurance system to verify the composition of alloy components in new and existing piping systems.

#### Olympus

www.olympus-ims.com/en/news/olympus-and-metal-analysis-group-to-deliver-api-rp-578-training/?utm\_source=ims\_email&utm\_medium=email&utm\_campaign=metal-analysis-group-pressrelease

## Olympus and Cytosurge Collaborate to Deliver a Complete Single-Cell and CRISPR Genetic Manipulation Solution in the Americas



Olympus, a leading manufacturer of high-end research microscopes, and Cytosurge, a precision manufacturer of cell manipulation technologies, have

entered a co-marketing agreement to become a complete system provider to the scientific community's growing need for next-generation single-cell and CRISPR genetic manipulation solutions. The partnership provides potential to blend Olympus optical technologies with Cytosurge high-precision cell manipulation technologies.

Cytosurge AG and Olympus www.Olympus-lifescience.com, www.cytosurge.com

### Vision Engineering Upgrades Digital Marketing Presence in Three Global Territories

Explore our **NEW** website



Vision Engineering Ltd., a 62-year-old British leading designer and manufacturer

of high-quality ergonomic inspection, digital 3D visualization, and visual measurement technologies, has launched a new website platform for manufacturing industry professionals in three of its global territories. The site offers product and service information plus a rich library of learning materials for a wide range of market sectors.

Vision Engineering Ltd. www.visioneng.com

## LUCID Vision Provides Multi-Purpose GigE Vision Cameras

LUCID Vision Labs, Inc. designs and manufactures innovative machine vision cameras and components that use the latest technologies to deliver exceptional value to customers. Our compact, high-performance GigE Vision cameras are suited for a wide range of industries and applications, such as factory automation, medical, life sciences, and logistics. LUCID Vision Labs innovates dynamically to create products that meet the demands of machine vision for Industry 4.0.

LUCID Vision Labs, Inc. www.thinklucid.com

# Linkam THMS600 Stage Used by University of Glasgow to Study Laser-Induced Phase Separation



A team of scientists set out to understand how and why lasers trigger crystallization and how changes made to the properties of the laser could influence which crystal form would be generated. Researchers working with Prof. Klaas Wynne of The School of Chemistry at the University of Glasgow have used the Linkam THMS600

temperature-controlled stage to explore phase transitions in mixed liquid systems and laser-induced nucleation.

#### Linkam Scientific

https://bit.ly/Llnkam-GlasgowArticle and https://www.nature.com/articles/s41557-018-0009-8

## RPMC Fundamentals of Confocal Raman Microscopy



RPMC announces the release of the white paper "Fundamentals of Confocal Raman Microscopy." RPMC focuses on the optical design of a confocal microscope and how that affects the performance of the system. It explains why the 532 nm single longitudinal

mode (SLM) diode-pumped solid-state (DPSS) laser from Oxxius, with excellent TEM00 beam quality, is an ideal source for integration into confocal Raman microscopes.

#### RPMC Lasers

 ${\tt https://blog.rpmclasers.com/white-papers/fundamentals-of-confocal-raman-microscopy}$ 

## Thermo Fisher and Contract Research Organizations Expand Cryo-EM Access

Thermo Fisher Scientific has announced it is facilitating access to cryo-electron microscopy (cryo-EM) for contract research organizations (CROs) around the globe that offer start-up packages for this breakthrough technology as a service. Three options are provided. The Starter Kit Package allows researchers to apply cryo-EM screening to determine whether their sample is suitable for cryo-EM exploration. The Exploration Package takes this examination a step further by allowing researchers to construct a 3D high-resolution molecular model of their sample. The Impact Package helps researchers gain formal cryo-EM training, applying the technology to multiple projects as they consider whether to build their own lab or continue with cryo-EM as a service.

#### Thermo Fisher Scientific

https://thermofisher.mediaroom.com/2020-08-18-Thermo-Fisher-and-Leading-Contract-Research-Organizations-Expand-Cryo-EM-Access-to-More-Pharma-and-Biotech-Companies

### Capture, Document, and Share Images in Seconds

Leica Microsystems launches the new FLEXACAM C1 microscope camera, which saves time and effort capturing, documenting, and sharing images. It turns microscopes into stand-alone digital imaging stations (no PC needed). Users can connect the camera to their viewing device and network to begin their daily imaging tasks. It can be adjusted and operated with the integrated on-screen display (OSD) directly via a monitor. It offers intuitive annotation, overlay, and network tools for more flexibility to enhance documentation.

#### Leica Microsystems

www.leica-microsystems.com/company/news/news-details/article/capture-document-and-share-images-in-seconds

### Miltenyi Biotec Offers Automated and Closed Adherent Cell Culture Solutions on CliniMACS Prodigy



Miltenyi Biotec's new CliniMACS Prodigy\* Adherent Cell Culture System is now available. A flexible architecture specifically developed for the GMPcompliant CliniMACS Prodigy Platform, it

enables the automated, scalable, and closed manufacturing of various adherent cell types, including stem cells and their derivatives. Tested processes include, for example, GMP-compliant expansion of human mesenchymal stromal cells and pluripotent stem cells, as well as differentiation of the latter into dopaminergic progenitors.

Miltenyi Biotech www.miltenyibiotec.com

## UV-Visible-NIR Polarization Spectroscopy of Microscopic Samples

CRAIC Technologies, a leading innovator of UV-visible-NIR microanalysis solutions, announces the addition of UV-visible-NIR polarization microscope spectroscopy capabilities to CRAIC microspectrophotometers. This unique feature is offered as a package that allows the user to measure polarization spectra in either transmission or reflectance modes. With the ability to measure polarization microspectra™ in the ultraviolet, visible, and near infrared regions, the UV-visible-NIR polarization package represents a powerful new tool for both materials science and biological research.

CRAIC Technologies www.microspectra.com

### CAMECA Akonis Metrology Tool Selected by Leading Semiconductor Manufacturer



AMETEK CAMECA, a provider of scientific instrumentation and metrology solutions, announces that one of the world's leading semiconductor players recently selected CAMECA's cutting-edge metrology solution for one of its fabrication sites. The selected metrology

system, the new AKONIS Secondary Ion Mass Spectrometer, fills a critical gap in semiconductor manufacturing processes by providing high throughput as well as high precision detection for implant profiles, composition analysis, and interfacial data directly in the fab line.

AMETEK CAMECA www.cameca.com

### A New Publication in Microscopy and Microanalysis

The Microscopy Society of America and Cambridge University Press announce the launch of a new publication. *Elements of Microscopy and Microanalysis* will consist of a series of digital publications ranging in length from 30 to 100 pages. Topics cover all aspects of microscopy and microanalysis and range from how-to tutorials to development and applications of state-of-the-art instruments used in research. For more information and to submit a topic for *Elements of Microscopy and Microanalysis*, contact the Editor-in-Chief, Dr. Beth Dickey.

Cambridge University Press www.cambridge.org/core/what-we-publish/elements

## TESCAN and MIZE Announce a New Service Management System

Mize, a leading provider of Connected Customer Experience Platform and Service Lifecycle Management software, announced that TESCAN ORSAY HOLDING ("TESCAN") will implement a new service management system using the Mize platform Connected Customer Experience Platform and Smart Blox modules. The Mize software solution will enable TESCAN to better manage many of their service processes, such as call activity, escalations, customer databases, service contracts, and service logistics.

#### TESCAN and Mize

www.prnewswire.com/news-releases/tescan-optimizes-global-service-delivery-with-mize-301056293.html

## Capture Higher Quality Multicolor Images more Quickly and Achieve Better Quantitative Results over the Full Field of View



The Olympus scanR high-content screening (HCS) station delivers improved image quality, better quantitative data, support for challenging segmentation and classification applications, and increased speed to help life science researchers maximize the information they get from their

samples. Key to these functionalities is Olympus' breakthrough lens manufacturing technology. X Line™ objectives offer simultaneously improved chromatic aberration correction, image flatness, and resolution.

#### Olympus

www.olympus-lifescience.com/microscopes/inverted/scanr