### **IndustryNews**

## Gatan GIF Quantum LS Imaging Filter with K2 Summit Camera Approaches 2.2 Å Resolution

Single-particle cryo-electron microscopy is for scientists who want to study DNA, proteins, and other biological molecules at atomic resolution. Researchers have shown that they can achieve resolutions that are good enough to almost visualize the atoms in individual amino acid residues in proteins. Cryo em can now resolve "holes" at the center of certain molecules, a feature typically associated with structures derived by X-ray crystallography at resolutions better than 2 Å resolution.

Gatan Inc. www.gatan.com/quantumls

### Renishaw Adds Raman Analysis to Scanning Electron Microscopy at The University Of Sydney, Australia

Dr. Elizabeth Carter is manager of the vibrational spectroscopy core facility at the University of Sydney. This professional services unit houses one of the largest concentrations of state-of-the-art Raman and FT-IR spectrometers in Australia. The research interests of facility users are diverse, and applications include: nanotechnology, materials science, art and archaeology, polymer science, pharmaceutics, environmental, forensics, mineralogy and gemmology, medical diagnostics, disease mechanisms, and other life sciences.

Renishaw plc www.renishaw.com/SEMRaman

### UCLA Combines Raman Microscopy with Scanning Electron Microscopy (SEM) to Study Archaeological Textiles and Fibers

UCLA uses a Renishaw SEM-SCA system to study textiles and fibers non-destructively. A paper published in the *Journal of Raman Spectroscopy* describes how a SEM may be interfaced with µRS to provide a means of non-destructively identifying organic compounds in complex samples, such as single fibers, by extractionless analysis. This enables the characterization of dyes from reference collections and archaeological textiles.

Renishaw plc www.renishaw.com/Raman

# XEI Scientific Appoints EM Resolutions as Distributor for the UK and Irish Markets

XEI Scientific Inc, maker of the popular EVACTRON® De-Contaminator™ Plasma Cleaning System, has appointed EM Resolutions Limited as their exclusive distributor for their products in the UK and Ireland. Founded in 2012, EM Resolutions offers a wide range of consumables and accessories for the electron microscopy marketplace. By being able to offer Evactron plasma cleaning, EM Resolutions can help their clients clean and maintain vacuum quality in their instrumentation.

doi:10.1017/S1551929515000875

XEI Scientific, Inc. and EM Resolutions www.evactron.com

### **Quick and Accurate Sperm Viability Testing**



Prior Scientific reports that its Lumen 100-LED has been integrated by Microptic SL to provide illumination for their Sperm Class Analyser (SCA) system. Microptic's SCA system is designed to quickly and accurately determine the

number of live and dead sperm cells within a sample via fluorescence microscopy. Fluorescence illumination for the SCA is provided by the Lumen 100-LED system, with Microptic selecting the single high-performance LED emitting in the ultraviolet range at 365 nm.

Prior Scientific Instruments Ltd www.prior-scientific.co.uk//Products/Live-Cell-Imaging.aspx

## Markus Lusser is the New President of Leica Microsystems

Markus Lusser is the new President and Director of Leica Microsystems, headquartered in Wetzlar, Germany. He succeeds Andries Peter Jan van den Broek who has left the company. In his new role with Leica Microsystems, Lusser assumes leadership over a major worldwide developer and manufacturer of microscopes and scientific analysis instruments. The company offers innovative, application-oriented solutions for the inspection and evaluation of micro- and nano-structures in a wide range of markets.

Leica Microsystems GmbH www.leica-microsystems.com

#### Bitplane Makes the IMS File Format Open Source

Bitplane, an Oxford Instruments Company, announced that its proprietary IMS file format would become open source. The IMS file format is based on Hierarchical Data Format (HDF5), which is designed to work with huge multidimensional data and is optimized to allow extremely fast visualization of huge volume data. To facilitate this, the format stores not only the original image data, but also lower-resolution versions of the original data.

Bitplane USA http://open.bitplane.com/ims

# New International Electron Microscopy Demonstration and Application Facility for Quorum

A new state-of-the-art cryo scanning electron microscopy (SEM) and analysis suite was formally opened at the Quorum headquarters in Laughton, East Sussex. The facility is the result of collaboration between Quorum Technologies, Hitachi High Technologies, and Oxford Instruments. At the heart of the new facility is a Hitachi SU8230 field emission scanning electron microscope (FE-SEM) fitted with technology-leading Oxford Instruments X-MaxN150 X-ray microanalysis and Quorum PP3010T cryo preparation systems.

Quorum Technologies www.quorumtech.com

### JEOL BRASIL Instrumentos Científicos Ltda. Sponsors Summer School



The summer school is to be held at the Brazilian Nanotechnology National Laboratory (LNNano), located in the Brazilian Center for Research in Energy and Materials (CNPEM) campus, Campinas. Three high-resolution, versatile TEM

models from JEOL will be used for training: JEM-1400, JEM-2100, and JEM-2100F. Applications experts from JEOL will also be available for assistance. "We are delighted to support LNNano and be involved with this highly regarded, national educational program," says Mr. Yuichi Matsumoto, president of JEOL Brasil Ltda.

JEOL USA INC www.jeolusa.com

#### Microscopy Innovations Wins Innovation Award

Microscopy Innovations, LLC announced today that its mPrep™ System received the 2015 Wisconsin Innovation Award in the BioTech category. The award was presented in a ceremony on August 18, 2015, at Discovery World in Milwaukee, Wisconsin. A panel of 18 industry experts selected microscopy innovations from more than 170 entries to receive one of 10 awards. The awards were created to celebrate "groundbreaking and transformational ideas" from Wisconsin companies, large and small.

Microscopy Innovations, LLC www.microscopyinnovations.com

## AXT Partner to Bring Nanolive's Live Cell Imaging Platform to Australia and New Zealand

AXT has been appointed a distributor for Nanolive, an innovative young company specializing in live cell imaging. Their first product, the 3D Cell Explorer uses revolutionary patented technology called holographic tomography to allow researchers to peer non-invasively deep into biological systems without damaging or interfering with the cells. Furthermore, it boasts the highest resolution of any commercially available conventional microscope.

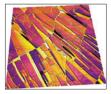
AXT Pty Ltd www.axt.com.au

### Fast-Growing China Laser Market Now Has Direct Access to More than 1,600 Edmund Optics Stock Laser Optics

Edmund Optics® (EO), a premier provider of optical components, announces that customers in China now have direct access to over 1,600 high-performance laser optics from Edmund Optics' large inventory of stock optics ready for immediate delivery. In addition, custom design and manufacturing of laser optics is now being offered for the first time to meet growing customer needs.

Edmund Optics www.edmundoptics.com

### Atomic Force Microscopes from Asylum Research Guide the Development of Thin Film Deposition and Etch Processes



A new application note from Oxford Instruments Asylum Research titled "AFM Characterization of Thin Films: High Resolution Topography and Functional Properties" describes the many ways that Asylum Research AFMs are being used in

this field and highlights several real-world examples where the AFM contributes directly actionable information that can help guide research and development of thin film materials.

Oxford Instruments Asylum Research, Inc. www.oxford-instruments.com/thin-films

### New Semrock Website Improvements Launched for Faster Ordering

Semrock announced the relaunch of Semrock.com with a new custom sizing calculator, improved site search, and a faster ordering process. Users will find it easier and faster to find single-band bandpass sets and dichroic beamsplitters. End users may now select and push a quote to their buyer for fast approval and purchase. Buyers will receive an email alert from the system that they have a purchase pending, making bundling multiple purchases for higher discounts much simpler.

Semrock, Inc www.semrock.com

### Renishaw's Spectroscopy Products Division Relocates to the Company's Headquarters Site

After 23 years, and many months of planning, Renishaw's Spectroscopy Products Division (SPD) said farewell to its Old Town site, in Wotton-under Edge, and moved to the new Renishaw Innovation Centre, located at the company's New Mills headquarters. Situated in the stunning Gloucestershire countryside, the Renishaw Innovation Centre is a brand-new building providing an additional 153,000 sq ft of space for Renishaw adjacent to the company's iconic HQ.

Renishaw plc www.renishaw.com/Raman

## Miniature Linear and Rotary Stage Catalog Released by PI

PI released an inclusive catalog of over 200 models of miniature translation and rotation stages representing varying sizes and motion ranges with different drive concepts, including servo/ stepper, piezo ultrasonic/inertia, linear, voice coil, air bearings, crossed rollers, and piezo flexures. In addition to the many standard products presented in the new catalog, PI can quickly modify existing product designs or provide a fully customized OEM part to fit the exact requirements of the application.

PI (Physik Instrumente) www.pi-usa.us/pdf/index.php?onl\_prweb