### Industry News

#### XEI Scientific Celebrates its Silver Anniversary

XEI Scientific is celebrating 25 years of continuing progress in fighting hydrocarbon contamination with Evactron® plasma cleaners. Since 1999 the Evactron is the single accessory that can be used to improve instrument performance, and it enables advanced technologies in FIBs and SEMs equipped with turbo-molecular pumps. Any analytical techniques that need to be carbon-free, such as EELS, low-energy EDS, EBSD, BSD, CLEM, 3D imaging, cryo-applications, and low-voltage FESEM, are made possible by Evactron cleaning.

XEI Scientific, Inc. www.evactron.com

# FEI Celebrates Shipment of 1,000<sup>th</sup> Helios DualBeam System



FEI announced a milestone of the 1,000<sup>th</sup> Helios<sup>™</sup> DualBeam system shipped since the product family was introduced in 2006. The 1,000<sup>th</sup> system was manufactured in FEI's dearlier this month to a company

Brno plant and was shipped earlier this month to a semiconductor customer who is u the system for advanced failure analysis on sub-20-nm semiconductor devices. Originally developed for semiconductor manufacturing failure analysis, the Helios DualBeam has enabled many new applications in the materials sciences and life sciences.

FEI Company www.fei.com

### Semrock Announces Distribution Partnership with AVR Optics

Semrock entered into a supply agreement with AVR Optics for the distribution of its optical filters and optical mirrors within the United States and Canada. AVR Optics was founded by a team with deep experience in the life science and analytical instrumentation markets and offers a tremendous extension to the Semrock sales support team. AVR will primarily focus on educational institutions and government research labs in the eastern half of the United States and Canada.

Semrock, a unit of IDEX Health & Science, LLC www.semrock.com and www.avr-optics.com

#### Introducing EAG Laboratories; EAG Inc. Unifies Brands to Leverage Global Footprint

EAG Inc announced that it has combined its 11 market-facing brands under a singular entity, EAG Laboratories. Following multiple acquisitions in recent years, the move is designed to bring together broad capabilities in the materials, engineering, and life sciences sectors. EAG Laboratories will leverage scientific talent in its 20 locations in the U.S., Europe, and Asia-Pacific regions, strengthening its offering for each of the vertical markets it serves.

EAG Laboratories www.eag.com

#### EDAX introduces OIM<sup>™</sup> ANALYSIS 8.0

EDAX OIM<sup>™</sup> Analysis 8.0, now features "Multithreaded Operations," ensuring faster map rendering, highlighting, and characterization calculations for performance improvements. Also "EBSD Pattern Indexing" offers users the ability to re-index data points within an OIM<sup>™</sup> mapping dataset. "Anti-Grain Analysis" enables characterization of non-indexed data points. "Anti-grain" can also be correlated with porosity or amorphous regions within an area of interest. "Correlative Plots" allow the visualization of the relationships between two EBSD measurement data sets.

EDAX is a unit of the Materials Analysis Division of AMETEK, Inc www.edax.com

#### Linkam Launches New LINK Software for Temperature-Controlled Microscopy



Linkam has created new LINK software with an intelligent user interface that delivers a practical and intuitive system experience to users of their temperaturecontrolled microscopy stages. From

one central interface, it is possible to control and monitor the different physical parameters for Linkam stages. These include temperature, humidity, shear mode, tensile force, and vacuum (depending on stage type and sensors fitted). LINK can be programmed with up to temperature 100 ramps.

Linkam Scientific Instruments www.linkam.co.uk

#### Park Systems Receives 2016 Global Enabling Technology Leadership Award

Frost & Sullivan announced today that Park Systems is the recipient of its 2016 Global Enabling Technology Leadership Award. Each year Frost & Sullivan presents this award to the company that has demonstrated uniqueness in developing and leveraging new technologies, which significantly impacts both the functionality and the customer value of new products and applications. Park's Atomic Force Microscopes demonstrate cutting-edge technology that has resulted in customized product lines.

Park Systems www.parkafm.com

#### FEI and Cornell University Collaborate to Commercialize New EMPAD Detector

FEI and Cornell University have entered into an agreement to commercialize a new high dynamic range detector for FEI's electron microscopes. It promises to enable new kinds of multichannel imaging and analysis. FEI expects to complete the commercialization of the design and offer the detector for new and upgraded electron microscopes in 2017. Uniquely, the electron microscope pixel array detector (EMPAD) simultaneously captures the spatially and angularly resolved distribution of all transmitted electrons.

FEI Company www.fei.com

#### New Application Note Describes Atomic Force Microscopy Tools for Nanoscale Electrical Characterization



Oxford Instruments Asylum Research announces its new application note describing atomic force microscopy (AFM) tools for nanoelectrical characterization. The application note discusses the most recent nanoelectrical characterization

techniques, as well as the benefits and exclusive modes that the Asylum Research Cypher<sup>™</sup> and MFP-3D<sup>™</sup> AFMs offer. Researchers will learn more about evaluating local electrical properties, including current, surface charge and potential, dielectric breakdown, conductivity, and permittivity.

Asylum Research, an Oxford Instruments company www.oxford-instruments.com/AFM

#### XEI Scientific Partners with Electron Microscopy Sciences

XEI Scientific, Inc announced an exclusive partnership with Electron Microscopy Sciences (EMS) to sell and promote Evactron<sup>®</sup> products in North and South America. XEI has sold more than 2,400 plasma radical sources for cleaning localized areas, analytical specimens, and large and small vacuum chambers. EMS specializes in the manufacturing, preparation, and distribution of high-quality chemicals, supplies, and equipment for microscopy and histology.

XEI Scientific, Inc www.evactron.com

# Hiden Product Catalog for Thin Films, Plasma, and Surface Engineering

The new Hiden catalog describes the full range of Hiden mass spectrometry-based products for vacuum coating and etching processes and for surface evaluation studies. Key new products include the UHV Temperature Programmed Desorption System for thermal desorption studies, monitoring desorption of surface species through temperatures to 1000°C. Two new Secondary Ion Mass Spectrometer Systems, the AutoSIMS and the Compact SIMS, provide surface diagnostics to the atomic layer level.

Hiden Analytical www.hidenanalytical.com

#### Nanosystem and Digital Surf Launch NanoMap Alpha

Nanosystem today announced the release of NanoMap Alpha software based on Digital Surf's industry-standard Mountains® software platform. NanoMap Alpha is now integrated into the company's NV- and NVM-series high-precision 3D optical measurement systems, thus providing an ideal solution for analyzing semiconductors, PCBs, displays, engineered parts, chemical materials, optical parts, etc. NanoMap Alpha software makes it easy and intuitive to measure a wide variety of surface materials and parameters.

Nanosystem and Digital Surf www.nanosystemz.com and www.digitalsurf.com

#### FEI and King Abdullah University of Science and Technology Establish New Electron Microscopy



FEI and the King Abdullah University of Science and Technology have announced a collaboration agreement to establish a new Centre of Excellence. The Centre will be located at the KAUST Research & Technology Park in Thuwal, Saudi Arabia. KAUST

has recently purchased electron microscopy equipment from FEI, including: a Titan Themis<sup>TM</sup> transmission electron microscope (TEM) and a Helios<sup>TM</sup> G4 DualBeam, as well as upgrades for its existing Titan Krios<sup>TM</sup> cryo-TEM.

FEI Company and King Abdullah University of Science and Technology www.fei.com and www.kaust.edu.sa

# Jenoptik Completes Portfolio of Microscope Cameras

The PROGRES GRYPHAX<sup>®</sup> KAPELLA, RIGEL, and PROKYON cameras will complete Jenoptik's USB 3.0 product series, making it an attractive option for scientific use. The new microscope cameras in the PROGRES GRYPHAX<sup>®</sup> series have been developed specifically for scientific applications in difficult lighting conditions. They are equipped with the latest CMOS sensor technology. With this development, Jenoptik has a USB 3.0 camera portfolio with which every microscope can be upgraded to become a modern, digital workspace.

JENOPTIK Optical Systems GmbH www.jenoptik.com/os

#### Researchers Investigate Toxicity of Nanoparticles Using Tomographic Microscopy

The Nanolive 3D Cell Explorer is a unique instrument using revolutionary technology that affords researchers a view inside living cells like never before. Australian researchers have embraced holographic tomography technology with four systems already installed and more set to follow. Their system was installed earlier this year and operators are able to generate images after 45 to 60 minutes of training thanks to the simplicity of its design and the easy, user-friendly interface.

AXT Pty Ltd www.axt.com.au

### Biolin Scientific Partners with L.A.B. Analytical to Expand Analytical Instrument Business in Scandinavia

Biolin Scientific has signed an agreement with L.A.B. Analytical, a specialist laboratory appliances provider, to distribute Biolin Scientific's state-of the-art surface analysis instruments in Sweden, Denmark, Norway, and Iceland. L.A.B. Analytical is part of the ClaraLab Group, a company founded in 2007 with subsidiaries in Sweden, Norway, and Denmark. Biolin Scientific is a leading Nordic instrumentation company with roots in Sweden, Denmark, and Finland.

L.A.B Analytical and Biolin Scientific www.biolinscientific.com