

## IndustryNews

### Simultaneous Delivery of Spatial and Spectral Data Brings Major Innovation to Molecular Imaging

The iXon Ultra 897 camera from Andor is at the heart of a new technique called spectrally resolved stochastic optical reconstruction microscopy (SR-STORM). The iXon Ultra 897 combines spectroscopy with super-resolution microscopy to produce the first “true-color” super-resolution microscope. It allows one to image single molecules with unprecedented spectral and spatial resolution.

Andor Technology plc., an Oxford Instruments company  
[www.andor.com](http://www.andor.com)

### FEI Extends Capabilities for *In-Situ* Electron Microscopy

The NanoEx family now includes: NanoEx i/v, a heating solution using MEMS-based nanoheaters for reproducible temperature control and uniform temperature distribution; NanoEx 3D Indenter, a nanoindentation solution for mechanical strain, hardness, and tribological measurements; NanoEx 3D STM/EP, an electric nanoprobng solution for measurements of contact current, bias, tunneling, and field emission currents, as well as displacement. Each NanoEx holder is designed to work seamlessly with FEI’s previous- and current-generation of transmission electron microscopy (TEM) platforms.

FEI Company  
[www.fei.com/NanoEx](http://www.fei.com/NanoEx)

### JEOL USA Announces Grand Prize Winners for 2015 SEM and TEM Image Contest

The Grand Prize TEM image was awarded to Prof. Moon Kim’s group, University of Texas at Dallas. Entitled *Nano Sun*, it is a pseudo-colored TEM image of a 500-nanometer silicate nanoshell particle. The Grand Prize SEM image was awarded to José R. Almodóvar Rivera, University of Puerto Rico Mayagüez Campus. The stunning false-colored image displays excellent depth of field and clearly shows the intricate details of an anther.

JEOL USA  
[www.jeolusa.com/winners](http://www.jeolusa.com/winners)

### Digital Surf Launches Revolutionary SEM Image Colorization

Digital Surf’s new Mountains® 7.3 software release enables colorization of an object with just one click of the mouse. Behind this new easy-to-use tool, Mountains® 7.3 software performs over 30 successive mathematical operations in order to distinguish different objects in the image. Colorizing your scanning electron microscope images can aid visualization and interpretation of the information they contain, as well as making them more aesthetically pleasing for publication purposes.

Digital Surf  
[www.digitalsurf.com](http://www.digitalsurf.com)

### Anasys Instruments Appoints Dean Dawson as VP of Marketing to Support Growth Objectives for Nanoscale IR Spectroscopy

Anasys Instruments, the world leader in Nanoscale IR spectroscopy, announces the appointment of Dean Dawson as vice president of marketing to support the company’s continuing growth trajectory. Dean was previously the senior director of the AFM division of Bruker Nano Surfaces, based in Santa Barbara, CA, with responsibility for global marketing and product management.

Anasys Instruments  
[www.anasysinstruments.com](http://www.anasysinstruments.com)

### New Leica Bioimaging Center

Leica Microsystems and the Biomedical Center of the Ludwig-Maximilians-Universität Munich, Germany, will inaugurate the new core facility Bioimaging. Leica Microsystems will use the facility as reference and demo center for state-of-the-art light microscopy. The BMC is the result of a strategic cooperation between Leica Microsystems and the LMU. The Leica Bioimaging Center provides the opportunity for a close cooperation between microscope developers and users to develop innovations in modern light microscopy and to establish their application in applied cell research.

Leica Microsystems GmbH  
[www.leica-microsystems.com](http://www.leica-microsystems.com)

### Physik Instrumente Promotes James Deichmann to Head PI’s US Western Region Sales Teams

PI (Physik Instrumente) L.P., a leader and solution provider in motion control and positioning components and systems, has promoted James Deichmann to director of sales for the US Western Region. His experience gained in 15 years with PI USA will be beneficial in leading, managing, and training the company’s West Coast sales engineering organization with the goal to grow the company and further develop customer relationships.

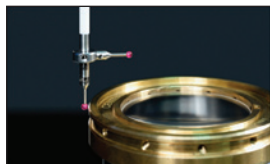
PI (Physik Instrumente)  
[www.pi-usa.us](http://www.pi-usa.us)

### Navitar Enters into Definitive Agreement to Acquire Hyperion Development

Navitar, Inc. has signed a definitive agreement to acquire Hyperion Development, LLC, a leading design firm and manufacturer of custom optical assemblies and OEM solutions. Hyperion Development has a history of designing innovative next-generation deep ultraviolet (DUV) and extreme ultraviolet (EUV) semiconductor lithography systems. The company will be operating out of four engineering, design, and production facilities located in San Ramon, CA; Woburn, MA; Denville, NJ; and Rochester, NY.

Navitar, Inc.  
[www.navitar.com](http://www.navitar.com)

## New High-Precision, High-Volume Lens Assembly Capability



Melles Griot continues to expand its high-precision lens assembly manufacturing with the acquisition of the state-of-the-art alignment turning station ATS 200 from TRIOPTICS. This new machine has

been successfully integrated into its precision optics facility and is now fully operational for cost-effective volume production of high-performance microscope objectives and other precision lenses. Melles Griot offers custom microscope objectives from prototype to higher-volume production quantities at prices previously achieved by only very high-volume standard objectives.

Melles Griot is a business unit of IDEX Health & Science, LLC  
[www.mellesgriot.com](http://www.mellesgriot.com)

## 2016 WITec Paper Awards for Outstanding Scientific Publications



The WITec Paper Awards jury selected the three best publications that document how correlative microscopy information on the chemical and structural composition of a material can be linked for a more comprehensive understanding. The awards

recognize outstanding scientific work published in 2015 that employed a WITec device as part of its experimental setup. The evaluation criteria include the significance of the results for the scientific community and the originality of the techniques used.

WITec GmbH  
 Open [www.witec.de](http://www.witec.de) to see the winners

## First-Ever AFM Images of Microvilli on Live Cells

In a just-released article in the *Journal of Molecular Recognition*, Dr. Hermann Schillers et al. report the first visualization of individual microvilli on living cells with atomic force microscopy. "It was previously impossible to resolve the finest structures of a live cell like microvilli, but now with the BioScope Resolve, I can image them easily in one hour," noted Dr. Schillers." Bruker's BioScope Resolve™ brings soft cell membrane structures into clear view for the first time.

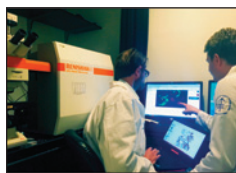
Bruker Nano Surfaces Division  
[www.bruker.com/bioafm](http://www.bruker.com/bioafm)

## Nature Methods Names Cryo-Electron Microscopy "Method of the Year 2015"

Cryo-electron microscopy was named Method of the Year 2015, an award given by the publication *Nature Methods*. FEI pioneered cryo-EM with its introduction of the Titan Krios™ transmission electron microscope in 2008. Since then, they have continued to make advancements in the technology and have partnered with several leading scientists to develop a sample preparation and imaging workflow that could significantly change structural and cellular biology research.

FEI Company  
[www.fei.com/life-sciences](http://www.fei.com/life-sciences)

## Memorial Sloan Kettering Cancer Center Uses a Renishaw In-Via Confocal Raman Microscope to Support the Development of Nanomolecular Probes



The Kircher laboratory at Memorial Sloan Kettering is developing novel nanoprobe for molecular imaging, image-guided therapy, and theranostics. Its ultimate goal is to develop a universal technology that allows precise

determination of the actual spread of a tumor *in vivo*. Currently surgeons cannot see the microscopic extent of the tumor during a procedure, which is essential information for tumor removal.

Renishaw plc  
[www.renishaw.com/Raman](http://www.renishaw.com/Raman)

## Department of Engineering Sciences at Oxford Uses Deben Stages to Characterize Materials



The Laboratory for In-situ Microscopy & Analysis in the Department of Engineering, University of Oxford, is using Deben Microtest tensile and compression stages. They are

applying various stages to characterize materials, ceramics, and biologicals at different temperatures and under varying loading conditions. Deben provides *in-situ* testing stages and innovative accessories and components for electron microscopy.

Deben UK Limited  
[www.deben.co.uk](http://www.deben.co.uk)

## Researchers First to Prove Zika Virus Associated with Microcephaly

Scientists from the Institute of Microbiology and Immunology and the Institute of Pathology in Ljubljana, Slovenia, are the first in the world to publish and prove that the Zika virus is associated with microcephaly. The complete genome of Zika was recovered from the fetal brain. Imaging of the ultra-thin sections and brain homogenate was performed with the use of the new JEOL 120kV JEM-1400Plus transmission electron microscope and the older model JEOL JEM-1200EXII.

JEOL USA  
[www.jeolusa.com](http://www.jeolusa.com)

## FEI Launches PerGeos Software for Oil and Gas Exploration and Production

FEI announced PerGeos™, the industry's first comprehensive digital rock software that helps geoscientists rapidly interpret and model digital rock imagery so that exploration and production (E&P) engineers can obtain meaningful, actionable data quickly and easily. PerGeos provides a better understanding of formation features and physical property of reservoir rock. Using PerGeos, core analysts, geologists, and petrophysicists can integrate data from multiple sources and share descriptions and statistics using a common platform.

FEI Company  
[www.fei.com](http://www.fei.com)