

## IndustryNews

### New President Appointed at Princeton Instruments

Princeton Instruments is pleased to announce the promotion of William Asher to president of Princeton Instruments. Mr. Asher previously held the position of vice president of product development and engineering for the past eight years. Prior to working at Princeton Instruments, Mr. Asher was general manager of Balzers Optical Corporation and executive vice president of operations and engineering at Boston Advanced Technologies.

Princeton Instruments  
www.princetoninstruments.com

### Vision Source Appointed as Authorized Distributor for Leica Biosystems's Family of Clinical Microscopes

Vision Source announced their appointment as UK-authorized distributors for the Leica Biosystems's range of clinical microscopes. Further to acquiring the assets and the hiring of the staff from Leica's former dealers, Optivision, Vision Source is committed to a seamless integration of Leica's products into their portfolio, offering users, old and new, continued excellent service and support.

Vision Source Limited  
www.visionsource.co.uk

### Topspin Extends Analytical Capabilities of JEOL ARM

ASU recently installed tools that enhance the analytical capabilities of their JEOL ARM200F aberration-corrected electron microscope. Topspin is a digital STEM, beam precession, and analytical experiment framework tool. The system uses the scanning coils or deflection coils of a TEM to collect precession electron diffraction patterns. Developed in partnership with Tempe-based AppFive and Brussels-based NanoMEGAS, Topspin allows researchers to perform routine advanced analytical experiments inside an electron microscope in ways previously not possible.

Arizona State University  
http://le-csss.asu.edu/node/311

### Princeton Instruments's IsoPlane Spectrograph Wins R&D 100 Award



Princeton Instruments announces the company's IsoPlane SCT-320 spectrograph has been named as a recipient of the prestigious R&D 100 Award for 2013. Award entries are judged by experts chosen from professional consultants, university faculty, and industrial researchers with expertise and experience in the areas they are judging. Based on the judges' votes and written comments, the editors of *R&D Magazine* determine the top 100 technologies of 2013.

Princeton Instruments  
www.princetoninstruments.com

### attocube systems AG was Honored as One of Germany's TOP Innovative Companies

On July 5th, the country's most innovative small- and medium-sized enterprises gathered for a very special kind of summit meeting in Berlin. The renowned TOP100 innovation award was given to the most important innovation drivers of the country. attocube systems was placed second, and project mentor Ranga Yogeshwar congratulated company founder Dr. Dirk Haft on this great success.

attocube systems AG  
www.attocube.com

### JPK Reports on the Development of High-Resolution Imaging

JPK Instruments reports on how researchers from Kanazawa University in Japan have used the NanoWizard®3 AFM to push the boundaries of high-resolution imaging on large objects. Professor Takeshi Fukuma runs a research group in the Division of Electronic Engineering and Computer Science at Kanazawa University in Japan. The Fukuma Laboratory focuses on molecular-scale analysis and measurements of biological phenomena using atomic force microscopy (AFM).

JPK Instruments AG  
www.jpk.com

### Microscopy Devices Market—Global Industry Forecast, 2012–2018

Microscopy devices find major application in research and development, in industries such as nanotechnology, material sciences, semiconductors, life sciences, and other precision manufacturing industries. This report estimates the global market for microscopy devices in terms of revenue (USD million) for the period 2012–2018, keeping 2011 as the base year. The microscopy devices market is segmented into three major types, namely market by-products, market by applications, and market by geography.

Research and Markets Ltd  
www.researchandmarkets.com

### Andor sCMOS Cameras Exhibit 100 fps in $\mu$ Manager



Andor Technology plc announced performance advancements for their Neo and Zyla sCMOS cameras. Both cameras are fully functional in  $\mu$ Manager, now achieving sustained full-resolution frame rates of up to 100 fps, benefiting from recent  $\mu$ Manager architectural improvements. Andor's sCMOS cameras represent a perfect way to radically upgrade microscope system performance, bettering existing interline CCD cameras by a factor of 5 $\times$  sensitivity, 10 $\times$  dynamic range, 16 $\times$  speed, and 4 $\times$  larger field of view.

Andor Technology plc  
www.andor.com

## Online Tool for Determining the Optimal Fluorescence Filter Cube Set



Leica Microsystems launched Leica FluoScout™, an online tool that enables users of fluorescence microscopes to determine the optimal filter cube or filter set for achieving excellent imaging results. Leica FluoScout™ is accessed at

[www.leica-microsystems.com/FluoScout](http://www.leica-microsystems.com/FluoScout). To achieve excellent results in fluorescence microscopy, the light source, the fluorophores, and the filter cubes have to be matched. A perfect fit of excitation and emission filter set maximizes the efficiency of excitation and emission to provide crisp images.

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

## Bruker is Awarding Excellence

Bruker's Excellence in X-Ray Diffraction scholarship program awards \$4,000 to the full-time graduate or undergraduate student at any recognized university who submits the most unique application report in X-ray diffraction performed on a Bruker diffractometer. For the 2011–2012 competition, technical paper submissions were judged by a panel of three recognized experts in academia and industry. The highest-rated paper in the powder or materials X-ray diffraction category was by Masoud Allahkarami from Oklahoma State University.

Bruker Corporation  
<http://my.bruker.com>

## Olympus IX3 Inverted Microscopes Earn Prestigious 2013 R&D 100 Award

An Olympus inverted microscope series has been recognized as among the 100 most technologically significant products introduced last year. With the IX83 and IX73 microscopes, researchers just slide modules (like drawers) in and out of the light path to create instruments with new capabilities. The microscopes deliver outstanding optical performance, with a fly-eye fluorescence illuminator and large tube lens design for even fluorescence across large fields of view.

Olympus America Inc., Scientific Equipment Group  
[www.olympusamerica.com/ix3](http://www.olympusamerica.com/ix3)

## EDAX Increases the Speed and Productivity of its Electron Backscatter Diffraction Cameras



EDAX Inc. announced a more than 25-percent increase in the performance of its Hikari XP and Digiview EBSD cameras. The Hikari XP camera now delivers up to 1,000 patterns per second. The camera offers outstanding performance across the complete range of EBSD applications, from high-speed analysis for process development and quality control to high-sensitivity indexing at low beam currents and low accelerating voltages for improved spatial resolution.

EDAX, Inc.  
[www.edax.com](http://www.edax.com)

## Hardcover Catalog on Precision Positioning and Motion Control Systems

The 2013/14 hardcover catalog is now available from PI (Physik Instrumente). The new publication covers PI and PI miCos precision positioning technologies and product families from motorized linear translation stages to 6-axis parallel kinematic positioners and from piezo flexure nanopositioning systems to high-speed ceramic linear motors, along with the associated drivers and motion controllers. The catalog contains fundamental information on several micropositioning, nanopositioning, and related technologies.

PI Physik Instrumente  
[www.pi-usa.us/pdf/PI\\_Precision\\_Positioning\\_Stages\\_Complete\\_Catalog\\_2013-14.pdf](http://www.pi-usa.us/pdf/PI_Precision_Positioning_Stages_Complete_Catalog_2013-14.pdf)

## NanoSight Adds DLS Capability to NTA Systems, Accelerating Aggregation Studies

NanoSight announced the launch of the first DLS-enabled version of their widely used NS500 instrument. For the first time these two techniques come together in one instrument, designated NanoSight NS500<sup>+DLS</sup>. This gives all the benefit of NTA in high-resolution sizing, with DLS extending the lower detection limit to 4 nm. In the NS500<sup>+DLS</sup>, the DLS software is integrated into the NTA suite, providing easy interchange between NTA and DLS data collection.

NanoSight Limited  
[www.nanosight.com](http://www.nanosight.com)

## Advanced Thin Films Wins 2013 OIC Manufacturing Challenge

Advanced Thin Films optical designers, Darren Berns and Zach Gerig, were acknowledged recently for achieving the best result in the 2013 Optical Interference Coatings Conference Manufacturing Problem Contest. The objective of the contest was to provide valuable insight into the present state-of-the-art in the design and manufacturing of thin-film optical coatings. The results were compared against 14 other teams. Advanced Thin Films's design was tied for the best result with two other companies.

Advanced Thin Films (Precision Photonics)  
[www.atf-ppc.com](http://www.atf-ppc.com)

## NORTEM JEOL Competence Center for TEM in Trondheim, Norway



SINTEF and NTNU established the first of two national TEM infrastructure nodes within the NORTEM project. The facility is equipped with three new TEMs: a JEOL JEM-ARM200F, a JEOL JEM-2100F, and a JEOL-JEM 2100. The three instruments provide all levels of analyses by TEM, from the highest analytical performance available for advanced studies of structure, composition, and electronic structure, to more routine imaging, diffraction, and analysis in materials science and physics.

JEOL (Germany) GmbH  
[www.ntnu.edu/physics/nortem](http://www.ntnu.edu/physics/nortem)