Wednesday, June 8, 2016

PHOTONICS spectra

PHOTONICS MEDIA

Monthly newsletter from the editors of Photonics Spectra, with features, popular topics, new products, and what's coming in the next issue.

From the Editor's Desk

Microscopy Brings New Worlds Into Focus

MIKE WHEELER, MANAGING EDITOR

Though the father-son duo of Hans and Zacharias Janssen is widely credited with developing the first microscope in the late 16th century, it was the English scholar Robert Hooke who inspired widespread public interest in the new science of microscopy. His seminal work, "Micrographia," published in 1665, included never-before-seen illustrations of magnified insects and plants, just as he saw them from his microscope.

Read Article

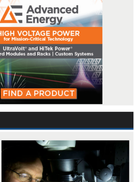
Ultrashort Pulse Laser Micromachining Surpasses Previous Limitations

With the power of ultrashort pulse laser systems on the rise, achieving dynamically and synchronously adaptable pulse repetition rates in the MHz range is the key to higher throughput.

Read Article

Lighting Up Microscopes: Advances and Emerging Sources

Spanning more wavelengths with greater intensity in ever smaller and cheaper packages, illumination systems are a make-or-break component in any modern microscope. Microscope developers are a resourceful bunch, opting to use the light source available to them at the time to pee at or below the surface of various materials. Even dating back to the 17th century, Galileo used sunlight to produce the very first optical microscope.

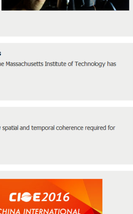


Read Article

Call for Nominations! Beacons of the Photonics Industry

Beacons are the photonics industry's luminaries who are guiding the scientific and business communities to optics and photonics through their work in five categories. Please submit a separate entry for each Beacon you wish to nominate. Deadline for submissions is July 1, 2016. The results of the survey will be published in the August issue of Photonics Spectra.

Nomination form

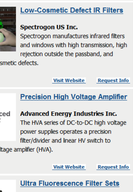


Read Article

In Case You Missed It

Electrochromic Polymers May Mean Brighter Future for Flat-Panel Displays

The use of super-thin layers of inexpensive electrochromic polymers to generate sharp colors that can be quickly changed may lead to a less expensive way to develop flat-panel displays that are also brighter, cleaner and more energy efficient.



Read Article

LIGO Awarded Special Breakthrough Prize in Fundamental Physics

The Laser Interferometer Gravitational-Wave Observatory (LIGO) operated by Caltech and the Massachusetts Institute of Technology has been awarded the Special Breakthrough Prize in Fundamental Physics.

Read Article

An Alternative to LEDs for Full-Field Imaging

A broadband fiber amplified spontaneous emission light source delivers the brightness and low spatial and temporal coherence required for optical coherence tomography and ranging applications.

Read Article

Featured Products

Capacitors Designed for Diode Lasers

Evans Capacitor Co.

Arborne or handheld, diode lasers require compact, lightweight, rugged and reliable capacitors.

Visit Website | Request Info

OpTest® Lens Measurement System

OptikosCorporation

OpTest®Lens Measurement Systems perform tests in situations similar to actual applications, replicating field angle positions, conjugate ratios, spectral regions and image plane architecture.

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TrueMode Fiber Laser Cavities

OFS

OFS has been developing and manufacturing high power components and modules since the early years of the lasers and continues to introduce new products in this area today.

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UV/VIS/IR Custom Coatings

Newport Thin Film Laboratory Inc.

NTFL is a fully equipped clean room coating facility specializing in the design and manufacture of vacuum deposited optical thin films used in the ultraviolet, visible and infrared spectrum.

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Thin-Film Coatings

OptoSigma Corp.

For more than twenty years, OptoSigma has been at the forefront of the optical components industry, manufacturing thin-film coatings to precision standards.

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Low-Cosmetic Defect IR Filters

Spectrogon US Inc.

Spectrogon manufactures infrared filters and windows with high transmission, high rejection outside the passband, and introducing low cosmetic defects.

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PICOEXPLORER™ Photo Absorption Sensor (PAS)

USHIO America Inc.

The USHIO PICOEXPLORER™ model PAS-110 handheld photo absorption sensor utilizes patent pending, Silicone Optical Technology.

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Precision High Voltage Amplifier

Advanced Energy Industries Inc.

The HVA series of DC-to-DC high voltage power supplies operates a precision filter/divider and linear HV switch to produce a high voltage amplifier (HVA).

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Specialty Optical Fibers

Fibercore

Fibercore is a leading innovator, designer and manufacturer of specialty optical fiber, serving customers across the world.

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Ultra Fluorescence Filter Sets

Alluxa

Alluxa's ULTRA Series of fluorescence filter sets are designed to provide the highest level of performance currently available for off-the-shelf products.

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SWIR Cameras

Raptor Photonics Ltd.

The Ninox 640 from Raptor Photonics enables high-speed visible and shortwave infrared imaging.

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Arbitrary Waveform Generator

Zurich Instruments AG

With the UHF-AWG 1.8 GSa/s Arbitrary Waveform Generator, Zurich Instruments presents a unique solution for the generation and acquisition of complex signals.

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Webinars

New Optics Drawings Standards

Thu, Jun 30, 2016 1:00 PM - 2:00 PM EDT

Dave Akens, the leader of the project to adopt ISO 10110 as an American National Standard, will provide an introduction of OP1.0110, the American National Standard for optics drawings. He will discuss the format of the drawings, as well as an overview of the tolerance notations for things like glass parameters, surface waves front, imperfections and texture. He will also explain how OP1.0110 differs from ISO 10110 and provide insight into how both standards will change in the coming decade.

Dave Akens is President and founder of Sarvoy Optics Corp. and is the head of the American delegation to ISO TC 172 SC1 which published ISO 10110. He is the Secretary of the American Standards Council for Optics, ASC-OP, which published OP1.0110, the American National Standard for optics drawings.

Register Now

Coming in July...

Features

Solid-State Lasers; Machine Vision Optics; Imaging Advances; Lighting: Multiphoton Microscopy

Issue Bonus

Asia-Pacific Regional Report

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazine *Photonics Spectra*. Please submit an informal 100-word abstract to Managing Editor Mike Wheeler at mike.wheeler@photonics.com or use our online submission form www.photonics.com/submitfeature.aspx

About *Photonics Spectra*

Since 1967, *Photonics Spectra* magazine has defined the science and industry of photonics, providing both technical and practical information for every aspect of the global industry and promoting an international dialogue among the engineers, scientists and end users who develop, commercialize and buy photonics products.

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