

PHOTONICS spectra



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



An Eye to the Past and a View of the Future

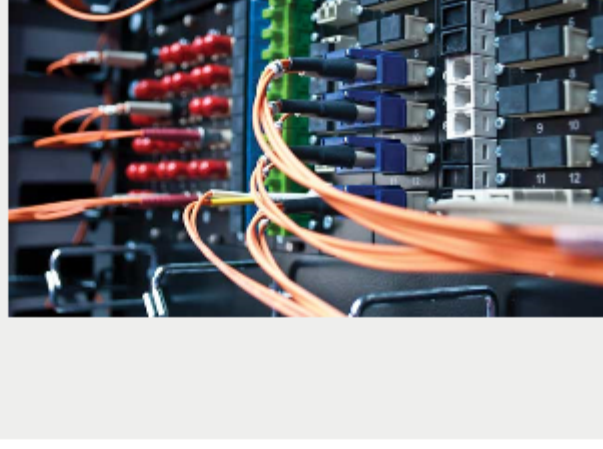
MIKE WHEELER, MANAGING EDITOR

This year Photonics Spectra celebrates its 50th anniversary. In the January issue our editors take a look back at the first 50 years, and also look forward to the future impact of photonic integrated circuits in various industries.

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Data Centers and Telecommunications

Today's data centers deliver millions of services, processing terabytes of data per second around the world for billions of devices. Considering the volume, it's amazing that we ever have a signal. As the need for connectivity increases, data centers are under constant pressure to add more and more massive racks of servers and fiber optic interconnects, which takes money and time, energy and real estate.



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Medicine and the Life Sciences

Imagine testing for a host of diseases and conditions in a single sample of blood, saliva, urine or even a few tear drops. Cancers, heart conditions, viruses, food allergies and sepsis are just some of the tests that could be carried out using next-generation lab-on-a-chip concepts that are being explored and patented by today's top researchers.



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In Case You Missed It

OLEDs Step In Where Design Matters

The near-ideal visual characteristics of OLED displays mean OLEDs will thrive as a mainstream display technology in coming years, while their compatibility with flexible and transparent materials is creating a new market for displays.



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Plasmonics Simplify Printing and Imaging in Color and Infrared

A new manufacturing technique promises to bring a simplified form of multispectral imaging into daily use. Using existing materials and production approaches that are scalable and inexpensive, Duke University researchers have found a way to print and image across a range of colors extending into the infrared.

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Photon Source Lighting the Way for Quantum Computing

As today's computers show fundamental limitations in calculation capacity for future use, a scalable, electrically driven photon source could make quantum computing a reality sooner than expected.

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Featured Products



UV-enhanced Silicon Photodetector

Electro-Optics Technology Inc.
For time domain and frequency response measurements, Electro-Optics Technology (EOT) has released the new ET-2070 Silicon UV-enhanced Photodetector featuring a 3ns rise time and fall time and a large active area of 2.55mm.

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Splicing and Glass Processing Systems

AFL
The LAZERMasteR LZM-110M, LZM-110P, LZM-110M+ and LZM-110P+ splicing and glass processing systems from AFL use a CO2 laser heat source to perform

splicing, tapering, lensing or other glass shaping operations with glass diameters up to 2.3 mm.

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Fast Imaging Photometer

Gooch & Housego Orlando
The Fast Imaging Photometer (FIP) is an ultra-high speed imaging photometer that is ideal for aerospace, defense, automotive and lighting applications. It is NIST-traceable, compact and rugged, affordable and an ideal upgrade from spot photometry systems.

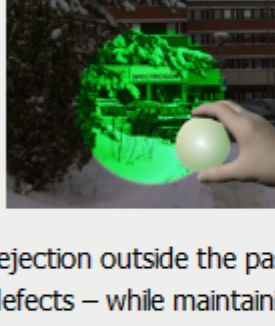
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Thin-Film Coatings

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 for Thermal Imaging

Spectrogon US
Spectrogon manufactures infrared filters and windows with high transmission, high rejection outside the passband, and introducing low cosmetic defects -- while maintaining excellent coating uniformity --- for thermal imaging applications such as cryogenically cooled IR detectors and for uncooled microbolometers.

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Zero Noise Photon Counting Camera

PHOTONIS Technologies
The Imaging Photon Camera is ideal for the most demanding low light and high speed applications, such as super-resolution molecule imaging technologies, high speed live cell imaging or fast astronomy events.

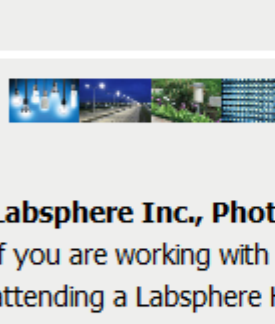
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Ultraviolet Helium Cadmium Lasers

Kimmon Koha USA Inc.
Kimmon Koha, the world leader in Helium Cadmium lasers, manufactures a full line of ultraviolet (325nm) HeCd lasers for use in a wide variety of applications.

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Light Metrology Hands-On Workshops

Labsphere Inc., Photonics
If you are working with LEDs or SSL lighting products of any type, attending a LabSphere Hands-On Light Metrology workshop will help you to:

- Give you and your business a competitive advantage
- Understand the jargon and metrics used to express light...

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Laurin Publishing Announces Poster Series

Photonics Media
Laurin Publishing Co., whose titles include Photonics Spectra and BioPhotonics magazines and the Photonics Buyers' Guide, announces the availability of two posters featuring art that takes a lighthearted look at the early days of the photonics industry.

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Cobolt Introduces 553 nm DPL Laser with Direct Modulation

Cobolt AB
Cobolt AB, Swedish manufacturer of high performance lasers, introduces a new wavelength of 553 nm on the Cobolt 06-01 Series of plug and play CW lasers.

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Webinars

An Overview of AFL's Fiber Processing Software for 100-Series Machines

Tue, Feb 7, 2017 1:00 PM - 2:00 PM EST
This webinar, presented by AFL, will cover the shaping, prototyping and data collection capabilities of AFL's Fiber Processing Software (FPS). Whether you are in the business of advanced fiber shaping or you are producing dozens of components a day, you can shape your skills and benefit your business by learning what AFL software is capable of doing for you. Discussion will include a demonstration of the company's new visual scripting interface, SpliceScript.

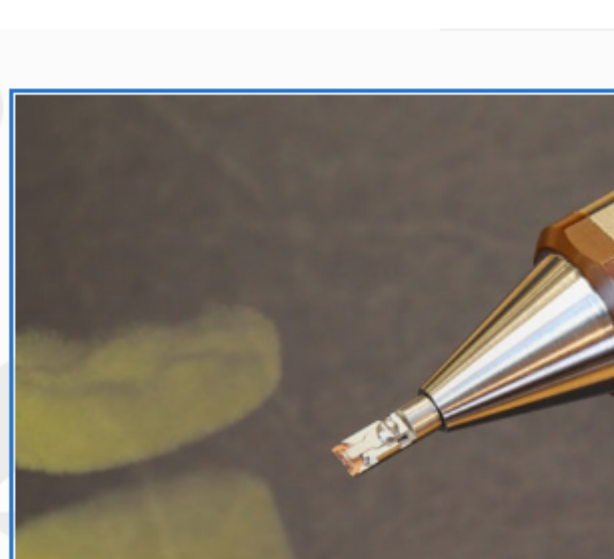
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Characterizing Photonics Devices with Transmission Electron Microscopy

Fri, Feb 10, 2017 1:00 PM - 2:00 PM EST
A new generation of transmission electron microscopes (TEMs) have become available which are capable of image resolutions better than 0.1 nm and spectroscopic resolutions better than 0.4 eV. Special purpose sample stages can convert these microscopes into true experimental nanomaterials laboratories. What does this mean for photonics? Join Brookhaven's Eric Stach to learn about ways that TEM can be used to take images of the structure of photonics devices at the Angstrom to micron scale; how diffraction can be used to characterize crystal structure; and how chemical spectroscopy can be used to determine chemical speciation and electronic structure at the nanoscale.

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Coming in February...

Features

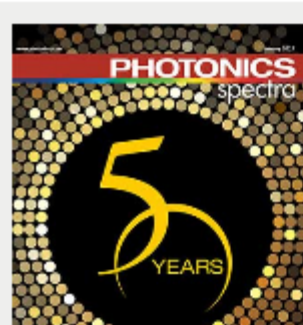
Lasers for Additive Manufacturing; Raman Spectroscopy; Graphene; Multiphoton Microscopy; Optical Networks

Issue Bonus

Spectroscopy, with directory; Enhanced Advertiser Listing; Market Report; Supplier New Product 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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