

# 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



### Optimal Conditions, Great Viewing

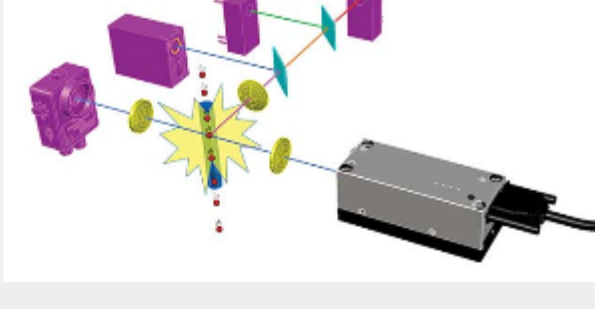
MIKE WHEELER, MANAGING EDITOR

Nestled in the Andes mountain range in the Atacama Desert in Chile sits the Las Campanas Observatory. At an elevation of almost 8,000 feet, the remote location is prized for its dark skies, excellent weather and superior visibility. Soon it will be home to the Giant Magellan Telescope (GMT) now under construction.

[Read Article](#) [f](#) [g+](#) [in](#) [t](#)

## In Vitro Diagnostics, Immunology Spurring Advances in Flow Cytometry

Cells are the building blocks of organisms. From yeast and bacteria to elephants and whales, cells are the fundamental units of both biological structure and function. They have long been the subject of intense study: to better understand how they work, to help develop safer and more effective drug compounds, and to serve as diagnostic proxies of disease.



[Read Article](#) [f](#) [g+](#) [in](#) [t](#)

## Optical Materials of Tomorrow

From silicon photonics and quantum dots to metamaterials and carbon nanotubes, innovative materials promise a faster, brighter and more integrated future. While some materials have already enjoyed a measure of commercial success, for others, the future promises anything from niche applications right up to market disruption and displacement of existing technologies.



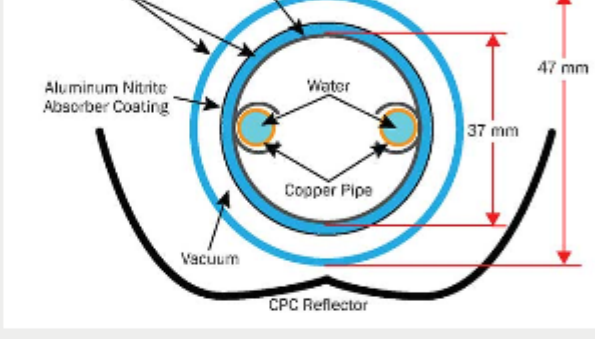
[Read Article](#) [f](#) [g+](#) [in](#) [t](#)

sponsors

## In Case You Missed It

### Maximum Exposure: Ray-Tracing Software Optimizes Reflector Design

The concentrated solar market is often overshadowed by photovoltaic (PV) panels, yet the market segment is expected to grow by nearly 20 percent annually through 2020. Concentrated solar power — or CSP — has unique performance advantages over PV panels, especially when tied to the electrical grid.



[Read Article](#) [f](#) [g+](#) [in](#) [t](#)

### Printing Shape-Changing 3D Structures With Light

A high-resolution 3D printing process that uses light from a projector to print patterns on shape-memory polymers (SMPs) was used to fabricate structures that can morph back to their original shape quickly.

[Read Article](#) [f](#) [g+](#) [in](#) [t](#)

### Optical Vortex Discovery Could Lead to Microscopy, Fiber Optics Advances

3D ring-shaped light structures, generated by high-intensity lasers, have been identified and could lead to new opportunities for the use of lasers in microscopy and telecommunications.

[Read Article](#) [f](#) [g+](#) [in](#) [t](#)

sponsors

## Featured Products



### Splicing and Glass Processing Systems

AFL

The LAZERMaster LQM-110M, LQM-110P, LQM-110M+ and LQM-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.

[Visit Website](#) [Request Info](#)



### TrueMode™ Fiber Laser Cavities

OFS

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

[Visit Website](#) [Request Info](#)

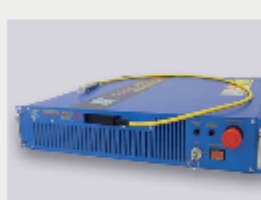


### Expanded Alluxa Filter Catalog

Alluxa

Alluxa's online optical filter catalog showcases Alluxa's standard high performance narrowband and life sciences solutions. New ultra-narrow and life sciences filters are being added to the catalog each week.

[Visit Website](#) [Request Info](#)



### High Specification CW Polarized Fiber Laser for Research Applications

Kimmon Koha USA Inc.

Introducing Kimmon Koha's model KKFL-20 fiber laser. With its single mode operation and a polarization ratio of >250:1 it is a perfect pumping source for SHG / THG.

[Visit Website](#) [Request Info](#)

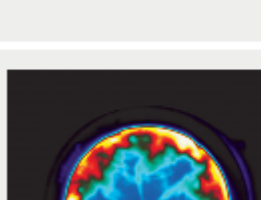


### Precision Impedance Analyzer and LCR Meter

Zurich Instruments AG

With the launch of the 5 MHz MFIA, Zurich Instruments is introducing a new type of impedance analyzer and precision LCR meter. The instrument is based on Zurich Instruments' proven lock-in amplifier technology.

[Visit Website](#) [Request Info](#)

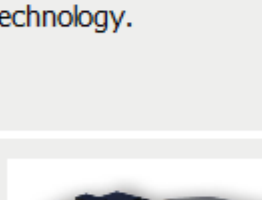


### FLIR High Speed Cameras – The Need for Speed

FLIR Systems Inc.

The FLIR X6900sc is an extraordinarily fast, highly sensitive MWIR camera designed with advanced triggering, on-camera RAM/SSD recording, and a four-position motorized filter wheel.

[Visit Website](#) [Request Info](#)

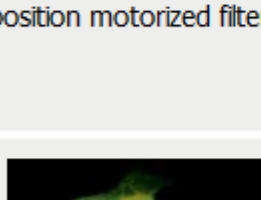


### Integrated Sphere Source

Gooch & Housego Orlando

Gooch & Housego has announced the OL 455-6KSA Elongated Integrating Sphere Source. The device features an elongated sphere design to reduce the nonuniformity by a factor of 10x.

[Visit Website](#) [Request Info](#)



### Unprecedented Luminescence Lifetime Imaging Camera: the pco.film

PCO-TECH Inc.

PCO introduces a new kind of camera system. The pco.film is the first luminescence lifetime imaging camera. The camera has a revolutionary image sensor and makes use of fluorescence lifetime imaging in the frequency domain, making it suitable for numerous applications in the field of biomedical research.

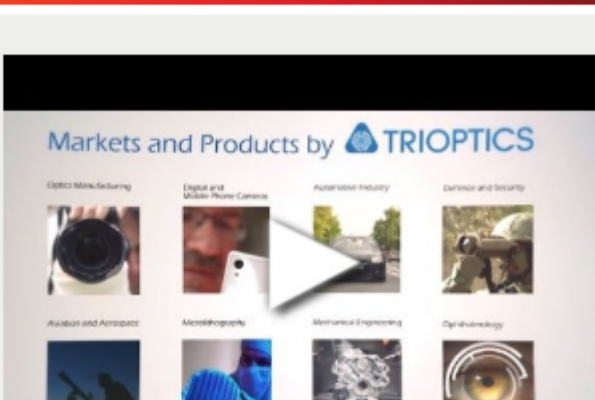
[Visit Website](#) [Request Info](#)

## Featured Video

### TRIOPTICS Applications and Product Portfolio

TRIOPTICS offers the world's most comprehensive range of optical measuring, testing and manufacturing technology for development, quality control and production. Our expertise ranges from the inspection of single optical components to the assembly and testing of complex camera systems. TRIOPTICS products are used in all industries that work on the manufacture, testing and application of optical assemblies.

[Watch Now](#)



## Coming in December...

### Features

Lasers for Medical Applications; Optical Coatings; Test & Measurement; Light Sources; Terahertz Imaging

### Issue Bonus

Corporate Profiles; SPIE Photonics West Preview

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

Stay current with a **FREE subscription** to the digital or print edition.

[View Digital Edition](#) [Subscribe Free](#)