

SPECTROSCOPY

Tech Pulse

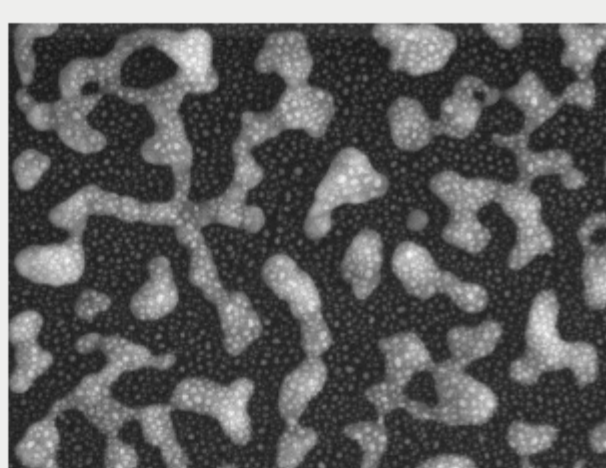


August 2018

Spectroscopy Tech Pulse is a special edition newsletter from Photonics Media covering key developments in spectroscopy technology. Manage your Photonics Media membership at Photonics.com/subscribe.

Sensing Chip Uses Raman Spectroscopy to Detect Cocaine in Minutes

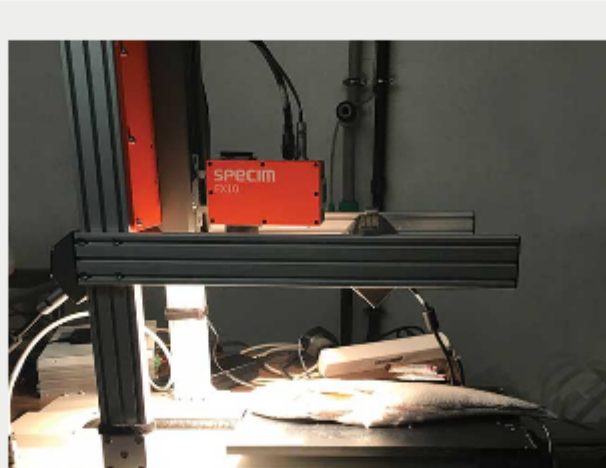
A chemical sensing chip, developed for use with surface-enhanced Raman spectroscopy (SERS), has demonstrated the ability to detect the chemical fingerprint of cocaine in biological samples. In the future, the technology could be used to detect the presence of other drugs, including marijuana, and could be integrated into a hand-held, portable device for on-site testing.



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Hyperspectral Imaging Fights Food Waste

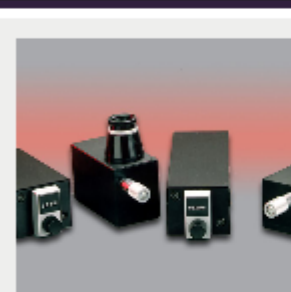
For food producers and retailers, quality control and assurance still rely on manual, lengthy, destructive processes, such as visual inspections, sensory evaluation, and sample-based testing. Noninvasive, rapid, objective techniques for monitoring food products are essential to improving the sorting and distribution processes. This is where hyperspectral imaging has great promise.



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Products



Digital Mini-Chrom Monochromators

Optometrics Corporation
The Digital Mini-Chrom (DMC) is a manually operated monochromator that utilizes a digital counter for wavelength selection. Rotation of the dial causes, via a precision lead screw/ sine bar mechanism, rotation of the diffraction grating which positions the selected wavelength at the exit slit.

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771 Series Laser Spectrum Analyzer

Bristol Instruments Inc.
The 771 Series Laser Spectrum Analyzer operates as both a high-resolution spectrum analyzer and a high-accuracy wavelength meter. With spectral resolution up to 2 GHz, wavelength accuracy as high as ± 0.2 parts per million, and an optical rejection ratio of more than 40 dB, the model 771 provides the most detailed information about a laser's spectral properties.

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Short-Arc Mercury Lamp for Microscopy Systems

Ushio America Inc.
Ushio's USH-103D short-arc mercury lamps are designed for use in all 100W fluorescent microscope systems. With an extended life of 300 hours, the lamp consists of enhanced electrode design for precise positioning and high arc stability to ensure consistent quality and high performance.

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Hyperion CIE 1931 XYZ Colorimeter

Admesy BV
The Hyperion series colorimeter from Admesy is the successor of our successful MSE platform colorimeter. The Hyperion offers even better filter characteristics compared to other colorimeters and ultra-high sensitivity packed in a typical robust and compact Admesy package.

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New Wavelengths for Raman by Cobolt

Cobolt AB
Cobolt AB, a part of HÜBNER Photonics, introduces new wavelengths on the 08-01 Series of 457 nm, 473 nm, 515 nm, 660 nm and 1064 nm, complementing already available wavelengths of 405 nm, 532 nm, 561 nm and 785 nm. The 08-01 Series of single-frequency and narrow-linewidth lasers are ideal for Raman spectroscopy applications.

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BaySpec's New SnapShot Imager - GoldenEye TM

BaySpec Inc.
BaySpec's newly released GoldenEye™ is the only Snapshot imager covering the extended range from 400nm to 1700nm. Using FT-PI BaySpec's proprietary technology, the novel imager features high sensitivity as compared to other imagers, and is particularly suitable for low light level applications, such as fluorescence imaging.

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More News

Point-of-Care Optics Helps Halt the Spread of Infectious Diseases

Medical experts and health care companies around the world recognize the value of developing ways to diagnose infectious diseases noninvasively at the point of care (POC). Many believe that readily available optical componentry that can be scaled up for volume production provides the best route to success.

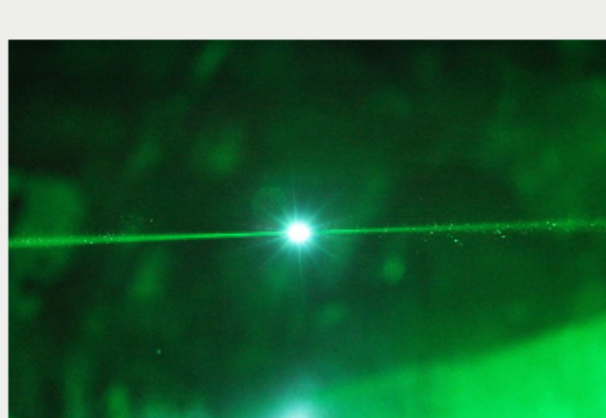
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LIBS Technique Analyzes Contaminants in Levitated Water Drops

A new approach to detecting metal contaminants in water involves the use of laser-induced breakdown spectroscopy (LIBS) to analyze the presence of heavy metals, such as mercury, in water drops that are levitated in midair using ultrasonic waves.

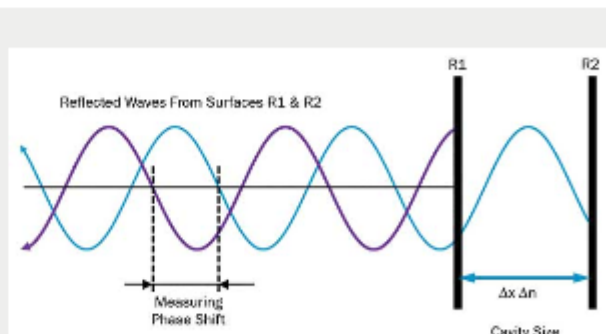
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Europe Drives Fiber Sensor Development for Industrial Apps

Currently, fiber-centric technology is mature enough to impact applications other than telecommunications, such as in sensing. New technologies in fiber optics will help the industrial sector to improve problem-solving and obtain rapid information.

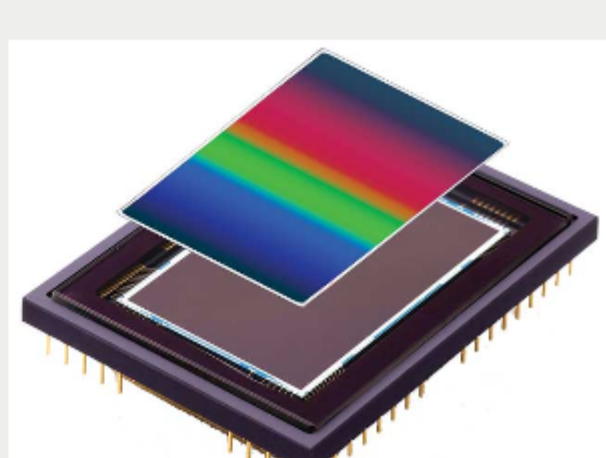
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Continuously Variable Bandpass Filters Aid Optics and HSI

The combination of continuously variable bandpass filters and silicon detectors allows the design of compact, robust, and affordable HSI detectors that offer several advantages over conventional approaches, including huge aperture compared with grating and prism, short measurement time, and high suppression of stray light.

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Webinars

Continuously Variable Filters for Spectroscopy, HSI, and Fluorescence Diagnostics

Thu, Oct 18, 2018 10:00 AM - 11:00 AM EDT
This webinar will introduce you to advances in variable filters, especially in the areas of transmission and blocking. You will learn about the properties and performance of variable filters, and how they are being used to increase the robustness and affordability of applications in the areas of hyperspectral imaging, spectroscopy, and fluorescence diagnostics. This webinar is sponsored by Delta Optical Thin Film A/S.

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