

TECH PULSE

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](https://Photonics.com/subscribe).

A podcast from Photonics Media

**Inline Spectroscopy Boosts Pharmaceutical Processing and Quality**

When quality is ensured in-line at every stage of pharmaceuticals manufacturing, significant upfront costs are reduced by gains in productivity, and engineers can better optimize processes. Near-infrared (NIR) spectroscopy is uniquely capable of supporting this quality-by-design environment.



[Read Article](#)

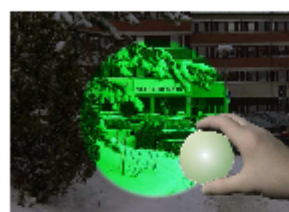
**Hyperspectral Imaging and AI Speed Up Necessary Inspection for Organic Electronics**

Fraunhofer IWS researchers, working under the European Union (EU) project OledSolar, introduced an approach for the monitoring, observation, and inspection of organic electronics in the manufacturing and development stages. The hyperspectral vision and measurement technique pairs with an AI model.



[Read Article](#)

**Featured Products**



[IR Filters for Thermal Imaging and Gas Detection](#)

**Spectrogon US**

Spectrogon manufactures infrared filters and windows with high transmission, high rejection outside the passband, while maintaining excellent coating uniformity — for thermal imaging and gas detection applications such as cryogenically cooled IR detectors and for uncooled microbolometers.

[Visit Website](#)

[Request Info](#)



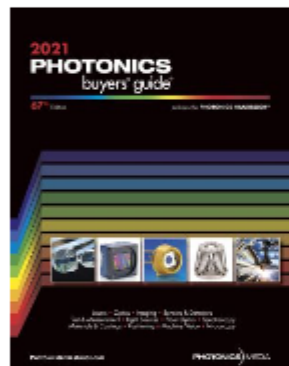
[WITec ParticleScout™ Enhanced for 2021](#)

**WITec GmbH**

WITec's ParticleScout automated microparticle analysis tool now offers even greater speed, precision and user-friendliness. Now features integration time optimization to reduce total measurement time, vignetting correction, smart zoom, sample illumination options, multiple sample area targeting, report templates, and more.

[Visit Website](#)

[Request Info](#)



[The 2021 Photonics Buyers' Guide](#)

**Photonics Media**

If you buy products and services related to lasers, optics, imaging, sensors, detectors, test and measurement, light sources, fiber optics, spectroscopy, materials and coatings -- you need the Photonics Buyers' Guide. Our editors verify all 4000+ company listings annually, making it the most trusted, accurate and...

[Visit Website](#)

[Request Info](#)



[Avantes' Improved, Cooled SensLine Spectrometer](#)

**Avantes BV**

AvaSpec SensLine spectrometers are all about sensitivity. For those measurements under hard conditions, low emissions: the SensLine gives you that extra power. For typical demanding applications. Discover the AvaSpec-ULS2048x64TEC-EVO spectrometer with improved electronics and cooling. Your ideal spectrometer for...

[Visit Website](#)

[Request Info](#)

**More News**

**Consortium Uses Infrared Imaging to Detect Brain Damage in Infants**

The "TinyBrains" health consortium, run in conjunction with ICFO (The Institute of Photonic Sciences), is developing a wearable device that enables real-time monitoring of newborn babies using light to measure the cause of a number of neurodevelopmental disabilities, allowing them to be treated in time to prevent permanent damage.

[Read Article](#)

**Raman Spectroscopy Platform Delivers Insights on Intrinsically Disordered Proteins**

Researchers from the Hong Kong University of Science and Technology (HKUST) developed optical tweezers-coupled Raman spectroscopy that can directly probe the structural features of alpha-synuclein, an intrinsically disordered protein (IDP) that is closely linked to Parkinson's disease.

[Read Article](#)

**Electroluminescence at THz Frequencies Brings Silicon QCLs into Focus**

An international research team based at the Institute for Quantum Electronics at ETH Zurich generated electrical light from a silicon-germanium (SiGe) semiconductor structure. That material is compatible with standard silicon device fabrication processes — giving the development meaning as a potential alternate approach to building a laser on silicon.

[Read Article](#)

**Microcomb Promises Durability in Biophotonics, Metrological Applications**

A microcomb developed by researchers from Chalmers University of Technology has the potential to herald significant advances in a variety of technologies, spanning metrology and optical communication. The design is based on two microresonators and is coherent, tunable, and reproducible, and has up to 10x higher net conversion efficiency than current state-of-the-art devices.

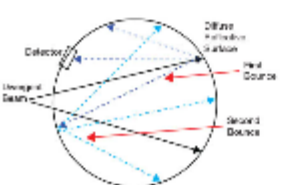
[Read Article](#)

**Upcoming Webinars**

**Measuring the Power and Beam Profile of Divergent Laser Sources**

Thu, May 20, 2021 1:00 PM - 2:00 PM EDT

Lasers with large beam divergence are used in a number of applications, such as remote sensing, optical communications, and materials processing. In this webinar, Derrick Peterman, Ph.D., will discuss methods for reliably characterizing the beam power and profile of divergent sources, so that users will be able to better understand how their lasers are performing in critical applications. Presented by Ophir, an MKS Instruments company.



[Register Now](#)



We respect your time and privacy. You are receiving this email because you are a Photonics Media subscriber, and/or a member of our website, Photonics.com. You may use the links below to manage your subscriptions or contact us.

Questions: [info@photonics.com](mailto:info@photonics.com)

[Unsubscribe](#) | [Subscribe](#) | [Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949

© 1996 - 2021 Laurin Publishing. All rights reserved. Photonics.com is Registered with the U.S. Patent & Trademark Office. Reproduction in whole or in part without permission is prohibited.