

# NEW PRODUCTS

## Focus on lasers, imaging, microscopy, and nanoscience

The descriptions of the new products listed in this section are based on information supplied to us by the manufacturers. PHYSICS TODAY can assume no responsibility for their accuracy. For more information about a particular product, visit the website at the end of its description. Please send all new product submissions to [ptpub@aip.org](mailto:ptpub@aip.org).

**Andreas Mandelis**

### Q-switched pulsed laser at 532 nm

Hübner Photonics now offers a new wavelength in its Cobolt Tor Series of high-performance, compact, air-cooled Q-switched lasers. The Cobolt Tor XE 532 nm delivers 0.25 mJ/pulse at up to a 1 kHz repetition rate. It offers short pulse lengths of 1–3 ns and excellent pulse-to-pulse stability for a passively Q-switched laser in a TEM<sub>00</sub> beam. Jitter is less than 2 μs. Through advanced, fully integrated control electronics, the emission can be triggered from single pulses up to 1 kHz pulse trains, bursts of pulses using external or internal trigger signals, or a combination of both. The compact laser head contains all drive electronics. The Cobolt Tor XE 532 nm is designed for integration into instruments for marking, laser-induced breakdown spectroscopy, lidar, and photoacoustic microscopy applications. *Hübner Photonics Inc, 2635 N 1st St, Ste 202, San Jose, CA 95134, <https://hubner-photonics.com>*



### Laser power and pulse-width stabilization system

Calmar has introduced a power and pulse-width stabilization system for its Carmel X-series of femtosecond fiber lasers. The OptaPower system is designed for users who need to measure extremely small signal levels and require hours for data acquisition. It ensures ultrastable power and pulse-width performance from the laser system for extended periods of time and irrespective of variations in the ambient temperature. Over a room-temperature change between 17 °C and 32 °C, OptaPower provides a twofold improvement in the rms pulse-width stability and an order of magnitude improvement in rms power stability. Carmel laser systems are used for nonlinear microscopy, cancer diagnostics, phototherapy, metrology, and other applications. *Calmar Laser, 951 Commercial St, Palo Alto, CA 94303, [www.calmarlaser.com](http://www.calmarlaser.com)*



### Cryogenic Raman imaging system

WITec and Attocube have jointly developed a system that makes Raman imaging at low temperatures in high magnetic fields accessible at high spatial resolution. CryoRaman integrates Attocube's cryostat and nanopositioner technology with WITec's sensitive, modular alpha300 correlative microscope series. It offers excitation wavelengths from visible to near-IR with optimized spectrometers, operating temperatures of 1.6–300 K, patented cryogenic Raman-specific objectives, and a precise piezoelectric scan stage. Optional modules include multiwavelength excitation capabilities, automated switching from optical microscopy to spectroscopic imaging, and time-correlated single-photon counting modes. CryoRaman also introduces to cryogenic Raman microscopy the ability to detect low-wavenumber Raman peaks and full polarization control in excitation and detection. *WITec Instruments Corp, 130G Market Place Blvd, Knoxville, TN 37922, [www.witec-instruments.com](http://www.witec-instruments.com)*

