

Dear Reader,

**SuperBIN** & **Laser Quantum** are pleased to meet you!  
We welcome you to our new bi-monthly newsletter.

As we look forward to an exciting year ahead, we can begin preparation for Photonics West where we will be launching a new hands-off frequency comb with 1GHz mode spacing and high mode power in the VIS/NIR. In addition, we are inviting customers to bring along samples for testing live at our booth #1440 with the **HASSP**, our high resolution THz time domain spectrometer. We are continuing to develop the few-cycle product range of lasers and amplifiers, and have recently launched our new website, which enables finding in-depth information on our products and services much quicker and easier.

If you would like any further information please do not hesitate to contact us.



## Few-cycle

The **venteon** range of lasers is renowned for their ultra-short pulse durations and exceptional spectral bandwidth. In a recent whitepaper, one of the founders and designers of the **venteon** range, Dr Stefan Rausch, discusses the design principles and explains a little of why the lasers are capable of such wide spectral bandwidths, and more importantly, why they are capable of producing measured pulses approaching the theoretical Fourier transform limited values.

Dr Rausch explains "Using the full emission spectra of the Ti:Sapphire crystal and controlling intra-cavity dispersion is all about the mirror design and pairing knowledge". Laser Quantum only uses matched pairs of chirped mirrors that have over 80 individual layers and carefully models the performance of the optics to ensure the best dispersion control is achieved. All the mirrors used are created using an ion beam sputtering technique that provides unmatched control over the accuracy and precision of these layers. The resultant mirrors have high damage thresholds, wide wavelength applicability, high reflectivity and group delay dispersion.

To find out more about the **venteon** laser design, please visit our website [here](#).

## Web page

Laser Quantum is pleased to announce the launch of its new website: [www.laserquantum.com](http://www.laserquantum.com). The site is a key source of information on applications, technology and a guide to finding the right Laser Quantum products for your needs. The new upgraded site has a number of useful enhancements, including:

- Pages that are responsive to the device you are surfing on. No more zooming in and out to get where you want to be.
- A search function to bring you directly to the information you are looking for.
- An enhanced support section with FAQs and operator manual downloads.
- A product comparison capability to aid decision making between different lasers.
- 3-dimensional graphics for all products to help when designing experimental setups.

Please visit our new site at:  
[www.laserquantum.com](http://www.laserquantum.com)

## THz at Photonics West

### Have you ever wondered whether THz spectroscopy is relevant to your research and samples?

At the Photonics West exhibition next month (February 15-18), Laser Quantum will be showing a complete working **HASSP-THz** time domain spectrometer and are offering you a chance to test your sample and answer the above question. If you have a sample you would be interested to test, [contact us](#) to arrange a time during the show to see the system in action. Also at the show we will have a full range of CW lasers, a working **venteon ultra** laser with pulse duration sub-5.5fs and the **taccor** family of 1GHz & 10GHz repetition rate lasers. Visit us at Hall B, Booth #1440.

## NEW: taccor comb

### 1GHz spaced frequency comb

Superior mode power in the  
**VIS/NIR**

Launching at Photonics West **Hall B, Booth #1440**



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We are sending you this newsletter as we genuinely believe you have an interest in lasers.

