

All Wavelengths, all Powers.

TOPTICA to present new product lines delivering higher laser power together with further innovations for science and industry at LASER World of PHOTONICS in Munich

Graefelfing | June 20th, 2023

With just a few days to go before the doors open at LASER World of PHOTONICS 2023, we are pleased to invite you to visit us at our booths B2.103 and A1.501 from June 27-30 in Munich. TOPTICA Photonics AG is looking forward to presenting our latest developments in laser systems and answering all your questions.



The TOPTICA team at LASER World of Photonics in 2022

About TOPTICA

TOPTICA has been developing, producing, and marketing highend lasers and laser systems for science, research, and industry for 25 years. The portfolio includes diode lasers, ultrafast fiber lasers, terahertz systems, and optical frequency combs.

Worldwide, TOPTICA has 490 employees in six business units with a consolidated group revenue of €130 million.

TOPTICA Photonics AG

Lochhamer Schlag 19 82166 Graefelfing, Germany www.toptica.com

Contact

Mr. Jan Brubacher +49 89 85837-123 jan.brubacher@toptica.com

TOPTICA is proud to present several new additions to our portfolio of advanced laser systems at this year's event. A key highlight is our new product line of highpower cw fiber lasers & amplifiers, complemented by a newly introduced Raman fiber amplifier technology to fill the wavelengths gaps of conventional amplifiers.

We would also like to invite all attendees to join our **TOPTICA booth party on Wednesday, June 28th at B2.103**. Stop by for a Quantum Cocktail or an entangled quantum beer and embrace the spirit of Schroedinger's playful idea of uncertainty. Will there be a party? There's only one way to find out!

Designed for high performance:

High Power CW Fiber Lasers & Amplifiers

TOPTICA's IR and VIS lasers feature high power, ultra low noise, single frequency, single mode, excellent power and pointing stability. At all wavelengths (488nm, 515nm, 532nm, 976nm, 1015nm, 1030nm, 1064nm and other custom wavelengths), the compact architecture of the products ensures ruggedness and reliability. The cw fiber lasers are suitable for quantum technologies, high-power Argon gas laser replacement, laser Doppler velocimetry, high-brightness laser pumping, laser holography, metrology and interferometry.



Lasers for Quantum Technologies:

Highly reliable Raman fiber amplifiers based on patented new technology

High power (up to 30W) Raman fiber amplifiers covering wavelength ranges (1120 .. 1370nm) not accessible by Yb or Er fiber amplifiers. With a tuning range of 10nm and a relative intensity noise <1% RMS, TOPTICA offers its own portfolio of RFAs that can be seamlessly integrated with TOPTICA lasers as seeders and frequency converters to reach visible and UV wavelengths.

Compact Single-Frequency Lasers:

Lasers for Multi-wavelength Digital Holography

TOPTICA introduces new wavelengths at 445nm and 447nm in its TopMode single-frequency diode laser series, pushing the boundaries of high-resolution Raman spectroscopy, microlithography, multi-wavelength digital holography and interferometry. With a linewidth of <5MHz, CHARM active coherence stabilization, and user-friendly push-button operation, these lasers set a new industry standard.

THz Technology for Material Inspection:

Terahertz thickness measurements with the T-Sweeper

Come and see the world's first optoelectronic 8-channel FMCW THz system, built by Fraunhofer HHI and ITWM in cooperation with TOPTICA. The multi-channel design scales up layer thickness measurements in a cost-efficient way. It also enables advanced experimental concepts like synthetic aperture radar.

Simplifying Microscopy:

Lasers for Non-linear Microscopy

For many life science applications, femtosecond pulses must be delivered in a flexible and space-saving way. Our new femtosecond 780nm solution uses ultrafast fiber delivery up to 25m in length for life science applications.

The Quad-Laser-Operation for DLC pro

One step further into the Second Quantum Revolution

The Quantum 2.0 shift demands world-class industrial laser systems that exceed key benchmarks such as integration, scalability, and ease of use. To move forward in supporting these key requirements, TOPTICA recently developed a new functionality: the Quad-Laser-Operation option! It will offer the possibility to the end-user to drive up to 4 DFB or DL pros or MTA DL pros at the same time. An upgrade for existing systems will be available.

Explore the HighFinesse Technology

Meet the next generation of Wavelength Meters already today!

With the next generation wavemeters, you can benefit from very recent progress and improvements in software and hardware development at HighFinesse already today. These make the instrument more powerful and versatile. The new technology enhances high-speed measurements, providing a measurement rate that is twice as fast as the standard WS-series.

It is compatible with Ubuntu 22.04 and extends this compatibility to a broad range of other Linux distributions. A new, versatile Graphical User Interface (GUI) is also introduced, improving the user experience and ease of use. The next generation improvements are available for WS8-10 and WS8-2 Std beginning from January 2024.



Running parallel: World of QUANTUM

Meet our colleagues in hall A1.501at the **World of QUANTUM**! Do you know all about quantum technology? Play the quiz at our booth and win Schroedinger's cat.

We look forward to your visit!

Would you like a personal meeting with a technology expert and to make an appointment in advance? With pleasure! Please simply fill out the **free guest ticket form** or contact us at +49 89 85837-0. We are already looking forward to your questions and to stimulating discussions.

https://www.toptica.com/contact-us/laser-world-of-photonics-tickets