

Press release**When performance matters: Heraeus Covantics Showcases Photonics Innovation at IFSA 2025 in Tours, France**

Hanau, 11. September 2025 – From September 14 to 19, Heraeus Covantics will participate in the International Conference on Inertial Fusion Sciences and Applications (IFSA) in Tours, France – one of the leading global platforms for inertial fusion research and enabling technologies.

Renowned for its decades of expertise in high-purity fused silica and advanced optical materials, Heraeus Covantics will unveil innovations designed to meet the extreme demands of laser-driven nuclear fusion and other cutting-edge photonics applications.

A key highlight will be the poster presentation by Eduard Klett, Global Sales Manager Research & Science, and Wolfgang Schlichting, Sales Manager Research & Science Optics US, titled “Optimizing Fused Silica for Commercial Fusion Energy Applications.” As part of the BMBF-funded PriFUSIO initiative, Heraeus Covantics is developing scalable, cost-effective manufacturing processes for large-format optics capable of withstanding the intense short-pulse laser conditions required in fusion power plants. Initial results show promising material properties that could help pave the way for commercial fusion energy.

In addition to its research contributions, Heraeus Covantics will introduce its latest product innovation for high-performance laser optics: Suprasil® SmartPlate. This next-generation synthetic fused silica plate features ultra-low OH content (~150 ppm), minimal absorption, and exceptional stability under high power densities. Engineered for near-infrared applications such as industrial cutting and welding optics or large-scale mirrors, the SmartPlate combines outstanding performance with flexible sizing options and an attractive cost of ownership.

“Advancing fusion energy is one of the great challenges of our time. Our expertise in engineering fused silica for extreme laser environments is essential to enabling this future,” says Christoph Fark, CEO of Heraeus Covantics. “At IFSA, we look forward to engaging with researchers from around the world and exploring how our materials can contribute to the breakthroughs the field needs.”

Visitors to IFSA 2025 are invited to meet Heraeus Covantics experts at the Tours Convention Center, Booth 10, to learn how customized optical materials – from plates and ingots to rods and specialty geometries – can meet the specific requirements of scientific, industrial, and energy applications. Further information: covantics.com/ifsa

About Heraeus

Heraeus is a family-owned global technology group headquartered in Hanau, Germany. The company's roots go back to a family pharmacy started in 1660. With its expertise and resources, Heraeus has been making meaningful contributions over generations and is committed to do so in the future. Today, the group bundles diverse activities in four Business Platforms: Metals & Recycling, Healthcare, Semiconductor & Electronics, as well as Industrials. Customers benefit from innovative technologies and solutions based on broad materials knowledge and technological leadership. In the 2023 financial year, the group generated revenues of €25.6 billion (US\$27.7 billion*) with approximately 16,400 employees in 40 countries. Heraeus is one of the top 10 family-owned companies in Germany.

MATERIALS. INNOVATIONS. FOR GENERATIONS.

(* calculated with 2023 average exchange rate, 1€ = 1.0813 US\$)

About Heraeus Covantics

Heraeus Covantics is a technology leader specializing in the manufacturing and processing of the industry's highest purity quartz, fused silica and other high-end materials such as ceramics and composites. With locations in Europe, USA and Asia, Heraeus Covantics manufactures semi-finished products, complex system components and custom-tailored solutions made of quartz glass, fused silica and ceramic materials. They are used in the data transmission and telecommunication industry, the production of specialty optical fibers for industrial and medical applications, semiconductor manufacturing and optical applications among others.



Image 1: Heraeus_Covantics_Suprasil_SmartPlate.jpg

Caption: When performance matters, it has to be Heraeus

Image source: Heraeus Covantics



Image 2: Heraeus_Covantics_Christoph_Fark.jpg

Caption: Christoph Fark, CEO of Heraeus Covantics

Image source: Heraeus Covantics

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