For Immediate Release

Armadillo SIA Introduces Radiation-Resistant, Silica/Silica
Optran® UV NSS Optical Fibers

- The innovative solarization-resistant optical fiber with a hermetic carbon layer is ideal for spectroscopy, medical diagnostics, and laser delivery systems. The company will premiere the new product at SPIE Optics + Photonics, 2022

Riga, Latvia – August 15, 2022– Armadillo SIA (www.armadillosia.com), a leading global provider of specialized optical fibers, sub-assemblies, and hybrid photonic solutions, introduces the revolutionary Optran® UV NSS Fiber, specially designed to provide excellent deep-UV (ultraviolet) solarization resistance. The new optical fiber features a hermetic carbon layer, very low numerical aperture (NA) expansion, and superior optical stability while operating in the UVC spectral range and beyond, from 190 nm to 1200 nm. The high solarization-resistance fibers are a great solution for semiconductor technology, laser delivery systems, spectroscopy, medical technology and diagnostics.

The UV NSS optical fibers are available in any NA value from 0.12 to 0.30 and can be customized upon request. Core diameters are available from 90 µm to 1000 µm. Comprised of biocompatible materials, the operating temperature range of the Silica/Silica optical fibers is -190 to +150 °C. For additional technical data, please download the specifications here: https://armadillosia.com/wp-content/uploads/2020/04/Optran_UV-NSS.pdf.

Armadillo SIA will showcase the Optran UV NSS during SPIE Photonics + Optics, August 23 – 25, 2022 at the San Diego Convention Center in booth #428.

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The company will also present a technical paper highlighting the technology and manufacturing process behind the new radiation-resistant UV fibers. The presentation is scheduled for August 21, 2022, 1:45 – 2:05 PM PDT in the San Diego Convention Center, Room 17B. For additional information, please go to: https://spie.org/optics-photonics/presentation/Manufacturing-and-testing-of-all-silica-fibers-resistant-to-UV/12229-5.

Armadillo SIA’s business development manager, Mario Paredes, notes, “We are extremely excited to announce this new product and our enhanced radiation-resistance technology. The findings of our study are providing new strategies to optimize the production of optically transparent all-silica fibers for various spectral regions. With this newest data, Armadillo SIA is providing the opportunity for further developments possible in UV lasers, diagnostics of thermonuclear fusion reactors, and astronautics. We are delighted to premiere our new UV NSS product in our booth #428 at Optics + Photonics in San Diego. We invite you to stop by.”

For more information about the company’s unique and customizable photonic solutions, please visit: www.armadillosia.com.

Armadillo SIA (Riga, Latvia - www.armadillosia.com) is a global leader in specialty fiber optic solutions, including fibers, bundles, cables, and customized hybrid photonics sub-assemblies. The company offers a wide range of expertise from needs evaluation to prototype and mass production.

Armadillo SIA’s vertically integrated manufacturing with outstanding quality control protocols, begins with preform fabrication, utilizing two types of deposition processes. Cables and assemblies are made in-house using their top-quality fibers and your choice of a broad range of sheathing, cabling, or jacketing. In addition, they offer all standard connectors or custom designed ferrules to suit applications from the deep UV to MIR. This provides Armadillo SIA the opportunity to support customers with challenging, specialized custom projects while offering competitive pricing and quick delivery.

Armadillo’s specialty optical fibers and assemblies are employed in lasers, spectrometers, spacecraft sensing and controls, precision devices for medical diagnostics, particle detection, mission-critical fields like nuclear physics, semiconductor manufacturing, life sciences, forensics, avionics, industrial applications, and more.

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