

ARMADILLO SIA Krisjana Valdemara St. 33-11A Riga, Latvia U. S. Contact: Ilya Rotenstein, Sales Phone: +1 408-834-7422 info@armadillosia.com www.armadillosia.com Media Contact: Marlene Moore Smith Miller Moore Phone: 818-708-1704 Email: marlene@smithmillermoore.com

For Immediate Release

## Armadillo SIA Introduces Multi-Core Optical Fibers at BiOS / Photonics West, 2022

• New Multi-Core Optical Fiber: Silica/Silica Concentric Core Fibers for laser power delivery applications, feature control of power density and laser beam shape using different cores or multiple cores simultaneously.

**Riga, Latvia – January 19, 2022 – Armadillo SIA** (<u>www.armadillosia.com</u>), a leading global provider of specialized optical fibers, sub-assemblies, and hybrid photonic solutions, will showcase **Multi-Core Optical Fiber: Silica/Silica Concentric Core Fibers** for laser power delivery applications in booth #8359 at SPIE's BiOS, January 22 – 23, 2022 and booth #3359 at Photonics West, January 22 – 27, 2022, Moscone Center, San Francisco.



The innovative Multi-Core Optical Fibers used for

applications in laser power delivery offer control of power density and laser beam shape by using different cores, or *multiple* cores simultaneously. These features make Multi-Core Optical Fibers ideal for processing various sheet metal materials and thicknesses. Armadillo SIA offers a range of fully customizable concentric multi-core optical fibers, including non-circular multi-core shapes, which are engineered to meet customers' requirements.

According to Armadillo SIA's business development manager, Mario Paredes, "There are different optimum power densities for processing sheet metals, depending on the material and the thickness. Our concentric multi-core optical fibers make power density adjustments possible, while also providing increased precision. We offer a huge advantage over our competitors with our full range of customization options for our multi-core optical fibers."

Silica/Silica Concentric Core Fibers feature multi kW power tolerance, non-circular core shape options, power density control, increased precision, a step-index profile, and special jackets that operate in high temperatures, high vacuum and harsh chemical environments. Jacketing options and temperature ranges for primary coatings are: Hard Clad/Fluorinated Acrylate (-40 to +80 °C) Silicone (-40 to +150 °C), Polyimide (-190 to +350 °C), Acrylate (-40 to +85 °C), Aluminum (-196 to +400 °C). A wide variety of secondary jackets are also available and include PFA Fluon<sup>®</sup> which operates between -200 and + 260 °C temperature range.

To learn more about Armadillo SIA's customizable options and varying spectral ranges, please view the Multi-Core Optical Fiber: Silica/Silica Concentric Core Fibers data sheet here: <a href="https://armadillosia.com/index.php/multi-core-fiber-optics/">https://armadillosia.com/index.php/multi-core-fiber-optics/</a>.

For more information about the company's unique and customizable photonic solutions, please visit: <u>www.armadillosia.com</u>.

**Armadillo SIA (Riga, Latvia - <u>www.armadillosia.com</u>) 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.

# # #