

NASA & Blueshift Update Exclusive License

Blueshift Materials, Inc. (Blueshift) is pleased to announce the deepening of our relationship with National Aeronautics and Space Administration (NASA). NASA has updated its exclusive license agreement with Blueshift for using polyimide aerogels in antenna applications in the Communications Technology Industry.

Blueshift provides a polyimide film, AeroZero, with an ultra-low dielectric constant (Dk) and loss tangent (Df) (1.45 and 0.004 respectively). The porous nature of AeroZero polyimide aerogel film (85% air) provides a low Dk/Df and lightweight design that supports demanding applications. The low thickness profile (125 micron / 5 mil) further supports the growing trend of miniaturization and decreasing footprint size. By combining NASA-developed antenna systems with Blueshift's AeroZero polyimide aerogel film, customers are provided with incredibly thin, lightweight, and thermally insulative antenna technology.

"AeroZero was developed to meet growing market demands for high performance, low-power, low-profile and bandwidth-hungry applications," says Garrett Poe, Executive Vice President, Technology, Blueshift. "Our exclusive license of NASA's aerogel antenna technology allows Blueshift to provide customers with lightweight, high performance antenna solutions that can meet these needs."

The license agreement from NASA includes multiple different frequency bands spanning an extremely wide frequency range (0.1 – 100 GHz), including VHF, UHF, X, Ku, K, Ka, V, and W bands. This exclusive license agreement provides Blueshift and NASA the opportunity to supply AeroZero polyimide aerogel film and laminates into a wide array of antenna and radome applications, including 5G, Internet-of-Things (IoT), and vehicular / automotive radar (76 – 81 GHz).

"Our team of experienced applications engineers and research scientists are trusted by our customers to collaboratively design, develop, and commercialize laminate products based on AeroZero polyimide aerogel film work in our customers' most demanding environments," says Lawino Kagumba, Sr. Director, Applications and Research, Blueshift. "AeroZero-based antennas and radomes provide exceptional RF performance, and we are pleased to offer this NASA technology to our customers."

About Blueshift

Blueshift, with headquarters and operations in Spencer, Massachusetts, USA, provides best-in-class state of the art lightweight materials. Blueshift is dedicated to developing streamlined products for a growing range of applications. We closely collaborate with our customers to develop customized solutions, support innovative designs, and address application challenges. For more information, email info@blueshiftmaterials.com or call 1-888-350-7586.