



## **EMF, a Dynasil Company, Announces Optics Coating Capabilities for Chalcogenide Family of Substrates for Infrared Applications**

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NEWTON, Mass., Feb. 04, 2020 (GLOBE NEWSWIRE) -- Dynasil Corporation of America ("Dynasil" or the "Company"), a developer and manufacturer of optics and photonics products, optical detection and analysis technology and components for the homeland security, medical and industrial markets, today announces that its subsidiary EMF has mastered the coating of chalcogenide substrates for infrared (IR) applications. The chalcogenide family of glasses are becoming a preferred optical substrate material for IR optics due to the advantages they offer over legacy crystalline materials including fabrication flexibility, stellar spectral performance, and lower production costs.

"We recognized the industry shift towards the chalcogenides early and custom-designed our Diamond-like Carbon (DLC) chamber to successfully coat chalcogenides, along with other IR substrates including germanium (Ge), silicon (Si), zinc selenide (ZnSe), and zinc sulfide (ZnS) at scale," said Paul M. Schulz, President of EMF.

Coating chalcogenides can be particularly temperamental - too few layers can result in the optic failing to meet required durability standards, while too many layers can lead to undue stress and the coating's premature rupture. Additionally, chalcogenides are prone to scratching and have a tendency towards tiny defects called pinholes that prevent a uniform coating.

Schulz added, "In designing our DLC chamber, our team of experts kept coating chalcogenides at the forefront, so everything from our chamber's geometry to its operating temperature, gas inputs, and even the coating direction has been carefully designed and calibrated to ensure that our processes produce dependable, long-lasting coatings on chalcogenides that have virtually zero pinholes."

EMF's DLC chamber and state-of-the-art-technology provides the capability to successfully coat and deliver infrared optics for the most demanding commercial and military applications.

Dynasil will be promoting its IR-coating capabilities along with other photonics-related products and services at booth 242 during the 2020 SPIE Photonics West exhibition from February 4-6 at the Moscone Convention Center in San Francisco, CA.

### **About Dynasil**

Dynasil Corporation of America develops and manufactures optics and photonics products, optical detection and analysis technology and components for the homeland security, medical and industrial markets. Combining world-class expertise in research and materials science with extensive experience in manufacturing and product development, Dynasil is commercializing products including dual-mode radiation detection solutions for Homeland Security and commercial applications and sensors for non-destructive testing. Dynasil has an impressive portfolio of issued and pending U.S. patents. The Company is based in Newton, MA, with additional operations in MA, MN, NY, NJ and the United Kingdom. More information about the Company is available at [www.dynasil.com](http://www.dynasil.com).

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