

CIRTEMO

For Immediate Release
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CIRTEMO develops world's first nanoscale optical arrays with MagAssemble technology

Columbia, S.C. – July 17, 2018 - Multivariate Optical Element innovator, CIRTEMO, announced today that the company has developed the world's first nanoscale optical arrays using MagAssemble technology.

"Today, custom optical arrays are very expensive, complicated, and slow to manufacture, especially on the prototype scale. With the MagAssemble technology, we can help customers create low-cost, high-value optical filter arrays and other diffractive optics very quickly, in some cases, within days," said Jason Williamson, CIRTEMO's Chief Executive Officer. "We can now help our customers develop unique optics, especially on the micro and nano scale. The MagAssemble technology is a game changer for companies who are developing hyperspectral imaging systems for industrial, defense, agricultural, life science, and autonomous vehicle applications."

CIRTEMO is commercializing two core optics platforms; Multivariate Optical Computing (MOC) and Pattern Transfer Nanomanufacturing (PTMN) based on MagAssemble technology. The MOC platform allows for the design and manufacture of patented optical filters, Multivariate Optical Elements, which are encoded to detect/measure complex chemical compounds and attributes in real-time. The PTMN platform allows CIRTEMO to design and manufacture shapes and structures on the nanometer scale. These features can then be transferred to a wide variety of substrates for producing unique optics that are not possible with traditional optical manufacturing techniques. CIRTEMO's technology platforms are ideally suited for both point detection sensors and hyperspectral imaging systems.

"As camera sensor manufacturers both increase the number of pixels within a camera while reducing the size of the pixels, the ability to manufacture optical filters and other diffractive optical elements on the nanoscale will become paramount," said Dr. Ryan Priore, CIRTEMO's Chief Technology Officer. "With PTMN technology, we can manufacture a variety of arrays on the nanoscale in both the visible and short wave infrared regions of the optical spectrum. Our existing partner network can mate these optical filters to a variety of detectors and/or focal plane arrays which are ideally suited for prototyping next generation hyperspectral imaging systems."

CIRTEMO primarily partners with Optical Filter Manufacturers (OFMs) and Optical Component and System Manufacturers (OCSMs). CIRTEMO's technology platforms allow OFMs and OCSMs to differentiate their offerings with a well-protected IP position and enable their customers to tackle new applications that are not possible with traditional optical filters and coatings.

CIRTEMO is the second company to be founded to commercialize the patented Multivariate Optical Element platform that was invented by Dr. Michael Myrick at the University of South Carolina. Prior to founding CIRTEMO, Jason Williamson founded Ometric in 2005. Ometric successfully commercialized the Multivariate Optical Element platform in a wide variety of large industrial sectors, including pharmaceuticals, chemicals, pet nutrition, mining, food and many others. The company was sold to Halliburton in 2011. Although the exact sale price of Ometric is considered confidential, Halliburton paid more than eight figures for the company, and the transaction generated the largest royalty payment in history ever paid to the University of South Carolina (\$2.7M).

About CIRTEMO

CIRTEMO designs and manufactures patented optical filters, called Multivariate Optical Elements, which are encoded to detect/measure complex chemical compounds and attributes. CIRTEMO's patented Multivariate Optical Element platform enables optical systems to perform high value detection and analysis at the speed of light, to a variety of industries, including life sciences, pharmaceuticals, chemicals, medical devices, agriculture, food and beverage, semiconductors, pet nutrition, environmental, plastics, and multiple cleantech applications. For more information, visit www.cirtemo.com or call 803-467-4189.

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