



OPTRA Inc. Awarded Phase II U.S. Department of Energy STTR Contract for H-PDLC Tunable Filter for Hyperspectral Imaging

Topsfield, MA (July 28, 2009) - OPTRA Inc. was awarded a \$749,706 Small Business Technology Transfer (STTR) Phase II research grant by the U.S. Department of Energy to develop a tunable filter based on holographically formed-polymer dispersed liquid crystal (HPDLC) materials. This project is a cooperative effort with Drexel University, Philadelphia, PA, which will perform advanced H-PDLC research and development to support OPTRA's instrument development. The federal government funded this project to further the science of detecting weapons of mass destruction. Hyperspectral imaging (HSI) provides the means for detecting the proliferation of these nuclear, chemical, and biological weapons. This information can be used by government and military security officials to initiate the appropriate response. There is a need for faster tunable wavelength filters than those that currently exist in practice. H-PDLC devices consist of a polymer and micron sized LC droplets composite, resulting in improved electro-optical properties compared to traditional LC materials. Advantages include faster switching times, wide wavelength operating range across the ultraviolet to infrared, narrow wavelength resolution, and high transmission. The Phase II effort will design and develop an HPDLC tunable filter operating in the visible wavelength regime. The prototype filter will be tested and key performance parameters will be measured.

OPTRA has a history of winning leading-edge technical development contracts for both commercial and government related research. Furthermore, OPTRA has a track record of transitioning these development contracts into successful commercial products and licensing agreements. Key areas of expertise include metrology, laser detection, laser beam steering and spectrometer systems, all based on state-of-the-art electro-optical technology.

CONTACT:

Sales Department

OPTRA, Inc.

461 Boston Street

Topsfield, MA 01983-1234

Phone: (978) 887-6600

Email: Sales@OPTRA.com

Fax: (978) 887-0022

Web: www.OPTRA.com