



LIGHTWAVE LOGIC™

## **CUNY Manufactures First Commercial Grade Non-Linear Waveguide Prototype for Lightwave Logic**

*Material Demonstrates Phase Shifting Characteristics Necessary for the Development of an All-Optical Transistor*

NEWARK, Delaware, August 11, 2011 /PRNewswire/ -- Lightwave Logic, Inc. (OTC Bulletin Board: [LWLG.OB](http://LWLG.OB)), a technology company focused on the development of a *Next Generation Non Linear Optical Polymer Materials Platform* for applications in high speed fiber-optic data communications and optical computing, announced today at its annual meeting of its shareholders that it has received outstanding test results demonstrating the Third-order properties of one of its Perkinamine chromophores.

In a tests conducted by the City University of New York, one of Lightwave Logic's advanced Perkinamine™ chromophores demonstrated the ability to effectuate a phase shift with very low optical losses. The ability of a non-linear material to change the phase of a light wave in the presence of another light wave is known as the Third-order effect which creates an all-optical switch that can be used in all optical networks.

Dave Eaton, Lightwave's Chief Technology Officer commented, "We are very excited that another one of our materials showed these kinds of results. An important part of this demonstration was that our material survived the strenuous fabrication conditions. We know of no other non-linear material that has the ability to operate in the all-optical realm with the thermal stability necessary to survive the strenuous manufacturing conditions.

We are also extremely pleased with the quality of the waveguides that Professor Menon's group has fabricated with our materials. We will shortly begin testing them in specific device designs for prototype products. Also, the CUNY group will use these structures as a basis to further the development of an all-optical transistor."

Jim Marcelli, CEO of Lightwave Logic commented, "The world is moving rapidly toward all-optical networks and optical computing. We are in the vanguard of companies developing products that will be needed to enable these next generation architectures. We view this as an opportunity to build enormous long term value for our shareholders."



LIGHTWAVELOGIC™

**“Powered by Lightwave Logic”**

Lightwave Logic, Inc. is a development stage company that is producing prototype electro-optic demonstration devices and is moving toward commercialization of its high-activity, high-stability organic polymers for applications in electro-optical device markets. Electro-optical devices convert data from electric signals into optical signals for use in high-speed fiber-optic telecommunications systems and optical computers. Please visit the Company's website, [www.lightwavelogic.com](http://www.lightwavelogic.com) for more information.

***Safe Harbor Statement***

*The information posted in this release may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. You can identify these statements by use of the words "may," "will," "should," "plans," "explores," "expects," "anticipates," "continue," "estimate," "project," "intend," and similar expressions. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. These risks and uncertainties include, but are not limited to, general economic and business conditions, effects of continued geopolitical unrest and regional conflicts, competition, changes in technology and methods of marketing, delays in completing various engineering and manufacturing programs, changes in customer order patterns, changes in product mix, continued success in technological advances and delivering technological innovations, shortages in components, production delays due to performance quality issues with outsourced components, and various other factors beyond the Company's control.*

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