



Lightwave Logic Provides First Quarter 2022 Corporate Update

ENGLEWOOD, Colo., May 11, 2022 /PRNewswire/ -- Lightwave Logic, Inc. (NASDAQ: LWLG), a technology platform company leveraging its proprietary electro-optic (EO) polymers to transmit data at higher speeds with less power, today provided a corporate update in conjunction with the filing of its Quarterly Report on Form 10-Q for the quarter ended March 31, 2022.

First Quarter 2022 and Subsequent Company Highlights:

- As of March 31, 2022, the company's cash and cash equivalents were approximately \$24.3 million, enabling it to finance operations through January 2024.
- Achieved world-class results for a polymer modulator, as demonstrated in an enhanced stability and high-speed measurement by Polariton Technologies and ETH Zurich.
- Achieved breakthrough photostability results on its electro-optic polymer modulators that are compatible with high-volume silicon foundry processes.
- Enhanced its foundry process development kit (PDK) offering with addition of optical grating couplers, which will be part of the company's Design Tool Kit to simplify foundry processes when integrating the company's polymer technology with silicon photonics.
- Fortified intellectual property portfolio through publication of a U.S. patent application that aids to significantly enhance polymer performance and simplify fabrication in foundry applications, as well as the receipt of another U.S. patent that simplifies modulator integration for high-volume manufacturing operations.
- Appointed Dr. John Zyskind - a veteran of the telecom and data communications industries - to spearhead the company's engineering teams ahead of commercialization and scale up with foundry partners.
- Announced the appointment of Dr. Craig Ciesla, a company Advisory Board member, to the Board of Directors. In conjunction, Dr. Joseph A. Miller retired from the Board of Directors and transitioned to the company's Advisory Board.
- Presented at multiple industry specific and investor-related conferences including the 34th annual ROTH Investor Conference, the Benzinga All Access Event and the Oppenheimer Virtual Emerging Growth Conference.

The full text of the company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 filed with the SEC on May 10, 2022 can be found [here](#).

Management Commentary

"The first quarter of 2022 was highlighted by several breakthrough achievements for our technology, including third party review and verification of stability and high-temperature operation of our world-class electro-optic polymer materials platform," said Dr. Michael Leppy, Chief Executive Officer of Lightwave Logic. "The results were generated using our proprietary, advanced Perkinamine® chromophores in Polariton Technologies' silicon-photonics-based plasmonic racetrack modulator. Through our collaboration with Polariton, we are clearly demonstrating the potential for our polymer materials to become ubiquitous in their use across the internet.

"During the quarter we also announced breakthrough photostability results of our electro-optic polymer modulators, which is an incredibly important metric as we optimize our polymers for high-volume silicon foundry processes. We also completed successful initial testing of our optical grating couplers, which will be part of our Process Development Kits (PDKs) that will simplify foundry processes when integrating our polymer technology with silicon photonics. Many of our

patent applications are in the area of manufacturing simplification as well - a key aspect in achieving deep market penetration, the importance of which cannot be understated.

"We continue to further fortify our patent portfolio as well, receiving a new patent that allows our polymer technology platform to turbo-charge both integrated photonics platforms as well as fiber optic transceivers that are already being utilized by the millions on the internet. The patent illustrates the use of our polymer modulators as a high speed, low power engine not only for data communication and telecommunication applications, but other new market opportunities as well.

"We look forward to additional advancements and innovations in the months ahead, in-line with our internal projections to further demonstrate the immense potential of our technology. We continue to build out our robust IP moat with each technology improvement, helping to improve performance or simplify manufacturing. In the months to come, we are highly focused on incorporating feedback from our partners to enhance our positioning in anticipation of mass market commercialization," concluded Dr. Lebbby.

About Lightwave Logic, Inc.

Lightwave Logic, Inc. (NASDAQ: LWLG) is developing a platform leveraging its proprietary engineered electro-optic (EO) polymers to transmit data at higher speeds with less power. The company's high-activity and high-stability organic polymers allow Lightwave Logic to create next-generation photonic EO devices, which convert data from electrical signals into optical signals, for applications in data communications and telecommunications markets. For more information, please visit the company's website at lightwavelogic.com.

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, lack of available funding; general economic and business conditions; competition from third parties; intellectual property rights of third parties; regulatory constraints; changes in technology and methods of marketing; delays in completing various engineering and manufacturing programs; changes in customer order patterns; changes in product mix; success in technological advances and delivering technological innovations; shortages in components; production delays due to performance quality issues with outsourced components; those events and factors described by us in Item 1.A "Risk Factors" in our most recent Form 10-K and Form 10-Q; other risks to which our company is subject; other factors beyond the company's control.

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