

Lightwave Logic, Inc.  
Form 10-Q  
August 14, 2014

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

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**FORM 10-Q**

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**(Mark One)**

**☐ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2014

**OR**

**☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 0-52567

**Lightwave Logic, Inc.**

(Exact name of registrant as specified in its charter)

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**Nevada**

**82-049-7368**

(State or other jurisdiction of  
Incorporation or Organization)

(I.R.S. Employer Identification No.)

**1831 Lefthand Circle, Suite C**

**Longmont, CO**

**80501**

(Address of principal executive offices)

(Zip Code)

**(720) 340-4949**

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes  No

The number of shares of the registrant's Common Stock outstanding as of August 13, 2014 was 58,156,013.



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### Forward-Looking Statements

This report on Form 10-Q contains forward-looking statements. Forward-looking statements involve risks and uncertainties, such as statements about our plans, objectives, expectations, assumptions or future events. In some cases, you can identify forward-looking statements by terminology such as anticipate, estimate, plan, project, continuing, ongoing, expect, we believe, we intend, may, should, will, could and similar expressions, or an uncertainty or an action that may, will or is expected to occur in the future. These statements involve estimates, assumptions, known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from any future results, performances or achievements expressed or implied by the forward-looking statements. You should not place undue reliance on these forward-looking statements.

Factors that are known to us that could cause a different result than projected by the forward-looking statement, 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 Annual Report on Form 10-K; other risks to which our Company is subject; other factors beyond the Company's control.

Any forward-looking statement made by us in this report on Form 10-Q is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

**PART I FINANCIAL INFORMATION**

**Item 1**

**Financial Statements**

**LIGHTWAVE LOGIC, INC.**

**FINANCIAL STATEMENTS**

**JUNE 30, 2014**

**(UNAUDITED)**

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**LIGHTWAVE LOGIC, INC.****BALANCE SHEETS**

	<b>June 30,</b>	<b>December 31,</b>
	<b>2014</b>	<b>2013</b>
	<b>(Unaudited)</b>	<b>(Audited)</b>
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 3,030,317	\$ 2,270,704
Prepaid expenses	198,275	132,204
	3,228,592	2,402,908
<b>PROPERTY AND EQUIPMENT - NET</b>	326,528	298,360
<b>OTHER ASSETS</b>		
Intangible assets - net	572,894	543,540
<b>TOTAL ASSETS</b>	<b>\$ 4,128,014</b>	<b>\$ 3,244,808</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 103,193	\$ 65,410
Accounts payable and accrued expenses- related parties	54,549	48,817
Accrued expenses	32,609	7,949
<b>TOTAL LIABILITIES</b>	190,351	122,176
<b>STOCKHOLDERS' EQUITY</b>		
Preferred stock, \$0.001 par value, 1,000,000 authorized No shares issued or outstanding		
Common stock \$0.001 par value, 100,000,000 authorized 56,032,240 and 52,617,789 issued and outstanding at June 30, 2014 and December 31, 2013	56,032	52,618
Additional paid-in-capital	38,224,914	35,414,206
Accumulated deficit	(34,343,283)	(32,344,192)
<b>TOTAL STOCKHOLDERS' EQUITY</b>	3,937,663	3,122,632
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 4,128,014</b>	<b>\$ 3,244,808</b>

See accompanying notes to these financial statements.





**LIGHTWAVE LOGIC, INC.****STATEMENTS OF OPERATIONS****FOR THE THREE MONTHS AND SIX MONTHS ENDING JUNE 30, 2014 AND 2013****(UNAUDITED)**

	<b>For the Three Months Ending June 30,</b>		<b>For the Six Months Ending June 30,</b>	
	<b>2014</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>
NET SALES	\$	\$	\$ 2,500	\$
COST AND EXPENSE				
Research and development	618,454	531,116	1,203,892	986,498
General and administrative	392,917	433,386	795,081	881,004
	1,011,371	964,502	1,998,973	1,867,502
LOSS FROM OPERATIONS	(1,011,371)	(964,502)	(1,996,473)	(1,867,502)
OTHER INCOME (EXPENSE)				
Interest income	62	62	124	141
Commitment fee and interest expense		(184,723)	(2,742)	(204,273)
NET LOSS	\$ (1,011,309)	\$ (1,149,163)	\$ (1,999,091)	\$ (2,071,634)
Basic and Diluted Loss per Share	\$ (0.02)	\$ (0.02)	\$ (0.04)	\$ (0.04)
Basic and Diluted Weighted Average Number of Shares	53,478,623	51,725,639	53,123,623	51,097,111

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See accompanying notes to these financial statements.

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**LIGHTWAVE LOGIC, INC.**  
**STATEMENT OF STOCKHOLDERS EQUITY**  
**JUNE 30, 2014**  
**(UNAUDITED)**

	Number of Shares	Common Stock	Paid-in Capital	Subscription Receivable/ Receivable for Issuance of Common Stock	Deferred Charge	Unrealized Loss on Securities	Accumulated Deficit	Total
BALANCE AT DECEMBER 31, 2013	52,617,789	\$ 52,618	\$ 35,414,206	\$	\$	\$	\$ (32,344,192)	\$ 3,122,632
Common stock issued to institutional investor	200,000	200	177,460					177,660
Common stock issued for additional commitment shares	2,680	3	2,739					2,742
Common stock issued in private placement	2,760,400	2,760	2,057,240					2,060,000
Common stock issued for services	2,371	2	1,998					2,000
Exercise of options	35,000	35	10,965					11,000
Exercise of warrants	414,000	414	142,416					142,830
Options issued for services			345,189					345,189

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Warrants issued for services										72,701										72,701	
Net loss for the six months ending June 30, 2014																				(1,999,091)	(1,999,091)
BALANCE AT JUNE 30, 2014	56,032,240	\$	56,032	\$	38,224,914	\$		\$		\$		\$	(34,343,283)	\$						3,937,663	

See accompanying notes to these financial statements.

**LIGHTWAVE LOGIC, INC.****STATEMENTS OF CASH FLOW****FOR THE SIX MONTHS ENDING JUNE 30, 2014 AND 2013****(UNAUDITED)**

	<b>For the Six Months Ending June 30,</b>	
	<b>2014</b>	<b>2013</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Net loss	\$ (1,999,091)	\$ (2,071,634)
Adjustment to reconcile net loss to net cash used in operating activities		
Warrants issued for services	72,701	26,837
Stock options issued for services	345,189	495,084
Common stock issued for services and fees	4,742	204,274
Depreciation and amortization	71,502	59,333
(Increase) decrease in assets		
Receivables		
Prepaid expenses and other current assets	(66,071)	(76,793)
Increase (decrease) in liabilities		
Accounts payable	37,783	18,715
Accounts payable and accrued expenses- related parties	5,732	36,532
Accrued expenses	24,660	6,717
Net cash used in operating activities	(1,502,853)	(1,300,935)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Cost of intangibles	(36,785)	(26,493)
Purchase of equipment, furniture and leasehold improvements	(92,239)	(99,522)
Net cash used in investing activities	(129,024)	(126,015)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Issuance of common stock, private placement	2,060,000	
Issuance of common stock, exercise of options and warrants	153,830	88,282
Issuance of common stock, institutional investor	177,660	1,800,000
Net cash provided by financing activities	2,391,490	1,888,282
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>		
	759,613	461,332
<b>CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD</b>		
	2,270,704	2,270,704
<b>CASH AND CASH EQUIVALENTS - END OF PERIOD</b>		
	\$ 3,030,317	\$ 2,732,036

See accompanying notes to these financial statements.



**LIGHTWAVE LOGIC, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**JUNE 30, 2014 AND 2013**

**NOTE 1 NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Financial Statements**

The accompanying unaudited financial statements have been prepared by Lightwave Logic, Inc. (the Company). These statements include all adjustments (consisting only of its normal recurring adjustments) which management believes necessary for a fair presentation of the statements and have been prepared on a consistent basis using the accounting polices described in the Summary of Accounting Policies included in the 2013 Annual Report. Certain financial information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission, although the Company firmly believes that the accompanying disclosures are adequate to make the information presented not misleading. The financial statements should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2013, as filed with the Securities and Exchange Commission. The interim operating results for the three and six months ending June 30, 2014 may not be indicative of operating results expected for the full year.

**Nature of Business**

Lightwave Logic, Inc. is a technology Company focused on the development of next generation photonic devices and non-linear optical polymer materials systems for applications in high speed fiber-optic data communications and optical computing markets. Currently the Company is in various stages of photonic device and materials development and evaluation with potential customers and strategic partners. The Company expects the next revenue stream to be in sales of non-linear optical polymers, prototype devices and product development agreements prior to moving into production.

The Company's current development activities are subject to significant risks and uncertainties, including failing to secure additional funding to operationalize the Company's technology now under development.



## **Loss per Share**

The Company follows Financial Accounting Standards Board Accounting Standards Codification ("FASB ASC") 260, "Earnings per Share", resulting in the presentation of basic and diluted earnings per share. Because the Company reported a net loss in 2014 and 2013, common stock equivalents, including stock options and warrants were anti-dilutive; therefore, the amounts reported for basic and dilutive loss per share were the same.

## **Comprehensive Income**

The Company follows FASB ASC 220.10, "Reporting Comprehensive Income." Comprehensive income is a more inclusive financial reporting methodology that includes disclosure of certain financial information that historically has not been recognized in the calculation of net income. Since the Company has no items of other comprehensive income, comprehensive income (loss) is equal to net income (loss).

## **Recently Issued Accounting Pronouncements Not Yet Adopted**

As of June 30, 2014, there are no recently issued accounting standards not yet adopted which would have a material effect on the Company's financial statements.

**LIGHTWAVE LOGIC, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**JUNE 30, 2014 AND 2013**

**NOTE 1 NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES  
(CONTINUED)**

**Recently Adopted Accounting Pronouncements**

In June 2014, the FASB issued ASU No. 2014-10, Development Stage Entities (Topic 915), Elimination of Certain Financial Reporting Requirements, including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation. The amendments in this Update remove the definition of a development stage entity from the Master Glossary of the Accounting Standards Codification, thereby removing the financial reporting distinction between development stage entities and other reporting entities from U.S. GAAP. In addition, the amendments eliminate the requirements for development stage entities to (1) present inception-to-date information in the statements of income, cash flows, and shareholder equity, (2) label the financial statements as those of a development stage entity, (3) disclose a description of the development stage activities in which the entity is engaged, and (4) disclose in the first year in which the entity is no longer a development stage entity that in prior years it had been in the development stage.

The amendments also clarify that the guidance in Topic 275, Risks and Uncertainties, is applicable to entities that have not commenced planned principal operations.

The amendments related to the elimination of inception-to-date information and the other remaining disclosure requirements of Topic 915 should be applied retrospectively except for the clarification to Topic 275, which shall be applied prospectively. For public business entities, those amendments are effective for annual reporting periods beginning after December 15, 2014, and interim periods therein.

For public business entities, the amendment eliminating the exception to the sufficiency-of-equity-at-risk criterion for development stage entities in paragraph 810-10-15-16 should be applied retrospectively for annual reporting periods beginning after December 15, 2015, and interim periods therein.

Early application of each of the amendments is permitted for any annual reporting period or interim period for which the entity's financial statements have not yet been issued (public business entities) or made available for issuance (other entities). Upon adoption, entities will no longer present or disclose any information required by Topic 915.

The Company adopted the amendments retrospectively for the interim period ending June 30, 2014.

## **NOTE 2 MANAGEMENT'S PLANS**

As a technology company focusing on the development of the next generation photonic devices and non-linear optical polymer materials systems, substantial net losses have been incurred since inception. The Company has satisfied capital requirements since inception primarily through the issuance and sale of its common stock. The Company currently has a cash position of approximately \$4,500,000. Based upon the current cash position and expenditures of approximately \$275,000 per month and no debt service, management believes the Company has sufficient funds currently to finance its operations through December 2015. In June 2013, the Company signed an agreement with an institutional investor to sell up to \$20 million of common stock. Under the agreement subject to certain conditions and at the Company's sole discretion, the institutional investor has committed to invest up to \$20 million in the Company's common stock over a 30-month period with the remaining available amount of \$18,619,512. The Company filed a registration statement with the U.S. Securities and Exchange Commission covering the resale of the shares that may be issued to the institutional investor. The Company recently raised \$3,090,000 from an equity private placement. Additional funding may also be provided by the exercise of 1,002,000 outstanding options expiring during 2014 at an exercise price of \$0.72, which may raise additional capital up to approximately \$720,000. Historically the Company has successfully raised sufficient cash to fund its operations.

**LIGHTWAVE LOGIC, INC.****NOTES TO FINANCIAL STATEMENTS****JUNE 30, 2014 AND 2013****NOTE 3 EQUIPMENT**

Equipment consists of the following:

	<b>June 30,</b>		<b>December 31,</b>
	<b>2014</b>		<b>2013</b>
Office equipment	\$ 51,322	\$	24,244
Lab equipment	497,770		474,049
Furniture	17,022		4,061
Leasehold Improvements	65,998		37,519
	632,112		539,873
Less: Accumulated depreciation	305,584		241,513
	\$ 326,528	\$	298,360

Depreciation expense for the six months ending June 30, 2014 and 2013 was \$64,071 and \$51,902. Depreciation expense for the three months ending June 30, 2014 and 2013 was \$33,862 and \$29,289.

**NOTE 4 INTANGIBLE ASSETS**

This represents legal fees and patent fees associated with the prosecution of patent applications. The Company has recorded amortization expenses on the Spacer and Chromophore patents granted by the United States Patent and Trademark Office in February 2011, April 2011 and September 2012, which are amortized over its legal life of 20 years and Chromophore patent granted by the Australian Patent Office in November 2012 which is amortized over its legal life of 20 years. Certain patent applications are abandoned by the Company when the claims are covered by patents already granted to the Company. Patent applications abandoned have been written off at full capitalized cost. No amortization expense has been recorded on the remaining patent applications since patents have yet to be granted. Once the patents are granted, the cost of the patents will be amortized over their legal lives, which is generally 20 years.

Patents consists of the following:

	<b>June 30,</b>		<b>December 31,</b>
	<b>2014</b>		<b>2013</b>
Patents	\$ 616,020	\$	579,235
Less: Accumulated amortization	43,126		35,695
	\$ 572,894	\$	543,540

Amortization expense for the six months ending June 30, 2014 and 2013 was \$7,431 and \$7,431. Amortization expense for the three months ending June 30, 2014 and 2013 was \$3,716 and \$3,715. Expense for abandoned patents for claims covered by patents already granted to the Company are recorded in research and development expenses and for the three months and six months ending June 30, 2014 and 2013 were \$0 and \$0.

**LIGHTWAVE LOGIC, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**JUNE 30, 2014 AND 2013**

**NOTE 5 INCOME TAXES**

There is no income tax benefit for the losses for the three and six months ended June 30, 2014 and 2013 since management has determined that the realization of the net deferred tax asset is not assured and has created a valuation allowance for the entire amount of such benefits.

The Company's policy is to record interest and penalties associated with unrecognized tax benefits as additional income taxes in the statement of operations. As of January 1, 2014, the Company had no unrecognized tax benefits, or any tax related interest or penalties. There were no changes in the Company's unrecognized tax benefits during the period ended June 30, 2014. The Company did not recognize any interest or penalties during 2014 related to unrecognized tax benefits. With few exceptions, the U.S. and state income tax returns filed for the tax years ending on December 31, 2010 and thereafter are subject to examination by the relevant taxing authorities.

**NOTE 6 STOCKHOLDERS' EQUITY**

**Preferred Stock**

Pursuant to the Company's Articles of Incorporation, the Company's board of directors is empowered, without stockholder approval, to issue series of preferred stock with any designations, rights and preferences as they may from time to time determine. The rights and preferences of this preferred stock may be superior to the rights and preferences of the Company's common stock; consequently, preferred stock, if issued could have dividend, liquidation, conversion, voting or other rights that could adversely affect the voting power or other rights of the common stock. Additionally, preferred stock, if issued, could be utilized, under special circumstances, as a method of discouraging, delaying or preventing a change in control of the Company's business or a takeover from a third party.

**Common Stock and Warrants**

In January 2009, an employee was granted with an option to purchase up to 25,000 shares of common stock at a purchase price of \$.25 per share. Using the Black-Scholes Option Pricing Formula, the options were valued at \$13,136, fair value. These options expire in 5 years and vest immediately. The expense recognized during 2009 is \$13,136. In May 2010, the option was partially exercised to purchase 15,000 shares of common stock for proceeds of \$3,750. In January 2014, the remaining 10,000 options were exercised to purchase 10,000 shares of common stock for proceeds of \$2,500.

In June 2009, an employee was granted with an option to purchase up to 25,000 shares of common stock at a purchase price of \$.34 per share. Using the Black-Scholes Option Pricing Formula, the options were valued at \$21,085, fair value. These options expire in 5 years and vest immediately. The expense recognized during 2009 is \$21,085. In May 2014, the option was fully exercised to purchase 25,000 shares of common stock for proceeds of \$8,500.

During June 2009, the Company issued a warrant to purchase 464,000 shares of common stock at a purchase price of \$0.34 per share for accounting services rendered. The warrant was valued at \$391,342 using the Black-Scholes Option Pricing Formula, vesting 46,400 immediately and the remaining on equal monthly installments of 23,200 over the next eighteen months. The warrant expires in 5 years. The expense is being recognized based on service terms of the agreement over a twenty two month period. The expense recognized during 2010 and 2009 is \$213,459 and \$177,883. In April 2010, the warrant was partially exercised to purchase 10,000 shares of common stock for proceeds of \$3,450. In February 2012, the warrant was partially exercised to purchase 20,000 shares of common stock for proceeds of \$6,900. In June 2013, the warrant was partially exercised to purchase 20,000 shares of common stock for proceeds of \$6,900. In March 2014, warrants were exercised to purchase 250,000 shares of common stock for proceeds of \$86,250. In June 2014, the remaining outstanding 164,000 warrants were exercised to purchase 164,000 shares of common stock for proceeds of \$56,580.

In January 2011, the Company issued a warrant to a related party to purchase 10,000 shares of common stock for legal services at an exercise price of \$1.25 per share. Using the Black-Scholes Option Pricing Formula, the warrants were valued at \$10,453, fair value. These warrants expire in 3 years and vest immediately. The expense recognized during 2011 is \$10,453. In January 2014, the warrant to purchase 10,000 shares of common stock forfeited.

**LIGHTWAVE LOGIC, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**JUNE 30, 2014 AND 2013**

**NOTE 6 STOCKHOLDERS' EQUITY (CONTINUED)**

**Common Stock and Warrants (Continued)**

In August 2012, the board of directors approved a grant to a new employee of an option to purchase up to 100,000 shares of common stock at a purchase price of \$0.925 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at \$74,486, fair value. The option expires in 5 years with 12,500 vesting every 3 months from date of grant. The option is expensed over the vesting terms. For the years ending December 31, 2013 and 2012, the Company recognized \$37,242 and \$15,611 of expense. For the three and six months ending June 30, 2014, the Company recognized \$0 and \$3,012 of expense. In February 2014, the option to purchase 25,000 shares of common stock forfeited. In May 2014, the option to purchase 75,000 shares of common stock forfeited.

In May 2013, the board of directors approved a grant to a new employee of an option to purchase up to 10,000 shares of common stock at a purchase price of \$1.03 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at \$9,574, fair value. The option expires in 10 years with 1,250 vesting quarterly from date of grant. The option is expensed over the vesting terms. In December 2013, the option to purchase 7,500 shares of common stock forfeited. For the year ending December 31, 2013, the Company recognized a net expense of \$2,394. For the six months ending June 30, 2014, the Company recognized \$0 of expense. In March 2014, the options to purchase 2,500 shares of common stock forfeited.

In June 2013, the Company signed a Purchase Agreement and Registration Rights Agreement with an institutional investor to sell up to \$20 million of common stock. Under the agreement subject to certain conditions and at the Company's sole discretion, the institutional investor has committed to invest up to \$20 million in the Company's common stock over a 30-month period. The Company filed the registration statement with the U.S. Securities and Exchange Commission in September 2013. The institutional investor is obligated to make purchases as the Company directs in accordance with the agreement, which may be terminated by the Company at any time, without cost or penalty. Sales of shares will be made in specified amounts and at prices that are based upon the market prices of the Company's common stock immediately preceding the sales to the institutional investor. The Company issued 200,000 shares of restricted common stock to the institutional investor as an initial commitment fee valued at \$170,000, fair value and 400,000 shares of common stock are reserved for additional commitment fees to the institutional investor in accordance with the terms of the agreement. During June 2013 through June 2014, the institutional investor purchased 700,000 shares of common stock for proceeds of \$656,160 and the Company issued 10,322 shares of common stock as additional commitment fee, valued at \$10,623, fair value, leaving 389,678 in reserve for additional commitment



fees. For the six months ending June 30, 2014, the institutional investor purchased 200,000 shares of common stock for proceeds of \$177,660 and the Company issued 2,680 shares of common stock as additional commitment fee, valued at \$2,741, fair value. For the three months ending June 30, 2014, the institutional investor did not purchase any shares of common stock. During July and August 2014, the institutional investor purchased 730,565 shares of common stock for proceeds of \$724,328. During July and August 2014, the Company issued 10,927 shares of common stock as additional commitment fee, valued at \$12,008, fair value, leaving 378,751 in reserve for additional commitment fees.

In December 2013, the board of directors approved a grant to a senior advisor effective January 2014 of a warrant to purchase up to 100,000 shares of common stock at a purchase price of \$0.715 per share. Using the Black-Scholes Option Pricing Formula, the warrant was valued at \$53,313, fair value. The warrant expires in 5 years and vests 25,000 immediately and the remaining in equal monthly installments of 7,500 over the next 10 months. The warrant is expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$26,438 of expense. For the three month ending June 30, 2014, the Company recognized \$13,292 of expense. As of June 30, 2014, the warrants to purchase 100,000 shares of common stock are still outstanding.

In January 2014, the Company issued options to the Company's 4 independent directors to each purchase 50,000 shares of common stock at a purchase price of \$0.715 per share. The options were each valued at \$29,440, fair value, using the Black-Scholes Option Pricing Formula. The options expire in 10 years with 20,000 vesting immediately and the remainder vesting in quarterly equal installments of 10,000 commencing April 1, 2014. The options are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$93,948 of expense. For the three month ending June 30, 2014, the Company recognized \$23,552 of expense. As of June 30, 2014, the options to purchase 200,000 shares of common stock are still outstanding.

**LIGHTWAVE LOGIC, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**JUNE 30, 2014 AND 2013**

**NOTE 6 STOCKHOLDERS' EQUITY (CONTINUED)**

**Common Stock and Warrants (Continued)**

In March 2014, the Company issued options to a new employee to purchase 30,000 shares of common stock at a purchase price of \$0.92 per share. The options were valued at \$23,304, fair value, using the Black-Scholes Option Pricing Formula. The options expire in 10 years vesting in quarterly equal installments of 3,750 from date of employment. The options are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$4,274 of expense. For the three month ending June 30, 2014, the Company recognized \$3,201 of expense. As of June 30, 2014, the options to purchase 30,000 shares of common stock are still outstanding.

In March 2014, the Company issued options to a new employee to purchase 75,000 shares of common stock at a purchase price of \$0.92 per share. The options were valued at \$58,384, fair value, using the Black-Scholes Option Pricing Formula. The options expire in 10 years vesting in quarterly equal installments of 9,375 from date of employment. The options are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$10,233 of expense. For the three month ending June 30, 2014, the Company recognized \$7,741 of expense. As of June 30, 2014, the options to purchase 75,000 shares of common stock are still outstanding.

In March 2014, the Company issued options to a new employee to purchase 50,000 shares of common stock at a purchase price of \$0.92 per share. The options were valued at \$38,922, fair value, using the Black-Scholes Option Pricing Formula. The options expire in 10 years vesting in quarterly equal installments of 6,250 from date of employment. The options are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$6,346 of expense. For the three month ending June 30, 2014, the Company recognized \$4,865 of expense. As of June 30, 2014, the options to purchase 50,000 shares of common stock are still outstanding.

In March 2014, the Company issued options to an employee to purchase 125,000 shares of common stock at a purchase price of \$0.92 per share. The options were valued at \$96,211, fair value, using the Black-Scholes Option Pricing Formula. The options expire in 10 years vesting in quarterly equal installments of 15,625 commencing April 1, 2014. The options are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$23,921 of expense. For the three month ending June 30, 2014, the Company recognized \$12,309 of expense. As of June 30, 2014, the options to purchase 125,000 shares of common stock are still outstanding.

In March 2014, the Company issued options to an employee to purchase 30,000 shares of common stock at a purchase price of \$0.92 per share. The options were valued at \$22,222, fair value, using the Black-Scholes Option Pricing Formula. The options expire in 10 years vesting in quarterly equal installments of 7,500 commencing April 1, 2014. The options are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$11,050 of expense. For the three month ending June 30, 2014, the Company recognized \$5,686 of expense. As of June 30, 2014, the options to purchase 30,000 shares of common stock are still outstanding.

In March 2014, the Company issued options to purchase 40,000 shares of common stock at a purchase price of \$0.92 per share to its Chief Executive Officer as part of a new employment agreement. The options were valued at \$29,630, fair value, using the Black-Scholes Option Pricing Formula. The options expire in 10 years vesting in quarterly equal installments of 10,000 commencing April 1, 2014. The options are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$14,734 of expense. For the three month ending June 30, 2014, the Company recognized \$7,582 of expense. As of June 30, 2014, the options to purchase 40,000 shares of common stock are still outstanding.

In March 2014, the Company issued warrants to purchase 100,000 shares of common stock for consulting services at an exercise price of \$0.92 per share. The warrants were valued at \$66,936, fair value, using the Black-Scholes Option Pricing Formula. The warrants expire in 5 years vesting 25,000 immediately with the remaining 75,000 vesting in monthly equal installments of 7,500 commencing April 1, 2014. The warrants are expensed over the vesting terms. For the six month ending June 30, 2014, the Company recognized \$22,006 of expense. For the three month ending June 30, 2014, the Company recognized \$16,688 of expense. As of June 30, 2014, the warrants to purchase 100,000 shares of common stock are still outstanding.

**LIGHTWAVE LOGIC, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**JUNE 30, 2014 AND 2013**

**NOTE 6 STOCKHOLDERS' EQUITY (CONTINUED)**

**Common Stock and Warrants (Continued)**

In May 2014, the Company issued options to a new director to purchase 200,000 shares of common stock at a purchase price of \$0.763 per share. The options were valued at \$122,515 using the Black-Scholes Option Pricing Formula. The options expire in 10 years with 50,000 vesting immediately and the remainder vesting in annual equal installments of 50,000 commencing on the one year anniversary of the date of grant. The options are expensed over the vesting terms. For the three and six month ending June 30, 2014, the Company recognized \$34,824 of expense. As of June 30, 2014, the option to purchase 200,000 shares of common stock are still outstanding.

During June 2014, the Company issued 2,760,400 shares of common stock and warrants to purchase 2,760,400 shares of common stock expiring five years from the date of purchase, for proceeds of \$2,060,000 in accordance to a private placement memorandum as amended on May 27, 2014. Pursuant to the terms of the offerings, up to 60 units were offered at the purchase price of \$50,000 per unit, with each unit comprised of 67,000 shares and a warrant to purchase 33,500 shares of common stock at \$1.00 per share and a warrant to purchase 33,500 shares of common stock at \$1.25 per share. The warrants to purchase 1,380,200 shares of common stock at \$1.00 per share are still outstanding as of June 30, 2014. The warrants to purchase 1,380,200 shares of common stock at \$1.25 per share are still outstanding as of June 30, 2014. During July 2014, the Company issued 1,380,200 shares of common stock and warrants to purchase 1,380,200 shares of common stock expiring five years from the date of purchase, for proceeds of \$1,030,000.

During June 2014, the Company issued 2,371 shares of common stock to a director serving as a member of the Company's Operations Committee valued at \$2,000, fair value. For the three and six month ending June 30, 2014, the Company recognized \$2,000 of expense. During July 2014, the Company issued 2,081 shares of common stock to the director serving as a member of the Company's Operations Committee valued at \$2,000, fair value.

**NOTE 7 STOCK BASED COMPENSATION**

The Company uses the Black-Scholes option pricing model to calculate the grant-date fair value of an award, with the following assumptions for 2014: no dividend yield, expected volatility, based on the Company's historical volatility, 96% to 109%, risk-free interest rate 1.46% to 2.08% and expected option life of 5 to 7.25 years.

As of June 30, 2014, there was \$577,277 of unrecognized compensation expense related to non-vested market-based share awards that is expected to be recognized through May 2017.

The following tables summarize all stock option and warrant activity of the Company during the three months ended June 30, 2014:

**Non-Qualified Stock Options and Warrants  
Outstanding and Exercisable**

	<b>Number of Shares</b>	<b>Exercise Price</b>	<b>Weighted Average Exercise Price</b>
Outstanding, December 31, 2013	7,146,000	\$0.25 - \$1.75	\$ 1.16
Granted	3,710,400	\$0.72 - \$1.25	\$ 1.05
Expired	(10,000)	\$1.25 \$0.925 -	\$ 1.25
Forfeited	(102,500)	\$1.03 \$0.25 -	\$ 0.93
Exercised	(449,000)	\$0.345	\$ 0.34
Outstanding, June 30, 2014	10,294,900	\$0.63 - \$1.75	\$ 1.15
Exercisable, June 30, 2014	9,361,775	\$0.63 - \$1.75	\$ 1.18

**LIGHTWAVE LOGIC, INC.****NOTES TO FINANCIAL STATEMENTS****JUNE 30, 2014 AND 2013****NOTE 7 STOCK BASED COMPENSATION (CONTINUED)**

Range of Exercise Prices	Non-Qualified Stock Options and Warrants Outstanding		Weighted Average Exercise Price of Options and Warrants Currently Exercisable
	Number Outstanding Currently Exercisable at June 30, 2014	Weighted Average Remaining Contractual Life	
\$0.63 - \$1.75	9,361,775	3.73 Years	\$ 1.18

**NOTE 8 RELATED PARTY**

At June 30, 2014 the Company had accrued salaries to two beneficial owners of \$42,088, legal accrual to related party of \$8,700 and travel and office expense accruals of officers in the amount of \$3,761. At December 31, 2013 the Company had accrued salaries to two beneficial owners of \$42,088, legal accrual to related party of \$5,500 and travel and office expense accruals of officers in the amount of \$1,229.

**NOTE 9 RETIREMENT PLAN**

During 2013, the Company established a 401(k) retirement plan covering all eligible employees beginning November 15, 2013. There were no contributions charged to expense.

**NOTE 10 SUBSEQUENT EVENTS**

During July 2014, the Company issued a warrant to purchase 100,000 shares of common stock at a purchase price of \$0.95 per share for accounting services rendered commencing July 1, 2014. The warrant was valued at \$63,576 using

the Black-Scholes Option Pricing Formula, vesting over the next twelve months with 8,333 vesting immediately, 8,333 vesting per month on the first day of the next ten months and 8,337 vesting on the first day of the twelfth month of the corresponding service agreement. The warrant expires in five years. The expense is being recognized based on service terms of the agreement over a twelve month period.

## Item 2

### Management's Discussion and Analysis of Financial Condition and Results of Operations

The following management's discussion and analysis of financial condition and results of operations provides information that management believes is relevant to an assessment and understanding of our plans and financial condition. The following selected financial information is derived from our historical financial statements and should be read in conjunction with such financial statements and notes thereto set forth elsewhere herein and the "Forward-Looking Statements" explanation included herein.

#### Overview

Lightwave Logic, Inc. (the **Company**) is a development stage technology company focused on the development of next generation photonic devices and non-linear optical polymer materials systems for applications in high speed fiber-optic data communications and optical computing markets. Our primary area of expertise is the chemical synthesis of chromophore dyes used in the development of organic Application Specific Electro-Optic Polymers (ASEOP) and Organic Non-Linear All-Optical Polymers (NLAOP) that have high electro-optic and optical activity. Our family of materials are thermally and photo-chemically stable, which we believe could have utility across a broad range of applications in devices that address markets like, telecommunication, data communications, high-speed computing and photovoltaic cells. Secondly, the Company is developing proprietary electro-optical and all-optical devices utilizing the advanced capabilities of our materials for the application in the fields mentioned above.

In order to transmit digital information at extremely high-speeds (wide bandwidth) over the Internet, it is necessary to convert the electrical signals produced by a computer into optical signals for transmission over long-distance fiber-optic cable. Molecularly engineered materials known as electro-optic polymers when designed into optical devices perform the actual conversion of an electrical signal to an optical signal.

We are currently developing electro-optic polymers that promise performance many times faster than any technology currently available and that have unprecedented thermal stability. High-performance electro-optic materials produced by our Company have demonstrated stability as high as 350 degrees Celsius. Stability above 250 degrees Celsius is necessary for vertical integration into many semi-conductor production lines. In December 2011 one of our non-linear optical polymers, Perkinamine Indigo™ demonstrated an unusually high electro-optical effect of greater than 250 picometers per volt on 1.5-micron films with excellent thermal and photo stability. Independent research laboratories at Photon-X and The University of Colorado confirmed these characteristics. We continued our development program on Perkinamine Indigo™ to better understand the properties that gave us the results reported in December 2011. In January 2014 we created a new methodology to combine multiple chromophores into a single polymer host that will significantly improve their ability to generate more powerful organic, nonlinear electro-optical (EO) polymer systems.



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The new synthetic chemistry process can enable multiple chromophores (dyes) to work in concert with each other within a single polymer host. This proprietary process has created two new material systems, which have demonstrated outstanding electro-optic values. In addition, initial thermal stability results exceed any commercially available organic nonlinear polymer material systems.

Our non-linear all optical polymers have demonstrated resonantly enhanced third-order properties about 2,630 times larger than fused silica, which means that they are very photo-optically active in the absence of an RF layer. In this way they differ from our electro-optical polymers and are considered more advanced next-generation materials.

Our revenue model relies substantially on the assumption that we will be able to successfully develop non-linear polymer materials and photonic device products, which will use non-linear all-optical and electro-optic polymers for applications within the industries named below. When appropriate, we intend to create specific materials for each of these applications and use our proprietary knowledge base to continue to enhance its discoveries.

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telecommunications/data communications

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backplane optical interconnects

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cloud computing and data centers

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photovoltaic cells

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medical applications

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satellite reconnaissance

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navigation systems

.

radar applications

.

optical filters

.

spatial light modulators

.

all-optical transistors

.

entertainment

To be successful, we must, among other things:

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Develop and maintain collaborative relationships with strategic partners;

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Continue to expand our research and development efforts for our products;

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Develop and continue to improve on our manufacturing processes and maintain stringent quality controls;

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Produce commercial quantities of our products at commercially acceptable prices;

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Rapidly respond to technological advancements;

.

Attract, retain and motivate qualified personnel; and

.

Obtain and retain effective intellectual property protection for our products and technology.

We believe that Moore's Law (a principle which states the number of transistors on a silicon chip doubles approximately every eighteen months) will create markets for our high-performance electro-optic materials and photonic device products.

### **Plan of Operation**

Since inception, we have been engaged primarily in the research and development of photonic devices and organic nonlinear polymer materials and associated products. We are devoting significant resources to engineer next-generation electro-optic polymers for future applications to be utilized by electro-optic device manufacturers,

such as telecommunications component and systems manufacturers, networking and switching suppliers, semiconductor companies, aerospace companies, government agencies and internal device development. We expect to continue to develop products that we intend to introduce to these rapidly changing markets and to seek to identify new markets. We expect to continue to make significant operating and capital expenditures for research and development activities.

As we move from a development stage company to a product supplier, we expect that our financial condition and results of operations will undergo substantial change. In particular, we expect to record both revenue and expense from product sales, to incur increased costs for sales and marketing and to increase general and administrative expense. Accordingly, the financial condition and results of operations reflected in our historical financial statements are not expected to be indicative of our future financial condition and results of operations.

Some of our more significant milestones that we achieved during 2013 and 2014 include:

In February 2013 we delivered to a potential large system supplier customer prototype devices that were coated with our advanced organic nonlinear electro-optical polymer, Perkinamine Indigo™. Tests conducted by the University of Colorado, Boulder on coupons coated with the material demonstrated consistent  $R_{33}$  measurements from 100-125 picometers per volt at 1550 nm, which as tested by the University of Colorado exceeded the potential large system supplier customer's stated requirements.

In March 2013 we entered into a product development contractor agreement with EM Photonics (EMP) of Newark, Delaware to fabricate and test waveguides and phase modulators during an initial development phase using existing EMP polymer modulator design and processes. In June 2013 we consolidated the EMP design program into our University of Colorado, Boulder (UCB) program after we fabricated structures with UCB that will be used as the basic building blocks of our Integrated Optical Device effort for the construction of both our advanced telecom modulator and data communications transceiver

In April 2013 our potential large system supplier customer informed us that their preliminary testing results on the prototype devices coated with Perkinamine Indigo that we delivered to them in February 2013 demonstrated several of the key performance parameters that they desired. There are still additional tests that need to be completed. We are working with our potential customer utilizing our Perkinamine™ family of chromophores in a number of host polymers and will evaluate these polymers in conjunction with our chromophores for a specific performance attributes for their application.

In April 2013 Japan granted our Company Japanese Patent No. 5241234 entitled Heterocyclical Chromophore Architectures. This patent protects the unique molecular structures that give our chromophores the thermal stability necessary to withstand CMOS processing temperatures without compromising electro-optical effects.



In June 2013 we signed a new agreement with Lincoln Park Capital Fund, LLC ( Lincoln Park ) to sell up to \$20 million of common stock. Under the agreement subject to certain conditions and at our sole discretion, Lincoln Park has committed to invest up to \$20 million in the Company's common stock over a 30-month period. In October 2013 the U.S. Securities and Exchange Commission declared effective our registration statement covering the resale of the shares that may be issued to Lincoln Park. Sales of shares will be made in specified amounts and at prices that are based upon the market prices of our Company's common stock.

In August 2013 in a combined effort of the Company's chemists, the University of Colorado, Boulder, and a third party research group we successfully fabricated Silicon Organic Hybrid (SOH) slot waveguide modulators. The devices utilize an existing modulator structure with one of our proprietary electro-optic polymer material systems as the enabling material layer. In October 2013 we confirmed the functionality of the SOH slot waveguide modulators as operating prototype devices. These first-generation devices have achieved greater electro-optical activity and dramatically lower drive voltage than industry standard modulators based on inorganic materials.

In November 2013 preliminary testing and initial data on our SOH slot waveguide modulators demonstrated several promising characteristics. The tested SOH chip had a 1-millimeter square footprint, enabling the possibility of sophisticated integrated optical circuits on a single silicon substrate. In addition, the waveguide structure was approximately 1/20 the length of a typical inorganic-based silicon photonics modulator waveguide. With the combination of our proprietary electro-optic polymer material and the extremely high optical field concentration in the slot waveguide modulator, the test modulators demonstrated less than 2.2 volts to operate. Initial data rates exceeded 30-35 Gb/sec in the telecom, 1550 nanometer frequency band. This is equivalent to four, 10Gb/sec, inorganic, lithium niobate modulators that would require approximately 12-16 volts to move the same amount of information. Our material also operates in the 1310 nanometer frequency band, which is suitable for data communications applications.

In February 2014 we received our first purchase order for our advanced organic nonlinear electro-optic (EO) polymer from Boulder Nonlinear Systems (BNS) of Boulder, Colorado in connection with the development of a next generation LADAR system. It is a radar system that utilizes a pulse laser to calculate the distance to a target, but is also capable of rendering a 3-D image.

In March 2014 we began the process of manufacturing an advanced design Silicon Organic Hybrid Transceiver prototype and have released the completed chip design to the OpSIS Center at the University of Delaware who will be producing initial silicon chips through their fabrication partner in Singapore. Delivery of the chips was expected in early summer 2014 for qualification and testing. We were recently notified that the delivery of these chips has been delayed until late summer or early fall. The OpSIS Center at the University of Delaware will be providing us with chips that we will process with various combinations of our electro-optic polymer systems. The initial application will target inter-data center interconnections of more than 10 kilometers. Our next design will utilize a different frequency and address the current bottleneck in the rack-to-server layer.

In April 2014, we entered into a sole worldwide license agreement with Corning Incorporated enabling us to integrate Corning's organic electro-optical chromophores into our portfolio of electro-optic polymer materials. The agreement allows us to use the licensed patents within a defined license field that includes communications, computing, power, and power storage applications utilizing the nonlinear optical properties of their materials. As a result of obtaining this license agreement, we created a new powerful and durable nonlinear organic electro-optical (EO) material that will be used in photonic device development and is based on our new multi-chromophore approach that allows two or more chromophores to work in concert. This multi-chromophore system has achieved a 50% increase in chromophore concentration, leading to higher electro-optical activity when compared to an equivalent single chromophore system. Further, the system does not cause the high chromophore density loading issues such as reduced effective electro-optic activity due to a non-uniform concentration of chromophore in the polymer host. Repeated, multi-point measurements multi-chromophore system shows twice the electro-optic effect of Lithium Niobate with excellent durability.

We ultimately intend to use our next-generation non-linear all-optical and electro-optic polymers for future applications vital to the following industries. We expect to create specific materials for each of these applications as appropriate:

- .  
telecommunications/data communications
- .  
backplane optical interconnects
- .  
cloud computing and data centers
- .  
photovoltaic cells

- .  
medical applications
- .  
satellite reconnaissance
- .  
navigation systems
- .  
radar applications
- .  
optical filters
- .  
spatial light modulators
- .  
all-optical transistors
- .  
entertainment

In an effort to maximize our future revenue stream from our non-linear all-optical and electro-optic polymer products, our business model anticipates that our revenue stream will be derived from one or some combination of the following: (i) technology licensing for specific product applications; (ii) joint venture relationships with significant industry leaders; or (iii) the production and direct sale of our own electro-optic device components. Our objective is to be a leading provider of proprietary technology and know-how in the photonic device markets. In order to meet this objective, subject to successful testing of our technology and having available financial resources, we intend to:

- .  
Develop non-linear all-optical and electro-optic polymers and photonic devices;



.  
Continue to develop proprietary intellectual property;

.  
Streamline our product development process;

.  
Develop a comprehensive marketing plan;

.  
Maintain/develop strategic relationships with government agencies, private firms, and academic institutions; and

.  
Continue to attract and retain high-level science and technology personnel to our Company.

### **Our Proprietary Products in Development**

As part of a two-pronged marketing strategy, our Company is developing several devices, which are in various stages of development that utilize our organic nonlinear optical materials.

They include:

.  
datacomm/telecomm photonic transceiver

.  
telecommunications modulator

.  
spatial light modulator

.  
optical filter

all-optical switch

multi-channel optical modem

Additionally, we must create an infrastructure, including operational and financial systems, and related internal controls, and recruit qualified personnel. Failure to do so could adversely affect our ability to support our operations.

### **Capital Requirements**

As a development stage company, we do not generate revenues. We have incurred substantial net losses since inception. We have satisfied our capital requirements since inception primarily through the issuance and sale of our common stock. During 2013 we received \$2,351,008 in cash proceeds from the issuance and sale of our common stock. During the first two quarters of 2014 we received \$2,391,490 in cash proceeds from the issuance and sale of our common stock.

### **Results of Operations**

#### **Comparison of three months ended June 30, 2014 to three months ended June 30, 2013**

##### Revenues

As a development stage company, we had no revenues during the three months ended June 30, 2014 and June 30, 2013. The Company is in various stages of material and photonic device development and evaluation with potential customers and strategic partners. We expect the next revenue stream to be in sale of nonlinear optical polymer materials, prototype devices, and product development agreements prior to moving into production.



## Operating Expenses

Our operating expenses were \$1,011,371 and \$964,502 for the three months ended June 30, 2014 and 2013, respectively, for an increase of \$46,869. This increase in operating expenses was due primarily to increases in research and development salaries and wages, research and development non-cash stock option and warrant amortization, depreciation, legal expenses, and rent and utility expenses, offset by decreases in general and administrative non-cash amortization of options and warrants, general and administrative wages and salaries, travel and lodging expenses and internet web design fees.

Included in our operating expenses for the three months ended June 30, 2014 was \$618,454 for research and development expenses compared to \$531,116 for the three months ended June 30, 2013, for an increase of \$87,338. This is primarily due to increases in research and development salaries and wages, laboratory electro-optic devices prototype, research and development non-cash stock option and warrant amortization and depreciation.

Research and development expenses currently consist primarily of compensation for employees engaged in internal research, product and application development activities; laboratory operations, internal and outsourced material and device testing and prototype electro-optic device design, development and processing work; customer testing; fees; costs; and related operating expenses.

We expect to continue to incur substantial research and development expense to develop and commercialize our electro-optic material platform. These expenses will increase as a result of accelerated development effort to support commercialization of our non-linear optical polymer materials technology; outsourcing work to build device prototypes; expanding and equipping in-house laboratories; hiring additional technical and support personnel; engaging a senior technical advisor; pursuing other potential business opportunities and collaborations; customer testing and evaluation; and incurring related operating expenses.

Wages and salaries increased \$32,775 from \$217,387 for the three months ended June 30, 2013 to \$250,162 for the three months ended June 30, 2014 primarily due to additional employees hired to perform in-house material development, testing and device development in the Company's laboratory facilities in Delaware and Colorado.

Non-cash stock compensation and stock option and warrant amortization increased \$41,434 from \$96,352 for the three months ended June 30, 2013 to \$137,786 for the three months ended June 30, 2014.

Depreciation expense increased \$3,374 from \$29,025 for the three months ended June 30, 2013 to \$32,399 for the three months ended June 30, 2014 primarily due to the additional equipment purchased for the Company's Delaware and Colorado laboratory facilities.

General and administrative expense consists primarily of compensation and support costs for management staff, and for other general and administrative costs, including executive, sales and marketing, investor relations, accounting and finance, legal, consulting and other operating expenses.

General and administrative expenses decreased \$40,469 to \$392,917 for the three months ended June 30, 2014 compared to \$433,386 for the three months ended June 30, 2013. The decrease is due primarily to decreases in general and administrative non-cash amortization of options and warrants, general and administrative wages and salaries, travel expenses and internet web design fees offset by increases in legal fees and rent and utility expenses.

Executive compensation including fringe benefits decreased \$21,468 to \$133,899 the three months ended June 30, 2014 compared to \$155,367 for the three months ended June 30, 2013. Also, general and administrative non-cash stock option and warrant amortization decreased by \$30,218 to \$58,945 for the three months ended June 30, 2014 compared to \$89,163 for the three months ended June 30, 2013.

Travel expenses decreased by \$14,622 to \$14,579 for the three months ended June 30, 2014 from \$29,201 for the three months ended June 30, 2013 primarily due to the relocation of the Company's headquarter and optical lab to Colorado.

Internet and web design expenses decreased by \$7,999 from \$9,208 for the three months ended June 30, 2013 to \$1,209 for the three months ended June 30, 2014 due to the web design revisions made during 2013.

Legal fees increased \$23,012 to \$74,450 for the three months ended June 30, 2014 compared to \$51,438 for the three months ended June 30, 2013 for legal fees in connection with the capital raise documents and additional registration statements filed during 2014.

Rent and utility expenses increased \$8,347 to \$12,247 for the three months ended June 30, 2014 compared to \$3,900 for the three months ended June 30, 2013 primarily for the expenses of the new headquarter facility in Colorado.

We expect general and administrative expense to increase in future periods as we increase the level of corporate and administrative activity, including increases associated with our operation as a public company; and significantly increase expenditures related to the future production and sales of our products.

#### Other Income (Expense)

Other income (expense) decreased \$184,723 to \$62 for the three months ending June 30, 2014 from (\$184,661) for the three months ending June 30, 2013, relating primarily to the commitment fee associated with the purchase of shares by an institutional investor for resale under a stock purchase agreement during the corresponding six-month period.

#### Net Loss

Net loss was \$1,011,309 and \$1,149,163 for the three months ended June 30, 2014 and 2013, respectively, for a decrease of \$137,854, due primarily to decreases in commitment fee associated with the purchase of shares by an institutional investor for resale under a stock purchase agreement, general and administrative non-cash amortization of options and warrants, general and administrative wages and salaries, travel and lodging expenses and internet web design fees offset by increases in research and development salaries and wages, research and development non-cash stock option and warrant amortization, depreciation, legal expenses and rent and utility expenses.

#### **Comparison of six months ended June 30, 2014 to six months ended June 30, 2013**

#### Revenues

As a development stage company, we had revenues of \$2,500 during the six months ended June 30, 2014 and \$0 for the six months ending June 30, 2013. The Company is in various stages of material and photonic device development and evaluation with potential customers and strategic partners. We expect the next revenue stream to be in sale of nonlinear optical polymer materials, prototype devices, product development agreements prior to moving into production.

### Operating Expenses

Our operating expenses were \$1,998,973 and \$1,867,502 for the six months ended June 30, 2014 and 2013, respectively, for an increase of \$131,471. This increase in operating expenses was due primarily to increases in research and development salaries and wages, laboratory electro-optic device prototype, development and outsourced testing expenses, laboratory materials and supplies, research and development non-cash stock option and warrant amortization, depreciation, legal expenses, investor relations expenses, rent and utility expenses, office expenses, software expense, human resource support and 401(k) Plan processing fees and moving expenses, offset by decreases in general and administrative non-cash amortization of options and warrants, general and administrative wages and salaries, travel and lodging expenses, internet web design fees and accounting fees.

Included in our operating expenses for the six months ended June 30, 2014 was \$1,203,892 for research and development expenses compared to \$986,498 for the six months ended June 30, 2013, for an increase of \$217,394. This is primarily due to increases in research and development salaries and wages, laboratory electro-optic devices prototype, development and outsourced testing expenses, laboratory materials and supplies, research and development non-cash stock option and warrant amortization, depreciation and moving expenses.

Research and development expenses currently consist primarily of compensation for employees engaged in internal research, product and application development activities; laboratory operations, internal and outsourced material and device testing and prototype electro-optic device design, development and processing work; customer testing; fees; costs; and related operating expenses.

We expect to continue to incur substantial research and development expense to develop and commercialize our electro-optic material platform. These expenses will increase as a result of accelerated development effort to support commercialization of our non-linear optical polymer materials technology; outsourcing work to build device prototypes; expanding and equipping in-house laboratories; hiring additional technical and support personnel; engaging a senior technical advisor; pursuing other potential business opportunities and collaborations; customer testing and evaluation; and incurring related operating expenses.

Wages and salaries, including fringe benefits increased \$70,228 from \$401,183 for the six months ended June 30, 2013 to \$471,411 for the six months ended June 30, 2014 primarily due to additional employees hired to perform in-house material development, testing and device development in the Company's laboratory facilities in Delaware and Colorado.

Non-cash stock compensation and stock option and warrant amortization increased \$55,600 from \$226,637 for the six months ended June 30, 2013 to \$282,237 for the six months ended June 30, 2014.

Laboratory materials and supplies increased \$35,045 from \$34,783 for the six months ended June 30, 2013 to \$69,828 for the six months ended June 30, 2014. Laboratory electro-optic device prototype, development and outsourced testing expenses also increased \$22,993 from \$167,619 for the year ended June 30, 2013 to \$190,612 for the six months ended June 30, 2014.

Depreciation expense increased \$10,640 from \$51,375 for the six months ended June 30, 2013 to \$62,015 for the six months ended June 30, 2014 primarily due to the additional equipment purchased for the Company's Delaware and Colorado laboratory facilities.

Moving expenses incurred during the six months ending June 30, 2014, for the move of the optical lab to the Company's new headquarter facility in Colorado were \$3,972.

General and administrative expense consists primarily of compensation and support costs for management staff, and for other general and administrative costs, including executive, sales and marketing, investor relations, accounting and finance, legal, consulting and other operating expenses.

General and administrative expenses decreased \$85,923 to \$795,081 for the six months ended June 30, 2014 compared to \$881,004 for the six months ended June 30, 2013. The decrease is due primarily to decreases in general



and administrative non-cash amortization of options and warrants, general and administrative wages and salaries, travel expenses, internet web design fees and accounting fees offset by increases in legal fees, investor relations expenses, rent and utility expenses, office expenses, software expense, general and administrative moving expenses and human resource support and 401(k) Plan processing fees.

Executive compensation including fringe benefits decreased \$39,604 to \$269,432 from \$309,036. Also, general and administrative non-cash stock option and warrant amortization decreased by \$93,149 to \$135,653 for the six months ended June 30, 2014 compared to \$228,802 for the six months ended June 30, 2013.

Travel expenses decreased by \$20,876 to \$34,024 for the six months ended June 30, 2014 from \$54,900 for the six months ended June 30, 2013 primarily due to the relocation of the Company's headquarter and optical lab to Colorado.

Internet and web design fees decreased \$7,476 to \$2,261 for the six months ended June 30, 2014 compared to \$9,737 for the six months ended June 30, 2013 due to the web design revisions made during 2013.

Accounting fees decreased \$4,390 to \$42,600 for the six months ended June 30, 2014 compared to \$46,990 for the six months ended June 30, 2013 for the implementation during the second quarter of 2013, of an employee stock option software program for interactive option exercises by employees and directors under the 2007 Employee Stock Plan.

Legal fees increased \$17,456 to \$106,728 for the six months ended June 30, 2014 compared to \$89,272 for the six months ended June 30, 2013 for legal fees in connection with capital raise documents and additional registration statements filed during 2014.

Investor relations expenses increased by \$15,780 from \$30 for the six months ended June 30, 2013 to \$15,810 for the six months ended June 30, 2014.

Rent and utility expenses increased \$12,930 from \$7,800 for the six months ended June 30, 2013 to \$20,730 for the six months ended June 30, 2014 primarily for the expenses of the new headquarter facility in Colorado.

Office expenses increased \$6,585 from \$7,384 for the six month period ended June 30, 2013 to \$13,969 for the six month period ended June 30, 2014 for expenses related to the Company's new headquarter and optical lab in Colorado. Administrative and receptionist expenses increased \$4,344 from \$600 for the six month period ended June 30, 2013 to \$4,944 for the six month period ended June 30, 2014 for the administrative assistant in the Company's new headquarter in Colorado.

Software expenses increased \$7,938 from \$0 for the six months ended June 30, 2013 to \$7,938 for the six months ended June 30, 2014 primarily for the implementation during the second quarter of 2013, of an employee stock option software program for interactive option exercises by employees and directors under the 2007 Employee Stock Plan.

Moving expenses incurred during the six months ending June 30, 2014, for the move of the Company's corporate office to the new headquarter facility in Colorado were \$7,736.

Human resource support and 401(k) Plan processing fees increased \$5,032 from \$1,545 for the six month period ended June 30, 2013 to \$6,577 for the six month period ended June 30, 2014 for the implementation of a 401(k) Plan in the fourth quarter of 2013.

We expect general and administrative expense to increase in future periods as we increase the level of corporate and administrative activity, including increases associated with our operation as a public company; and significantly increase expenditures related to the future production and sales of our products.

#### Other Income (Expense)

Other income (expense) decreased \$201,514 to (\$2,618) for the six months ending June 30, 2014 from (\$204,132) for the six months ending June 30, 2013, relating primarily to the commitment fee associated with the purchase of shares by an institutional investor for resale under a stock purchase agreement during the corresponding six-month period.

#### Net Loss

Net loss was \$1,999,091 and \$2,071,634 for the six months ended June 30, 2014 and 2013, respectively, for a decrease of \$72,543, due primarily to decreases in commitment fee associated with the purchase of shares by an institutional investor for resale under a stock purchase agreement, general and administrative non-cash amortization of options and warrants, general and administrative wages and salaries, travel and lodging expenses, internet web design fees and accounting fees offset by increases in research and development salaries and wages, laboratory electro-optic device prototype, development and outsourced testing expenses, laboratory materials and supplies, research and development non-cash stock option and warrant amortization, depreciation, legal expenses, investor relations expenses, rent and utility expenses, office expenses, software expense, human resource support and 401(k) Plan processing fees and moving expenses.

### **Significant Accounting Policies**

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates based upon historical experience and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ materially from these estimates.

We believe our significant accounting policies affect our more significant estimates and judgments used in the preparation of our financial statements. Our Annual Report on Form 10-K for the year ended December 31, 2013 contains a discussion of these significant accounting policies. We adopted changes to our significant accounting policies since December 31, 2013. See our Note 1 in our unaudited financial statements for the six months ended June 30, 2014, as set forth herein for a complete discussion of our Company's accounting policies.

## Liquidity and Capital Resources

During the six months ended June 30, 2014, net cash used in operating activities was \$1,502,853 and net cash used in investing activities was \$129,024, which was due primarily to the Company's research and development activities and general and administrative expenditures. Net cash provided by financing activities for the six months ended June 30, 2014 was \$2,391,490. At June 30, 2014, our cash and cash equivalents totaled \$3,030,317, our assets totaled \$4,128,014, our liabilities totaled \$190,351, and we had stockholders' equity of \$3,937,663.

## Sources and Uses of Cash

Our future expenditures and capital requirements will depend on numerous factors, including: the progress of our research and development efforts; the rate at which we can, directly or through arrangements with original equipment manufacturers, introduce and sell products incorporating our polymer materials technology; the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; market acceptance of our products and competing technological developments; and our ability to establish cooperative development, joint venture and licensing arrangements. We expect that we will incur approximately \$3,300,000 of expenditures over the next 12 months. Our cash requirements are expected to increase at a rate consistent with the Company's path to revenue growth as we expand our activities and operations with the objective of commercializing our electro-optic polymer technology during 2015.

Our business does not presently generate the cash needed to finance our current and anticipated operations. We believe we have raised sufficient capital to finance our operations through December 2015, however, we will need to obtain additional future financing after that time to finance our operations until such time that we can conduct profitable revenue-generating activities.

Such future sources of financing may include cash from equity offerings, exercise of stock options, warrants and proceeds from debt instruments; but we cannot assure you that such equity or borrowings will be available or, if available, will be at rates or prices acceptable to us.

In May 2011 we signed our stock purchase agreement with Lincoln Park whereby subject to certain conditions and at our sole discretion, Lincoln Park has committed to purchase up to \$20 million of our common stock over a 30-month period. We registered for resale by Lincoln Park 10,000,000 shares of our common stock in June 2011. The stock purchase agreement expired in December 2013. In June 2013 we signed our new stock purchase agreement with Lincoln Park to sell up to \$20 million of common stock whereby subject to certain conditions and at our sole discretion, Lincoln Park has committed to purchase up to \$20 million of our common stock over a 30-month period.

We registered for resale by Lincoln Park 10,000,000 shares of our common stock in October 2013. Pursuant to the new stock purchase agreement, Lincoln Park is obligated to make purchases as the Company directs in accordance with the purchase agreement, which may be terminated by the Company at any time, without cost or penalty. Sales of shares will be made in specified amounts and at prices that are based upon the market prices of our Company's common stock immediately preceding the sales to Lincoln Park. We expect this financing to provide our Company with sufficient funds to maintain its operations for the foreseeable future. With the additional capital, we expect to achieve a level of revenues attractive enough to fulfill our development activities and adequate enough to support our business model for the foreseeable future. We cannot assure you that we will meet the conditions of the stock purchase agreement with Lincoln Park in order to obligate Lincoln Park to purchase our shares of common stock. In the event we fail to do so, and other adequate funds are not available to satisfy either short-term or long-term capital requirements, or if planned revenues are not generated, we may be required to substantially limit our operations. This limitation of operations may include reductions in capital expenditures and reductions in staff and discretionary costs.

There are no trading volume requirements or restrictions under the new stock purchase agreement, and we will control the timing and amount of any sales of our common stock to Lincoln Park. Lincoln Park has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the purchase agreement. We can also accelerate the amount of common stock to be purchased under certain circumstances. There are no limitations on use of proceeds, financial or business covenants, restrictions on future funding, rights of first refusal, participation rights, penalties or liquidated damages in the purchase agreement. We may terminate the stock purchase agreement at any time, at our discretion, without any penalty or cost to us. Lincoln Park may not assign or transfer its rights and obligations under stock the purchase agreement.

We expect that our cash used in operations will increase during 2014 and beyond as a result of the following planned activities:

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The addition of management, sales, marketing, technical and other staff to our workforce;

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Increased spending for the expansion of our research and development efforts, including purchases of additional laboratory and production equipment;

Increased spending in marketing as our products are introduced into the marketplace;

Developing and maintaining collaborative relationships with strategic partners;

Developing and improving our manufacturing processes and quality controls; and

Increases in our general and administrative activities related to our operations as a reporting public company and related corporate compliance requirements.

### **Analysis of Cash Flows**

For the six months ended June 30, 2014

Net cash used in operating activities was \$1,502,853 for the six months ended June 30, 2014, primarily attributable to the net loss of \$1,999,091 adjusted by \$72,701 in warrants issued for services, \$345,189 in options issued for services, \$4,742 in common stock issued for services, \$71,502 in depreciation expenses and patent amortization expenses, (\$66,071) in prepaid expenses and \$68,175 in accounts payable and accrued expenses. Net cash used in operating activities consisted of payments for research and development, legal, professional and consulting expenses, rent and other expenditures necessary to develop our business infrastructure.

Net cash used by investing activities was \$129,024 for the six months ended June 30, 2014, consisting of \$36,785 in cost for intangibles and \$92,239 in asset additions primarily for the lab facility and new corporate office.

Net cash provided by financing activities was \$2,391,490 for the six months ended June 30, 2014 and consisted of \$2,060,000 in proceeds from the private sale of common stock and warrants, \$177,660 in proceeds from the registered resale of common stock to an institutional investor and \$153,830 from the exercise of options and warrants.

## **Inflation and Seasonality**

We do not believe that our operations are significantly impacted by inflation. Our business is not seasonal in nature.

## **Item 4**

### **Controls and Procedures**

*Evaluation of Disclosure Controls and Procedures.* The Company's management, with the participation of the Company's Principal Executive Officer and Principal Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of June 30, 2014. Based on this evaluation, the Company's Principal Executive Officer and Principal Financial Officer concluded that, as of June 30, 2014 the Company's disclosure controls and procedures were effective, in that they provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and is accumulated and communicated to the Company's management, including the Company's Principal Executive Officer and Principal Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

*Changes in Internal Control Over Financial Reporting.* There were no changes in our internal control over financial reporting during the quarter ended June 30, 2014 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**PART II OTHER INFORMATION**

**Item 2**

**Unregistered Sales of Equity Securities and Use of Proceeds**

<b>Date</b>	<b>Security/Value</b>
May 2014	Common Stock 25,000 shares of common stock at \$0.34 per share pursuant to an option exercise for total proceeds of \$8,500.
May 2014	Options right to buy 200,000 shares of common stock at \$0.763 per share issued for services.
June 2014	Common Stock 164,000 shares of common stock at \$0.345 per share pursuant to a warrant exercise for total proceeds of \$56,580.
June 2014	Common Stock 2,371 shares of common stock at \$0.843 per share issued for services.
June 2014	Units - 2,760,400 shares of common stock and warrants to purchase 2,760,400 shares of common stock contained in units for total proceeds of \$2,060,000.

No underwriters were utilized and no commissions or fees were paid with respect to any of the above transactions. We relied on Section 4(a)(2) of the Securities Act of 1933, as amended, since the transactions did not involve any public offering.

**Item 6**

**Exhibits**

The following exhibits are included herein:

<b>Exhibit No.</b>	<b>Description of Exhibit</b>	<b>Location</b>
31.1	Certification pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, executed by the Principal Executive Officer of the Company.	Filed herewith
31.2		Filed herewith



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	Certification pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, executed by the Principal Financial Officer of the Company.	
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by the Principal Executive Officer of the Company.	Filed herewith
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by the Principal Financial Officer of the Company.	Filed herewith
101	XBRL	Furnished herewith

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

**LIGHTWAVE LOGIC, INC.**

Registrant

By: /s/ Thomas E. Zelibor  
Thomas E. Zelibor,  
Chief Executive Officer  
(Principal Executive Officer)

Date: August 14, 2014

By: /s/ James S. Marcelli  
James S. Marcelli,  
President, Chief Operating Officer  
(Principal Financial Officer)

Date: August 14, 2014

