



LIGHTWAVE LOGIC™

Open Letter to Lightwave Logic, Inc. Shareholders

Newark, Delaware, May 16, 2012

Fellow Shareholders,

I would like to begin by telling you how excited I am to be appointed as the new CEO of Lightwave Logic, Inc. It is an honor and a privilege for me to assume this position and I am looking forward to the increased responsibility and the opportunity to make a greater contribution to the success of our Company. We have some impressive technology under development, but there is a great deal of work left to do and I am very anxious to improve the Company's efforts to move us forward.

I would also like to take this opportunity to thank Jim Marcelli, our former CEO, for all of his hard work and years of service in that position. Jim did a very good job getting the Company organized, functioning and financed to the level that we are today. With the capital Jim has been able to secure through private placements, as well as the Lincoln Park Capital purchase agreement, we now have the resources necessary to make the investments required for our future growth.

I want to make sure you all understand that the demands of running the Company were getting increasingly complicated and it had become clear that there was not enough time in the day to manage scientific development, day-to-day administration, financial management and shareholder communications. This generated frustration about the seemingly slow progress we have been making as a company. Now that I am the Chairman and CEO, I will have the opportunity to be engaged full-time in the Company's efforts. In addition, having Jim focus on the operational side of our business will give the Company increased efficiency and help us achieve our commercialization goals more rapidly. This is a huge win for you, our shareholders and as we previously announced, he has taken over the responsibilities as the Company's President and Chief Operating Officer. This change will allow us to operate more effectively as a team and be more proactive, vice reactive.

Finally, I want to thank the Board of Directors for the support I have received over the past several months in the capacity of non-executive Chairman of the Board. We are very fortunate to have such a talented group of professionals to help us on our Board and it is a pleasure to work



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alongside each and every one of them.

Five Areas of Focus:

1. Control of Critical Functions

I am now in the process of evaluating all the areas of our business that have hindered our operational efficiency. For years now, we have had a strong reliance on Universities to accomplish much of our synthetic chemistry and testing. We have derived some good benefits from these relationships and it was a sound strategy for a company with limited resources. However, having a single reliance on academic institutions for our critical functions is not a viable long-term solution for a company such as ours since by definition, they do not share our same sense of urgency. Going forward, I am going to narrow our reliance on them by actively searching for full-time organic/synthetic chemists, as well as an optical engineer to bring most of this activity inside Lightwave Logic. I want young, hungry professionals that have a strong desire to be a part of something special and willing to put in the time and effort required to achieve our goals. Throughout my career I have never relished the thought of being held hostage by things that are not in my control and I don't intend to start now. We will take control of our own destiny.

2. Product Testing

The next issue that needs redirection is our product testing. As Joe Miller mentioned at last year's annual meeting, testing has always been a hindrance to scientific development. And for us, relying on outside testing entities has magnified the problem. It has severely limited our ability to respond effectively to our potential customers and partners. This is not ideal for us and my intent is to make a concerted effort to obtain our own internal testing capability, hence the search for an optical engineer I mentioned above.

It is important to realize that there can be a lot of variability involved in testing due to theoretical disagreement, along with differences in technical procedures and even human error. At the end of the day, the most valuable test is how a material works in a device. Dr. Fred Leonberger is currently at work in that endeavor. He has recently finished an initial design of a modulator using Perkinamine Indigo™ and we are beginning to implement this design in an operational device. Our current schedule targets completion of this prototype modulator later this year—subject to the successful characterization of our materials both on a stand-alone basis and in a modulator design.



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Finally, modern lab facilities and equipment are essential not only to ensure that we can develop and produce repeatable, high quality processes and materials, but just as important, they are critical to the recruitment and retention of the key personnel we need in the Company to help us advance the science we value so much. We have outgrown the start-up nature of our current facilities and we are about to change the culture of our entire organization. To accomplish this goal, we have signed a lease (effective May 1st) for a new laboratory in the Delaware Technology Park and near the University of Delaware. We have begun purchasing the necessary capital equipment to outfit this facility to our specifications and standards. We expect to begin operations there in June. I feel it is imperative to have a tightly linked coupling between chemical synthesis and testing. This move will give us the ability to synthesize and test in the same facility and will help us accelerate our development efforts. Completing these actions convinces me we can dramatically improve how we develop, test and compare results, allowing us to take better advantage of our materials progress up to this point.

3. Commercial Activity

It is also imperative that we have a fully developed and well-publicized strategic vision and business plan. This plan must detail phases of our development as a company, complete with milestones and objectives assigned to individuals in the organization. This has been attempted a few times in our past, but has not been fully accomplished to the expected level or to my satisfaction. To that end, I am looking for an additional Board member with start-up expertise and financial market savvy to give us the additional insight and experience we need to build realistic business expectations and product development strategies that are achievable for a company whose goal is to create sustainable growth.

While there is bona fide commercial interest in our technology, part of the delay we are experiencing reflects some reticence by customers to dive into and be the first to implement organic nonlinear optical polymer materials in their products. That said, one product opportunity that has recently emerged on the path to commercialization is the development of optical limiters using our Third-Order material, Perkinamine NR™. An optical limiter is a device that absorbs light in a wide range of frequencies and then limits transmitted light (such as laser energy) to protect sensitive sensors or the human eye from damage. The device can accomplish this at very high rates of speed. As you might expect, some Department of Defense laboratories have made it known that there is a tremendous need for a material with this type of capability. We are pursuing this with the Air Force Research Laboratory, which is conducting tests on our material now. Additionally, our major microelectronics partner has indicated that they are interested in bringing some of our material testing internal to their company, which should enhance our progress with them.



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For more detailed information including updates on where we are in the development of our Perkinamine™ family of materials, I invite you to review our Form10-Q that was just released on May 15th. I will continue to inform you of any new developments.

4. Investor Communications

When I took the Chair last fall, I believed strongly that one of our goals should be to improve communications to both our shareholders and to the professional investment community. Other than significantly improving the website, the overall effort to improve our communications did not happen the way I envisioned it and we fell short of my goals. As a result, I am going to make this initiative a priority.

We attempted to improve our communications as economically as possible and kept the process internal. I still feel at our current stage of development we can meet everyone's needs effectively with that strategy, but we must continually work to improve our execution. We will allocate the appropriate level of resources to this very important area to develop a professional, well thought out IR/PR plan and execution is key. If our shareholders and the professional investment community do not have regular, and understandable communications, the predictable response will be indifference and confusion. I am already in the process of working through a clear and concise message that everyone will be able to understand. I also feel strongly that listing on an exchange such as the NASDAQ is necessary to increase access to institutional investors. We are currently investigating the requirements to accomplish that goal. The results of this program, over time, should be an increase in our institutional investor base, and increased opportunities for potential partnerships and acquisitions.

I want to see shareholder value increase as a result of our hard work and results. The objective is to effectively manage long-term shareholder value. Our share price will go up and down as influenced by our successes, challenges and many other factors not under our control. Splitting the duties of CEO and President/COO will allow us to spend more time on the road meeting as many professional investors, registered representatives and retail investors as possible—getting our story out. I also expect to talk about our technology and its potential uses in conferences, whitepapers, trade journals and other media outlets. We need these programs for obvious reasons and until we really begin this in earnest, no one will know who we are, or what we have accomplished.



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5. Leadership

Many factors have to work in concert to be an effective leader who accomplishes the goals and objectives for an organization. For me, the three most important are: responsibility, authority and accountability. Interestingly enough, my previous roles in Lightwave Logic gave me plenty of responsibility and accountability, but did not carry the requisite authority. In my new position, that triangle is now complete; therefore, I will expend considerable energy to complete the items I have outlined above. I consider it a real privilege to have this opportunity and I will take full advantage of it. I look forward to leading the effort to make Lightwave Logic successful. You all have been very patient and loyal and I want you to know that the entire Lightwave Logic team greatly appreciates both your commitment and trust. We are going to work extremely hard to make you proud of your ownership of our exciting young company.

Sincerely,

Tom Zelibor
Chairman & CEO,
Lightwave Logic, Inc.