

August 12, 2021

Fellow Shareholders,

I am delighted to share with you our first quarterly update since META became the first NASDAQ-listed metamaterials company. As a result of the transaction and our recent ATM offerings, we were able to close Q2 with over \$150MM in cash and a virtually debt free balance sheet. META has the necessary funds to execute its current scale-up plan. We continue to actively explore and evaluate strategic, organic, and inorganic growth opportunities to broaden our platform, focusing on complementary technologies, expanding the customer base, adding manufacturing capacity, building supplier relationships, and opening new markets.

Financial Results: META is an early growth stage, platform company, moving toward volume production for applications in multiple end markets. In Q2:2021, revenue grew nearly 200% Y/Y, to \$624K compared to \$210K in Q2:2020. In H1:2021, revenue grew 88%, to \$1,221K vs. \$651K. We expect development programs to account for the majority of our revenue over the next 12 months. META is currently pursuing multi-year, multi-million-dollar contracts with several OEMs. All aspects of lease obligations for the Torchlight oil and gas assets are in compliance, and we have hired a consultant to help determine the best path to maximize value for the Series A Preferred shareholders. Please visit the [Investors](#) section of our website for our complete financial statements and MD&A.

On August 5th, we announced a [transformational deal to acquire Nanotech Security Corp. \(TSXV:NTS\)](#), which will add nanofabrication volume and scale, accelerating the commercialization of a number of META's applications by at least 9 months, expand our team in key operations and manufacturing capabilities, and enhance our IP position. In the government and banknote market, Nanotech has supplied security features used in 30+ banknote denominations. In 2017, Nanotech won a multi-year C\$30 million development contract with a confidential top-10 central bank to design a unique, nano-optic security feature for a future banknote and it is in the process of seeking to secure a next phase contract later this year.

Production Scale-Up: Nanotech brings state of the art electron beam lithography (EBL), high-volume, roll-to-roll nanoimprint lithography (NIL) and nano-coating production equipment, with current capacity exceeding 7 million square meters per year, at significantly lower production costs compared to semiconductor processes. In-house EBL capabilities are expected to significantly increase META's capacity for new customer engagements and shorten material selection and scale-up programs. META plans to double Nanotech's production capacity to approximately 15 million square meters. **META's existing non-security applications are expected to retail at prices of \$300-\$450 per square meter**, similar on a per unit basis to our existing products sold on our e-commerce site. META's Pleasanton, CA facility is also expanding, and on **July 30th**, [Dr. Hai Sun joined META to oversee lithography manufacturing](#). The Nanotech transaction is expected to close by early October. [Click here for a webcast replay](#) related to the acquisition or visit our IR site.

On July 23rd, we announced the appointment of [Darren Ihmels as Vice President of Business Development Ophthalmics](#). Mr. Ihmels brings over 30 years of experience in ophthalmic products, sales, manufacturing, equipment, and services for prescription lenses and smart augmented reality (AR) applications. He will be focused on growing META's **ARfusion™ technology**, which combines precision cast lens fabrication tools and functional metamaterials and volume holograms, to provide META's AR wearable developers with a platform for seamlessly integrating smart technologies into thin lightweight prescription glasses. To learn more about the ARfusion™ platform and see a video of the automated lens casting system in action, [click here](#).

On July 6th, we announced the completion of a 27-month long UK-funded project towards developing a [non-invasive glucose sensing prototype](#), which combined radio wave and optical sensors to improve accuracy in predicting glucose level changes. The developed biosensing prototype is a critical step towards a "Home Hub" system targeted at monitoring biological parameters. The novel multiwavelength biosensing technology is protected with two patent applications filed in 2021 and extends the previous research work on this topic resulting in a total of 5 patent

families, comprising 11 international patents (4 granted, 7 pending). Human trials began in July, and META is in the process of securing an electronics contract manufacturer providing design for manufacture services.

Our Mission: META delivers previously unachievable performance, across a range of applications, by inventing, designing, developing, and manufacturing sustainable, highly functional smart materials. Our technology platform encompasses **three core capabilities**, holography, lithography, and wireless sensing, and is **software and AI-design driven**. This allows us to develop a library of solutions and functional prototypes much faster and at lower cost than traditional chemical synthesis. We enable leading global brands to deliver breakthrough products to customers in consumer electronics, 5G communications, health and wellness, aerospace, automotive, and clean energy.

Application Examples:

- **EMI Shielding** – NANOWEB® transparent metal mesh with sub-micron linewidths provides high EMI shielding (60-70dB) without sacrificing optical transparency (~90%). We are pursuing potential uses ranging from high-volume consumer electronics devices to high-value aerospace applications protecting instruments and sensors.
- **5G Communications** – META and [Sekisui Chemical are collaborating](#) to develop a transparent and flexible, passive radio wave reflective film based on NANOWEB® metal mesh to improve the performance and coverage of 5G and future 6G networks. We are ramping production of test samples to meet customer demand.
- **LIDAR Protection** – Autonomous vehicles and ADAS (advanced driver assistance systems) depend on sensors to “see” their surroundings, and can be disrupted by inclement weather, as well as electromagnetic interference (EMI). META is developing NANOWEB® for deicing/defogging and EMI shielding. We are seeing growing interest.
- **Medical Wireless Sensing** – Our radiWISE™ technology enhances the signal to noise ratio for MRI (magnetic resonance imaging) systems by up to 40x. We are pursuing partnerships to design updated prototypes and developing a plan to conduct clinical studies.
- **Molecular Biosensor** – META is developing a bio-photonic sensor with sensitivity and performance enhanced by nanomaterial to meet rising demand for point of care/point of use testing for COVID-19 and 50 other molecules. This portable, smartphone attached biosensor under development uses Surface-Enhanced Raman Spectroscopy (SERS) with a special film material as a consumable.

Intellectual Property: Since the Q1 report, we were **granted six new patents, one** related to RML® (rolling mask lithography) in Korea and five for MRI (magnetic resonance imaging) in Europe. We have **filed three new patents, including two new patent families**. One new filing was on manufacturing holographic applications, one on EMI shielding applications of NANOWEB®, and one enhancing the efficiency of solar cells. META currently has a total of **82 patents granted and 67 pending patent applications**, including 36 active applications in the U.S. and 113 in 21 other countries around the world. META’s portfolio comprises **46 patent families, 28 of which are granted**.

Conclusion: When I founded the Company in 2011, I had a vision for how a new class of materials, called metamaterials, might be used to help improve human life. We are committed to scaling our production and bringing the benefits of nanotechnology to customers across multiple applications and markets. META is a leader in the field of metamaterials. META intends to support and grow its position and build our talent pipeline through sponsorships such as the [Stanford University SystemX Alliance](#) and open innovation partnerships in the months and years ahead. I invite you to join us as we seek to “**go beyond**” to make every product smarter and more sustainable by utilizing light and advanced materials. We very much appreciate your continued support.

Sincerely,

George Palikaras

George Palikaras, Ph.D.,
President & CEO / Founder

About Metamaterial Inc.

META delivers previously unachievable performance, across a range of applications, by inventing, designing, developing, and manufacturing sustainable, highly functional materials. Our extensive technology platform enables leading global brands to deliver breakthrough products to their customers in consumer electronics, 5G communications, health and wellness, aerospace, automotive, and clean energy. Our achievements have been widely recognized, including being named a Global Cleantech 100 company. Learn more at www.metamaterial.com.

Forward Looking Information

This letter includes forward-looking information or statements within the meaning of Canadian securities laws and within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995, regarding the Company, Nanotech, their businesses and the proposed transaction, which may include, but are not limited to, statements with respect to the business strategies, product development, expansion plans and operational activities of the Company and Nanotech, and the benefits to the Company of the potential acquisition of Nanotech. Often but not always, forward-looking information can be identified by the use of words such as “potential,” “predicts,” “projects,” “seeks,” “plans,” “expect”, “intends”, “anticipated”, “believes” or variations (including negative variations) of such words and phrases, or statements that certain actions, events or results “may”, “could”, “should,” “would” or “will” be taken, occur or be achieved. Such statements are based on the current expectations and views of future events of the management of the Company and are based on assumptions and subject to risks and uncertainties. Although the management of the Company believes that the assumptions underlying these statements are reasonable, they may prove to be incorrect. The forward-looking events and circumstances discussed in this release may not occur and could differ materially as a result of known and unknown risk factors and uncertainties affecting the Company, including risks related to the potential benefits of the transaction with Nanotech, the capabilities of Nanotech’s facility and the expansion thereof, research and development projects of the Company, the market potential of the products of the Company and Nanotech, the market position of the Company, the completion of the transaction, the scalability of the Company’s production ability, capacity for new customer engagements, material selection programs timeframes, the ability to reduce production costs, enhance metamaterials manufacturing capabilities and extend market reach into new applications and industries, the ability to accelerate commercialization plans, the possibility of new customer contracts, the continued engagement of Nanotech’s team, the technology industry, market strategic and operational activities, and management’s ability to manage and to operate the business. More details about these and other risks that may impact the Company’s businesses are described under the heading “Forward Looking Information” in the Company’s Form 8-K filed with the SEC on July 23, 2021, and under the heading “Risk Factors” in the Company’s Form 10-Q filed with the SEC on May 14, 2021, in the Company’s Form 10-K filed with the SEC on March 18, 2021, and in subsequent filings made by Meta Materials with the SEC, which are available on SEC’s website at www.sec.gov. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on any forward-looking statements or information. No forward-looking statement can be guaranteed. Except as required by applicable securities laws, forward-looking statements speak only as of the date on which they are made and the Company does not undertake any obligation to publicly update or revise any forward looking statement, whether as a result of new information, future events, or otherwise, except to the extent required by law.