

## FORM 7

### **MONTHLY PROGRESS REPORT**

Name of Listed Issuer: [Metamaterial Inc. \(the "Issuer" / "META"\)](#).

Trading Symbol: [MMAT](#)

Number of Outstanding Listed Securities:

As of April 8, 2021, 105,528,460 Common Shares, 13,170,069 Options, 1,872,750 Deferred Share Units, 1,606,855 Warrants, 19,619 Broker Warrants, Unsecured Convertible Promissory Notes of US \$11,049,914 convertible into 7,823,775 Common Shares.

Date: [April 8, 2021](#)

#### **Report on Business**

1. Provide a general overview and discussion of the development of the Issuer's business and operations over the previous month. Where the Issuer was inactive disclose this fact.

[Metamaterial Inc. \("META"\)](#), designs and produces highly functional and sustainable products that master and manipulate light and other forms of energy. META applies this technology to revolutionize everything from solar solutions to aircraft safety, to automotive, consumer electronics and medical devices.

META uses three proprietary manufacturing processes to produce its products: holography, lithography and wireless sensing. One of META's trade secrets is a powerful rapid-design software that not only designs the nanostructure pattern for our nanomaterials but also selects the optimal combinations of materials for them. Our proprietary rapid computer design, material selection and virtual testing capabilities result in highly optimized materials. This essentially eliminates the need to spend months and millions of dollars developing new chemical formulations, currently offered by major Industrial-Chemical companies, resulting in only incremental performance gains over previous legacy products.

Whether for our own products, or in response to custom requirements from industry, we are highly proficient in the rapid design of novel light and energy management functionalities into both original and existing products. Our holographic and lithographic nanofabrication technologies allow metamaterials to be rapidly produced in not only large quantities, even reel to reel in many cases, but also in dimensions suitable for seamless use in many larger applications. This means that our nanomaterial-based products can be a competitive opportunity for any OEM who needs to rely on specialty and high-performance materials in almost any application, and yet keep performance/cost ratios under good control.

META's technology is multidisciplinary in nature and acts as catalyst. It is at the cross section of advanced materials and nanocomposites, physics and chemistry, nanofabrication and machine learning. META has assembled a large portfolio of intellectual property and is now moving toward commercializing products at a performance and price point combination that has the potential to be disruptive in multiple market verticals.

The very precise and demanding quality standards of metamaterial design and nanofabrication require a robust quality management system. META has implemented and adheres to a carefully designed ISO 9001 Quality Management System ("QMS"). META's QMS defines the quality standards we must meet and the policies, processes, testing procedures and auditing measures that META must employ to achieve and maintain these very high standards.

META's products are designed and manufactured with environmental sustainability as a high priority. As a result, META was honoured to be named by the Cleantech Group in the prestigious 2019 Global Cleantech 100. The Global Cleantech 100 is an annual guide to the leading companies and themes in sustainable innovation. The Global Cleantech 100 features companies that are best positioned to solve tomorrow's clean technology challenges.

META's current products include metaAIR<sup>®</sup>, an optical filter to provide laser eye protection; metaOPTIX<sup>™</sup> Holographic Film Notch Filters, which are targeted for use by engineers and scientists in corporate R&D departments and university research labs; and NanoWeb<sup>®</sup> a transparent metal mesh that can be used to replace Indium Tin Oxide (a strategic metal that is conductive and transparent) for a wide range of applications including but not limited to transparent heaters, EMI shielding, sensors and 5G antennas.

Indium, according to the British Royal Society of Chemistry has a "0.052 crustal abundance (parts per million)", its recycling rate "is less than 10%" and considers Indium as "one of the least abundant minerals on Earth". They further report that Indium "has been found uncombined in nature, but typically it is found associated with zinc minerals and iron, lead and copper ores." Indium is currently commercially produced as a by-product of zinc refining.

META has been working with global industry partners to showcase its lithographic ITO-alternative product capabilities including in energy, consumer electronics and automotive OEMs who have shown interest in developing, funding and commercializing META's NanoWeb<sup>®</sup> product, as a replacement for ITO within existing product applications.

In addition, META has more than ten products currently in different stages of development, customer interaction and maturity. META's business model is to co-develop products with industry leaders, with the objective of enabling META to understand market dynamics and ensure the relevance and need of its products.

## 2. Provide a general overview and discussion of the activities of management.

As a result of COVID-19, management has been focused on keeping the Company's employees and consultants as safe as possible while at the same time advancing sales and scaling manufacturing capabilities.

Management has continued the design, development and procurement activities intended to scale its manufacturing batch processes to enable increased volume production of its NanoWeb® product line at a wafer scale and subsequently on larger substrates using roll-to-roll equipment. In holography, development is ongoing to support a range of standard products, such as metaOPTIX™ Holographic Film Notch Filters, as well as custom development programs for OEM customers.

On March 2, 2021, META announced the addition of three senior executives in key positions to support continued global expansion. Scott Richards joined the Company as Chief Marketing Officer. META appointed Rob Stone as Vice President Corporate Development and Communications. Additionally, Norbert Münzel as Country Managing Director, Switzerland.

On March 3, 2021, META announced a collaboration with Sekisui Chemical ("Sekisui") to improve the performance and coverage of high-speed, 5G and future 6G networks. Together, META and Sekisui are developing a new transparent and flexible radio wave reflection film, which passively reflects and transmits radio waves in the sub 6 GHz and millimeter wave ranges. This transparent film can be applied anywhere, without requiring connection to a power supply, and without spoiling the surface's appearance, to improve the communication environment.

On March 12, 2021, META announced the results of its annual general and special meeting (the "Meeting") of META shareholders and holders of options, warrants and deferred share units (collectively and together with the shareholders, the "Securityholders"), which was held virtually earlier today. All six nominees were elected as directors of the Company, KPMG LLP was appointed as auditor of the Company, and the special resolution (the "Arrangement Resolution") relating to the proposed plan of arrangement between Torchlight Energy Resources, Inc. ("Torchlight") and META (the "Business Combination Transaction") was approved.

On March 12, 2021, META announced that it has signed a letter of intent (the "LOI") with its landlord, Rank Incorporated and Page Property Management (the "Landlord"), to amend the lease to its Highfield facility (the "Highfield Facility"), located in Dartmouth, Nova Scotia, expanding the space by about 15,000 square feet, to approximately 68,000 square feet. In addition to holography and lithography R&D labs and the next phase of META's development of roll-to-roll processes, the expanded space will include a new customer center for training and technology transfer.

On March 18, 2021, META announced that it had obtained a final order from the Ontario Superior Court of Justice (Commercial List) approving the previously announced plan of arrangement (the "Business Combination Transaction") with Torchlight Energy Resources, Inc. ("Torchlight") pursuant to which Torchlight will,

among other things, indirectly acquire all of the issued and outstanding shares of the Company through its wholly owned subsidiary, Metamaterial Exchangeco Inc. (“Canco”) in exchange for shares of common stock in the capital of Torchlight or exchangeable shares in the capital of Canco at the election of each eligible holder of shares of META.

3. Describe and provide details of any new products or services developed or offered. For resource companies, provide details of new drilling, exploration or production programs and acquisitions of any new properties and attach any mineral or oil and gas or other reports required under Ontario securities law.

On March 8, 2021, META announced it was presenting an expanded range of products and technologies at Photonics West. For smart eyewear, metaFUSION™ combines embedded AR/VR functionality with precision cast prescription lenses. For laboratory applications, two new series of conventional and anomalous notch filters are being added to the metaOPTIX™ holographic filter range. The metaAIR® laser glare protection family is expanding to include applications for law enforcement and sensors. For application development, NanoWeb® transparent conductive film will be available with tailored mesh designs of optimized transparency, haze, and conductivity for each application.

4. Describe and provide details of any products or services that were discontinued. For resource companies, provide details of any drilling, exploration or production programs that have been amended or abandoned.

None.

5. Describe any new business relationships entered into between the Issuer, the Issuer’s affiliates or third parties including contracts to supply products or services, joint venture agreements and licensing agreements etc. State whether the relationship is with a Related Person of the Issuer and provide details of the relationship.

META’s management has been advancing partnership discussions with major OEMs in the automotive, materials, scientific instruments, and consumer electronics industries with proposals at various stages of negotiation.

META is working with one European-based global leader in specialty chemicals towards a strategic co-operation agreement.

6. Describe the expiry or termination of any contracts or agreements between the Issuer, the Issuer’s affiliates or third parties or cancellation of any financing arrangements that have been previously announced.

None.

7. Describe any acquisitions by the Issuer or dispositions of the Issuer’s assets that occurred during the preceding month. Provide details of the nature of the assets

acquired or disposed of and provide details of the consideration paid or payable together with a schedule of payments if applicable, and of any valuation. State how the consideration was determined and whether the acquisition was from or the disposition was to a Related Person of the Issuer and provide details of the relationship.

None.

8. Describe the acquisition of new customers or loss of customers.

See Section 2 above.

9. Describe any new developments or effects on intangible products such as brand names, circulation lists, copyrights, franchises, licenses, patents, software, subscription lists and trade-marks.

- 3 new patent families filed (2 related to glucose sensing, 1 related to 5G infrastructure)
- 1 new patent issued in Europe related to MRI (magnetic resonance imaging)

10. Report on any employee hirings, terminations or lay-offs with details of anticipated length of lay-offs.

In the month ending March 31, 2021, the Company had one voluntary departure and hired one full-time employee.

11. Report on any labour disputes and resolutions of those disputes if applicable.

None.

12. Describe and provide details of legal proceedings to which the Issuer became a party, including the name of the court or agency, the date instituted, the principal parties to the proceedings, the nature of the claim, the amount claimed, if any, if the proceedings are being contested, and the present status of the proceedings.

None.

13. Provide details of any indebtedness incurred or repaid by the Issuer together with the terms of such indebtedness.

No indebtedness issuance or repayments, however, an aggregate balance of \$6,000,455 between loans and payables, including interest, were converted into common stock during March 2021 as detailed below.

14. Provide details of any securities issued and options or warrants granted.

Security	Number Issued	Details of Issuance	Use of Proceeds <sup>(1)</sup>
Common shares Issuance	155,172	Issued at \$0.58 on March 3, 2021 in exchange for services performed in relation to	No proceeds

**FORM 7 – MONTHLY PROGRESS REPORT**

March 2021

		the Torchlight RTO in late 2020 valued at \$90,000.	
Common shares (liability conversion)	7,672,537	BDC Loan of \$5,370,776 of principal and accrued interest was converted on March 2, 2021 at \$0.70/share	No proceeds
Common shares (liability conversion)	67,597	Loan from Caixa capital of \$261,735 of principal and interest was converted on March 12, 2021 at \$3.87/share	No proceeds
Common shares (liability conversion)	81,584	Liability due to Lamda Guard Technologies Ltd. ("LGTL") of \$367,944 was converted on March 16, 2021 at \$4.51/share	No proceeds
Common shares (warrants conversion)	44,497	Warrants converted on March 22, 2021 with exercise price of \$0.90/share	Proceeds of \$40,047
Common shares (warrants conversion)	7,568	Broker warrants converted during March 2021 with exercise price of \$0.62/share	Proceeds of \$4,692
Common shares (options conversion)	80,000	Options exercised at \$0.64/share	Proceeds of \$51,200

(1) State aggregate proceeds and intended allocation of proceeds.

15. Provide details of any loans to or by Related Persons.

None for March 2021.

16. Provide details of any changes in directors, officers or committee members.

On March 2, 2021, META announced that Scott Richards had joined the Company as Chief Marketing Officer (CMO).

17. Discuss any trends which are likely to impact the Issuer including trends in the Issuer's market(s) or political/regulatory trends.

Since March 2020, META continues to expect that COVID-19 will impact this year's sales of metaAIR® laser protection eyewear product. Worldwide restrictions on travel are significantly impacting the airline industry and purchasing of metaAIR eyewear may not be the primary focus of airlines post COVID-19. Management is pursuing sales in adjacent

markets including consumer, military and law enforcement.

During the COVID-19 crisis and its escalation globally, META's management continued to implement the March 16, 2020 Work From Home ("WFH") policy in all three locations.

META is continuing to be able to maintain inventory of long lead items and to work with its suppliers to optimize future supply orders. META continues to pursue business relief funding in all three locations.

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## Certificate Of Compliance

The undersigned hereby certifies that:

1. The undersigned is a director and/or senior officer of the Issuer and has been duly authorized by a resolution of the board of directors of the Issuer to sign this Certificate of Compliance.
2. As of the date hereof there were is no material information concerning the Issuer which has not been publicly disclosed.
3. The undersigned hereby certifies to the Exchange that the Issuer is in compliance with the requirements of applicable securities legislation (as such term is defined in National Instrument 14-101) and all Exchange Requirements (as defined in CNSX Policy 1).
4. All of the information in this Form 7 Monthly Progress Report is true.

Dated: **March 8, 2021.**

**Kenneth L. Rice** \_\_\_\_\_

Name of Senior Officer

*Kenneth Rice*

Signature

Chief Financial Officer

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Official Capacity

<b><i>Issuer Details</i></b> Name of Issuer: Metamaterial Inc.	For Month End March 2021	Date of Report 21/4/8
Issuer Address 1 Research Drive		
City/Province/Postal Code Dartmouth, Nova Scotia, B2Y 4M9	Issuer Fax No. (902) 466 6889	Issuer Telephone No. (902) 482 5729
Contact Name George Palikaras	Contact Position CEO	Contact Telephone No. (902) 482 5729
Contact Email Address <a href="mailto:george.palikaras@metamaterial.com">george.palikaras@metamaterial.com</a>	Web Site Address www.metamaterial.com	