UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2021

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from ____________ to ___________

Commission File No. 001-31332

LIQUIDMETAL TECHNOLOGIES, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**33-0264467**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

20321 Valencia Circle
Lake Forest, CA 92630
(Address of principal executive offices, zip code)
Registrant's telephone number, including area code: **(949) 635-2100**
Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 12(g) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, $0.001 par value per share	LQMT	OTCQB

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒
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 every Interactive Data File required to be submitted 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 such files). Yes ☒ No ☐

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

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company ☒
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☐ No ☒

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant as of June 30, 2021, was approximately $35,356,287. For purposes of this calculation only, (i) shares of common stock are deemed to have a market value of $0.07 per share, the closing price of the common stock as reported on the "OTCQB Venture Marketplace" on June 30, 2021, and (ii) each of the executive officers, directors and persons holding more than 10% of the outstanding common stock as of June 30, 2021, is deemed to be an affiliate.

The number of shares of common stock outstanding as of March 29, 2022 was 917,285,149.

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PART I

Forward-Looking Statements

This Annual Report on Form 10-K of Liquidmetal Technologies, Inc. contains "forward-looking statements" that may state our management's plans, future events, objectives, current expectations, estimates, forecasts, assumptions or projections about the company and its business. Any statement in this report that is not a statement of historical fact is a forward-looking statement, and in some cases, words such as "believes," "estimates," "projects," "expects," "intends," "may," "anticipate," "plans," "seeks," and similar expressions identify forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or results. These statements are not guarantees of future performance, and undue reliance should not be placed on these statements. It is important to note that our actual results could differ materially from what is expressed in our forward-looking statements due to the risk factors described in the section of this report entitled "Risk Factors" (Item 1A of this report) as well as the following risks and uncertainties:

- Our ability to fund our operations in the long-term through financing transactions on terms acceptable to us, or at all;
- Our history of operating losses and the uncertainty surrounding our ability to achieve or sustain profitability;
- Our limited history of developing and selling products made from our bulk amorphous alloys;
- Challenges associated with having products manufactured from our alloys and the use of third parties for manufacturing;
- Our limited history of licensing our technology to third parties;
- Lengthy customer adoption cycles and unpredictable customer adoption practices;
- Our ability to identify, develop, and commercialize new product applications for our technology;
- Competition from current suppliers of incumbent materials or producers of competing products;
- Our ability to identify, consummate, and/or integrate strategic partnerships;
- The potential for manufacturing problems or delays; and
- Potential difficulties associated with protecting or expanding our intellectual property position.

We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Item 1. Business

In this Annual Report on Form 10-K, unless the context indicates otherwise, references to "the Company", "Liquidmetal Technologies", "our Company", "we", "us", and similar references refer to Liquidmetal Technologies, Inc. and its subsidiaries.

Overview

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary bulk alloys and composites that utilize the advantages offered by amorphous alloy technology. We design, develop, and sell custom products and parts from bulk amorphous alloys to customers in various industries. We also partner with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products.

Amorphous alloys are, in general, unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in other metals and alloys when they solidify. Liquidmetal alloys are proprietary amorphous alloys that possess a combination of performance, processing, and potential cost advantages that we believe will make them preferable to other materials in a variety of applications. The amorphous atomic structure of bulk alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. We believe the alloys and the molding technologies we employ can result in components for many applications that exhibit exceptional dimensional control and repeatability that rivals precision machining, excellent corrosion resistance, brilliant surface finish, high strength, high hardness, high elastic limit, alloys that are non-magnetic, and the ability to form complex shapes common to the injection molding of plastics. All of these characteristics are achievable from the molding process, so design engineers often do not have to select specific alloys to achieve one or more of the characteristics as is the case with crystalline materials. We believe these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

General Corporate Information

We were originally incorporated in California in 1987, and we reincorporated in Delaware in May 2003. Our principal executive office is located at 20321 Valencia Circle, Lake Forest, California 92630. Our telephone number at that address is (949) 635-2100. Our Internet website address is www.liquidmetal.com and all of our filings with the Securities and Exchange Commission (“SEC”) are available free of charge on our website.

Our Technology

The performance, processing, and potential cost advantages of Liquidmetal alloys are a function of their unique atomic structure and their proprietary material composition.

Unique Atomic Structure

The atomic structure of Liquidmetal alloys is the fundamental feature that differentiates them from other alloys and metals. In the molten state, the atomic particles of all alloys and metals have an amorphous atomic structure, which means that the atomic particles appear in a completely random structure with no discernible patterns. However, when non-amorphous alloys and metals are cooled to a solid state, their atoms bond together in a repeating pattern of regular and predictable shapes or crystalline grains. This process is analogous to the way ice forms when water freezes and crystallizes. In non-amorphous metals and alloys, the individual crystalline grains contain naturally occurring structural defects that limit the potential strength and performance characteristics of the material. These defects, known as dislocations, consist of discontinuities or inconsistencies in the patterned atomic structure of each grain. Unlike other alloys and metals, bulk Liquidmetal alloys can retain their amorphous atomic structure throughout the solidification process and therefore do not develop crystalline grains and the associated dislocations. Consequently, bulk Liquidmetal alloys exhibit superior strength and other superior performance characteristics compared to their crystalline counterparts.

Prior to 1993, commercially viable amorphous alloys could be created only in thin forms, such as coatings, films, or ribbons. However, in 1993, researchers at the California Institute of Technology (“Caltech”) developed the first commercially viable amorphous alloy in a bulk form. We obtained the exclusive right to commercialize the bulk amorphous alloy through a license agreement with Caltech and have developed the technology to enable the commercialization of bulk amorphous alloys.

Proprietary Material Composition

The constituent elements and percentage composition of Liquidmetal alloys are critical to their ability to solidify into an amorphous atomic structure. We have several different alloy compositions that have different constituent elements in varying percentages. The raw materials that we use in Liquidmetal alloys are readily available and can be purchased from multiple suppliers.

Advantages of Liquidmetal Alloys

Liquidmetal alloys possess a unique combination of performance, processing, and potential cost advantages that we believe makes them superior in many ways to other commercially available materials for a variety of existing and potential future product applications. The unique combined process results of precise dimensional control and repeatability, surface finish, strength, hardness, elasticity, and corrosion resistance are uncommon in crystalline material alternatives. Additionally, the ability to leverage various molding processes and related tooling technologies provides the ability to deliver a broad range of material characteristics in a complex shaped component.

Performance Advantages

Our bulk Liquidmetal alloys provide several distinct performance advantages over other materials, and we believe that these advantages make the alloys desirable in applications that require high precision and repeatability, high yield strength, strength-to-weight ratio, elasticity, corrosion resistance and hardness.

Processing Advantages

The processing of a material generally refers to how a material is shaped, formed, or combined with other materials to create a finished product. Bulk Liquidmetal alloys possess processing characteristics that we believe make them preferable to other materials in a wide variety of applications. In particular, our alloys are amenable to processing options that are similar in many respects to those associated with plastics. Additionally, unlike most metals and alloys, our bulk Liquidmetal alloys are capable of being thermoplastically molded in bulk form. Thermoplastic molding consists of heating a solid piece of material until it is transformed into a moldable state, although at temperatures much lower than the melting temperature, and then introducing it into a mold to form near-to-net shaped products. Accordingly, thermoplastic molding can be beneficial and economical for net-shape fabrication of high-strength products. Liquidmetal alloys also have superior net-shape casting capabilities as compared to high-strength crystalline metals and alloys. "Net-shape casting" is a type of casting that permits the creation of near-to-net shaped products that reduce costly post-cast processing or machining.

Cost Advantages

Liquidmetal alloys have the potential to provide cost advantages over other high-strength metals and alloys in certain applications. Because bulk Liquidmetal alloys have processing characteristics similar in some respects to plastics, which lend themselves to near-to-net shape molding, Liquidmetal alloys can in many cases be shaped efficiently into intricate, engineered products. This capability can eliminate or reduce certain post-molding steps, such as machining and re-forming, and therefore has the potential to significantly reduce processing costs associated with making parts in high volume.

Our Strategy

In July 2019, we adopted a restructuring plan pursuant to which we elected to wind down our manufacturing operations at our Lake Forest, CA facility and proceeded to outsource the manufacture of parts utilizing our technology through domestic and international manufacturing partners (the "2019 Restructuring Plan"). In connection with the 2019 Restructuring Plan, we reduced management staff and shifted our business strategy from internal manufacture of parts and products for customers toward the use and reliance of outsourced manufacturers, including Dongguan Yihao Metals Materials Technology Co., Ltd. ("Yihao"), a China-based, metal manufacturing company that is an affiliate of our largest beneficial stockholder, Chairman, Professor Lugee Li.

The key elements of our strategy include:

- *Focusing Our Marketing Activities on Select Products with Optimized Gross-Margins*. We have focused and continue to focus our marketing activities on select products with optimized gross margins for the long term. This strategy is designed to align our product development initiatives with our processes and cost structure, and to reduce our exposure to more commodity-type product applications that are prone to unpredictable demand and fluctuating pricing. Our focus is primarily on products that possess design features that take advantage of our physical properties and manufacturing advantages of our technology and that command a price commensurate with the performance advantages of our alloys. In addition, we will continue to engage in prototype manufacturing for products that will ultimately be licensed to or manufactured by third-parties.

- *Pursuing Strategic Partnerships in Order to More Rapidly Develop and Commercialize Products*. We have and continue to actively pursue and support strategic partnerships that will enable us to leverage the resources, strength, and technologies of other companies in order to more rapidly develop and commercialize products. These partnerships may include licensing transactions in which we license full commercial rights to our technology in a specific application area, or they may include transactions of a more limited scope in which, for example, we outsource manufacturing activities or grant limited licensing rights. We believe that utilizing such a partnering strategy will enable us to reduce our working capital burden, better fund product development efforts, better understand customer adoption practices, leverage the technical and financial resources of our partners, and more effectively handle product design and process challenges.

- *Advancing the Liquidmetal® Brand*. We believe that building our corporate brand will foster continued adoption of our technology. Our goal is to position Liquidmetal alloys as a superior substitute for materials currently used in a variety of products across a range of industries. Furthermore, we seek to establish Liquidmetal alloys as an enabling technology that will facilitate the creation of a broad range of commercially viable new products. To enhance industry awareness of our company and increase demand for Liquidmetal alloys, we are engaged in various brand development strategies that could include collaborative advertising and promotional campaigns with select customers, industry conference and trade show appearances, public relations, and other means.

Applications for Liquidmetal Alloys

There is a very broad number of markets where Liquidmetal alloys have application opportunities. Some of the more prominent markets include: medical/dental, automotive, non-consumer electronics, and sporting equipment. We believe that these areas are consistent with our strategy in terms of market size, building brand recognition, and providing an opportunity to develop and refine our processing capabilities. Although we believe that strategic partnership transactions could also create valuable opportunities beyond the parameters of these target markets, we anticipate continuing to pursue these markets both internally and in conjunction with partners.

Medical Devices

We are engaged in product development efforts relating to various medical devices that could be made from bulk Liquidmetal alloys. We believe that the unique properties of bulk Liquidmetal alloys provide a combination of performance and cost benefits that could make them a desirable replacement for incumbent materials, such as machined stainless steel and titanium, or components made from other more traditional metalworking technologies currently used in various medical device applications. Our ongoing emphasis has been on minimally invasive surgical instrument applications for Liquidmetal alloys. These include, but are not limited to, specialized blades, clamps, tissue suturing components, tissue manipulation devices and orthopedic instruments utilized for implant surgery procedures, dental devices, and general surgery devices. The potential value offered by our alloys is higher performance in some cases and cost reduction in others, the latter stemming from the ability of Liquidmetal alloys to be net shape molded into components, thus reducing costs of secondary processing common with other metalworking processes. The status of most components in the prototyping phase is subject to non-disclosure agreements with our customers.

Automotive Components

We are engaged in product development efforts relating to various automotive components that could be made from bulk Liquidmetal alloys. We believe that the unique properties of bulk Liquidmetal alloys provide the combination of long-lasting surface finish, corrosion resistance, strength, and precision required by most automotive applications, especially for the EV space. The potential value offered by our alloys is higher performance in some cases and cost reduction in others, the latter stemming from the ability of Liquidmetal alloys to be net shape molded into components, thus reducing costs of secondary processing common with existing processes.

Components for Non-Consumer Electronic Products

We design, develop and supply components for non-consumer electronic devices utilizing our bulk Liquidmetal alloys and believe that our alloys offer enhanced performance and design benefits for these components in certain applications. Our strategic focus is primarily on parts that command a price commensurate with the performance advantages of our alloys. These product categories in the non-consumer electronics field include, but are not limited to, aerospace components, leisure products, and industrial machines. We believe that there are multiple applications and opportunities in the non-consumer electronics product category for us to produce parts that command the higher margin and premium prices consistent with our core business strategy.

We believe that the continued miniaturization of, and the introduction of advanced features to non-consumer electronic devices is a primary driver of growth, market share, and profits in our industry. The high strength-to-weight ratio and elastic limit, along with the processing advantages of bulk Liquidmetal alloys enable the production of smaller, thinner, but stronger electronic parts. We also believe that the strength characteristics of our alloys could facilitate the creation of a new generation of non-consumer electronic devices which currently may not be viable because of strength limitations of conventional metal parts in the marketplace today. Lastly, we believe that our alloys offer style and design flexibility, such as shiny metallic finishes, to accommodate the changing tastes of our customers.

On August 5, 2010, we entered into a license transaction with Apple Inc. (“Apple”) pursuant to which, for a one-time, upfront license fee, we granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize our intellectual property in the field of “consumer electronic” products, as defined in the license agreement. We continue to work with Apple to develop and advance research and development in the amorphous alloy space to benefit both consumer and non-consumer electronics fields. For more information regarding our transaction with Apple, see “ – Licensing Transactions” below.

Sporting Goods and Leisure Products

We are developing a variety of applications for Liquidmetal alloys in the sporting goods and leisure products area.

In the sporting goods industry, we believe that the high strength, hardness, corrosion resistance, and elasticity of our bulk alloys have the potential to enhance performance in a variety of products including, but not limited to, golf clubs, tennis rackets, archery, sporting arms and scuba equipment. We further believe that many sporting goods products are conducive to our strategy of focusing on high-margin products that meet our design criteria.

In the leisure products category, we believe that bulk Liquidmetal alloys can be used to efficiently produce intricately engineered designs with high-quality finishes, such as premium watchcases and knives. We further believe that Liquidmetal technology can be used to make high-quality, high-strength jewelry from precious metals.

Licensing Transactions

Eontec License Agreement

On March 10, 2016, in connection with the 2016 Purchase Agreement (defined below), we entered into a Parallel License Agreement (the "License Agreement") with DongGuan Eontec Co., Ltd., a Hong Kong corporation ("Eontec") pursuant to which we each entered into a cross-license of our respective technologies.

The License Agreement provides for the cross-license of certain patents, technical information, and trademarks between us and Eontec. In particular, we granted to Eontec a paid-up, royalty-free, perpetual license to our patents and related technical information to make, have made, use, offer to sell, sell, export, and import products in certain geographic areas outside of North America and Europe, and Eontec granted to us a paid-up, royalty-free, perpetual license to Eontec's patents and related technical information to make, have made, use, offer to sell, sell, export, and import products in certain geographic areas outside of specified countries in Asia. The license granted by us to Eontec is exclusive (including to the exclusion of us) in the countries of Brunei, Cambodia, China (P.R.C and R.O.C.), East Timor, Indonesia, Japan, Laos, Malaysia, Myanmar, Philippines, Singapore, South Korea, Thailand, and Vietnam. The license granted by Eontec to us is exclusive (including to the exclusion of Eontec) in North America and Europe. The cross-licenses are non-exclusive in geographic areas outside of the foregoing exclusive territories.

Beyond the License Agreement, we collaborate with Eontec to accelerate the commercialization of amorphous alloy technology. This includes but is not limited to developing technologies to reduce the cost of amorphous alloys, working on die cast machine technology platforms to pursue broader markets, sharing knowledge to broaden our intellectual property portfolio, and utilizing Eontec's volume production capabilities as a third-party contract manufacturer.

Eutectix Business Development Agreement

On January 31, 2020, we entered into a Business Development Agreement (the "Agreement") with Eutectix, LLC, a Delaware limited liability company ("Eutectix"), which provides for collaboration, joint development efforts, and the manufacturing of products based on our proprietary amorphous metal alloys. Under the Agreement, we have agreed to license to Eutectix specified equipment owned by us, including two injection molding machines, the Machines, and other machines and equipment, all of which will be used to make products for our customers and Eutectix customers. The licensed machines and equipment represent substantially all of the machinery and equipment currently held by us. We have also licensed to Eutectix various patents and technical information related to our proprietary technology. Under the Agreement, Eutectix will pay us a royalty of six percent (6%) of the net sales price of licensed products sold by Eutectix, and Eutectix will also manufacture products for us. The Agreement has a term of five years, subject to renewal provisions and the ability of either party to terminate earlier upon specified circumstances.

Apple License Transaction

On August 5, 2010, we entered into a license transaction with Apple pursuant to which (i) we contributed substantially all of our intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, Crucible Intellectual Property, LLC ("CIP"), (ii) CIP granted to Apple a perpetual, worldwide, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, in exchange for a one-time, upfront license fee, and (iii) CIP granted back to us a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use.

Under the agreements relating to the license transaction with Apple, we were obligated to contribute to CIP all intellectual property developed by us through February 2016. We are also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction.

Swatch Group License

In March 2009, we entered into a license agreement with Swatch Group, Ltd. ("Swatch") under which Swatch was granted a non-exclusive license to our technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches as against all third parties (including us), but non-exclusive as to Apple. We will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.

Liquidmetal Golf License

On January 13, 2022, our Liquidmetal Golf subsidiary (see below) entered into a sublicense agreement ("LMG Sublicense Agreement") with Amorphous Technologies Japan, Inc. ("ATJ"), a newly formed Japanese entity that was established by Twins Corporation, a sporting goods company operating in Japan. Under the agreement, LMG granted to ATJ a nonexclusive worldwide sublicense to the Company's amorphous alloy technology and related trademarks to manufacture and sell golf clubs and golf related products. The LMG Sublicense Agreement has a term of three years and provides for the payment of a running royalty to LMG of 3% of the net sales price of licensed products.

Our Intellectual Property

Our intellectual property consists of patents, trade secrets, know-how, and trademarks. Protection of our intellectual property is a strategic priority for our business, and we intend to vigorously protect our patents and other intellectual property. Our intellectual property portfolio includes more than 35 owned or licensed U.S. patents relating to the composition, processing, and application of our alloys, as well as more than 35 foreign counterpart patents and patent applications.

Our initial bulk amorphous alloy technology was developed by researchers at Caltech. We have acquired patent rights that provide us with the exclusive right to commercialize amorphous alloys and other amorphous alloy technology developed at Caltech through a license agreement ("Caltech License Agreement") with Caltech. In addition to the patents and patent applications that we license from Caltech, we are building a portfolio of our own patents to expand and enhance our technology position. These patents and patent applications primarily relate to various applications of our bulk amorphous alloys and the processing of our alloys. The patents expire on various dates between 2021 and 2040. Our policy is to seek patent protection for all technology, inventions, and improvements that are of commercial importance to the development of our business, except to the extent that we believe it is advisable to maintain such technology or invention as a trade secret.

In order to protect the confidentiality of our technology, including trade secrets, know-how, and other proprietary technical and business information, we require that all of our employees, consultants, advisors and collaborators enter into confidentiality agreements that prohibit the use or disclosure of information that is deemed confidential. The agreements also obligate our employees, consultants, advisors and collaborators to assign to us developments, discoveries and inventions made by such persons in connection with their work with us.

Research and Development

As a result of the 2019 Restructuring Plan, and associated reductions in employee headcount, research and development efforts have been reduced from those engaged in during previous periods. For the year ended December 31, 2021, we have engaged in ongoing research and development programs that were driven by the following key objectives:

- *Enhance Material Processing and Manufacturing Efficiencies.* We are working with our strategic partners to enhance material processing and manufacturing efficiencies. We plan to continue research and development of processes and compositions that will decrease our cost of making products from Liquidmetal alloys.

- *Develop New Applications.* We will continue the research and development of new applications for Liquidmetal alloys. We believe the range of potential applications will broaden as we expand the forms, compositions, and methods of processing of our alloys.

In addition to our internal research and development efforts, we enter into cooperative research and development relationships with leading academic institutions. We have entered into development relationships with other companies for the purpose of identifying new applications for our alloys and establishing customer relationships with such companies. Some of our product development programs are partially funded by our customers. We are also engaged in negotiations with other potential customers regarding possible product development relationships. Our research and development expenses for the years ended December 31, 2021 and 2020 were $84 and $110, respectively.

Raw Materials

Liquidmetal alloy compositions are comprised of many elements, many of which are generally available commodity products. While we believe that each of these raw materials is readily available in sufficient quantities from multiple sources on commercially acceptable terms, we continue to seek opportunities to secure stocks of essential elements in advance to manage lead-times and cost. Due to our inherent dependency on these alloy compositions for the manufacture of Liquidmetal products, any substantial increase in the price or interruption in the supply of these materials could have an adverse effect on our business.

Manufacturing

During 2017, we purchased and relocated to a new manufacturing facility, with a plan for the expansion of our ability to (i) provide on-site manufacturing of customer products, (ii) provide our customers and strategic partners a venue to inspect, collaborate, and demonstrate the latest developments of our alloy composition development and manufacturing processes, and (iii) provide multiple platforms for manufacturing customer products. As a result of the 2019 Restructuring Plan, the Company discontinued manufacturing operations in this facility during 2020.

Going forward, our current manufacturing strategy is to partner with global companies that are contract manufacturers and alloy producers. We seek third party companies with proven track records of success who can gain specialized skills and knowledge of our alloys through close collaborations with our team of engineers. We believe that partnering with these global companies will allow us to forgo the capital intensive requirements of maintaining our own large scale manufacturing facilities and allow us to grow the number of applications for the technology much faster than could be accomplished on our own.

On January 12, 2022, Liquidmetal Technologies entered into a manufacturing agreement (“Manufacturing Agreement”) with Dongguan Yihao Metal Materials Technology Co. Ltd. (“Yihao”) to become the primary outsourced manufacturer of the Company’s products. Under the Manufacturing Agreement, which has a term of five years, Yihao has agreed to serve as a non-exclusive contract manufacturer for amorphous alloy parts offered and sold by the Company at prices determined on a “cost-plus” basis. Yihao is an affiliate of Dongguan Eontec Co. Ltd. and Professor Lugee Li, our Chairman and largest beneficial owner of the Company’s capital stock.

Customers

During 2021, there were three major customers, who together accounted for 82% of our revenue. During 2020, there were four major customers, who together accounted for 93% of our revenue. As of December 31, 2021, two customers represented 89%, or $147,000, of the total outstanding trade accounts receivable. As of December 31, 2020, one customer represented 99%, or $270,000, of the total outstanding trade accounts receivable. In the future, we expect that a significant portion of our revenue may continue to be concentrated in a limited number of customers, even if our bulk alloys business grows.

Competition

Our bulk Liquidmetal alloys face competition from other materials, including metals, alloys, plastics and composites, which are currently used in the commercial applications that we pursue. For example, we face significant competition from plastics, zinc and stainless steel in our non-consumer electronics components business, and titanium and composites will continue to be used widely in medical devices and sporting goods. Many of these competitive materials are produced by domestic and international companies that have substantially greater financial and other resources than we do. Based on our experience developing products for a variety of customers, we believe that the selection of materials by potential customers will continue to be product-specific in nature, with the decision for each product being driven primarily by the performance needs of the application and, secondarily, by cost considerations and design flexibility. Because of the relatively high strength of our alloys, dimensional precision, and the design flexibility of our process, we are most competitive when the customer is seeking a higher strength, as well as greater design flexibility, than currently available with other materials. However, if currently available materials, such as plastics, are strong enough for the application, our alloys are often not competitive in those applications with respect to price. We also believe that our alloys are generally not competitive with the cost of some of the basic metals, such as steel, aluminum or copper, when such basic metals can be processed by simple traditional metalworking processes into shapes and components that are satisfactory for their intended applications. Our alloys are generally more competitive with respect to price compared to components machined from various metals, such as titanium, stainless steel and other higher performance crystalline metals. Our alloys could also face competition from new materials that may be developed in the future, including new materials that could render our alloys obsolete.

We experience and will continue to experience indirect competition from the competitors of our customers. Because we rely on our customers to market and sell finished goods that incorporate our components or products, our success will depend in part on the ability of our customers to effectively market and sell their own products and compete in their respective markets.

Backlog

Because of the minimal lead-time associated with orders of bulk alloy parts, we generally do not carry a significant backlog. The backlog as of any particular date gives no indication of actual sales for any succeeding period.

Sales and Marketing

We direct our marketing efforts towards customers that will incorporate our components and products into their finished goods. Our goal is to educate customers on the benefits of our technology and help them gain adequate knowledge to apply the technology to their upcoming product application designs. To that end, we have business development personnel who, in conjunction with engineers and scientists, will actively identify potential customers that may be able to benefit from the introduction of Liquidmetal alloys to their products. We currently have 3 full-time individuals engaged in our internal sales, business development and marketing activities. In addition, we work closely with a team of more than 15 external sales representatives covering the territories of North America and Europe.

Human Capital

As of December 31, 2021, we had 7 full-time employees and 1 full-time consultant. As of that date, none of our employees or consultants were represented by a labor union. We have not experienced any work stoppages, and we consider our employee and consultant relations to be favorable. We endeavor to maintain a workplace that is free from discrimination or harassment on the basis of color, race, sex, national origin, ethnicity, religion, age, disability, sexual orientation, gender identification or expression or any other status protected by applicable law. The basis for recruitment, hiring, development, training, compensation and advancement is a person's qualifications, performance, skills and experience. We believe that our employees are fairly compensated, without regard to gender, race and ethnicity, and routinely recognized for outstanding performance.

Governmental Regulation

Government regulation of our products will depend on the nature and type of product and the jurisdictions in which the products are sold. For example, medical instruments incorporating our Liquidmetal alloys will be subject to regulation in the United States by the Food and Drug Administration ("FDA") and corresponding state and foreign regulatory agencies. Medical device manufacturers to whom we intend to sell our products may need to obtain FDA approval before marketing their medical devices that incorporate our products and may need to obtain similar approvals before marketing these medical device products in foreign countries.

Environmental Law Compliance

Our operations are subject to national, state, and local environmental laws in the United States. We believe that we are in material compliance with all applicable environmental regulations. While we continue to incur costs to comply with environmental regulations, we do not believe that such costs will have a material effect on our capital expenditures, earnings, or competitive position.

Liquidmetal Golf

Liquidmetal Golf Inc. ("Liquidmetal Golf" or "LMG") is a majority-owned subsidiary which has the exclusive right and license to utilize our Liquidmetal alloy technology for purposes of golf equipment applications. This right and license is set forth in an intercompany license agreement dated January 1, 2002 between Liquidmetal Technologies and Liquidmetal Golf. This license agreement provides that Liquidmetal Golf has a perpetual and exclusive license to use Liquidmetal alloy technology for the purpose of manufacturing, marketing, and selling golf club components and other products used in the sport of golf. We own 79% of the outstanding common stock in Liquidmetal Golf.

On January 13, 2022, Liquidmetal Golf entered into a sublicense agreement ("LMG Sublicense Agreement") with Amorphous Technologies Japan, Inc. ("ATJ"), a newly formed Japanese entity that was established by Twins Corporation, a sporting goods company operating in Japan. Under the agreement, LMG granted to ATJ a nonexclusive worldwide sublicense to the Company's amorphous alloy technology and related trademarks to manufacture and sell golf clubs and golf related products. The LMG Sublicense Agreement has a term of three years and provides for the payment of a running royalty to LMG of 3% of the net sales price of licensed products.

Item 1A. Risk Factors

*Investing in our securities involves a high degree of risk. The risks described below are not the only ones facing us. Additional risks not currently known to us or that we currently believe are immaterial also may impair our business, operations, liquidity and stock price materially and adversely. You should carefully consider the risks and uncertainties described below in addition to the other information included or incorporated by reference in this Annual Report on Form 10-K. If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer. In that case, the trading price of our common stock could fall and you could lose all or part of your investment***.**

Risk Related to Our Company and Business

We have incurred significant operating losses in the past and may not be able to achieve or sustain profitability in the future.

We have experienced significant cumulative operating losses since our inception. Our operating loss for the fiscal years ended December 31, 2021 and 2020 were $4.1 million and $3.5 million, respectively. We had an accumulated deficit of approximately $272.3 million at December 31, 2021, and approximately $268.9 million at December 31, 2020. We anticipate that we may continue to incur operating losses for the foreseeable future. Consequently, it is possible that we may never achieve positive earnings and, if we do achieve positive earnings, we may not be able to achieve them on a sustainable basis.

We have a limited history of developing and selling products made from our bulk amorphous alloys.

We have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, our suppliers' ability to produce our products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of its control, including the nature and design of the component, the customer's specifications, and required delivery timelines.

We rely on assumptions about the markets for our products and components that, if incorrect, may adversely affect our profitability.

We have made assumptions regarding the market size for, and the manufacturing requirements of, our products and components based in part on information we received from third parties and also from our limited history. If these assumptions prove to be incorrect, we may not achieve anticipated market penetration, revenue targets or profitability.

Our historical results of operations may not be indicative of our future results.

As a result of our limited history of developing and marketing bulk amorphous alloy components and products, as well as our new manufacturing strategy of partnering with contract manufacturers and alloy producers, our historical results of operations may not be indicative of our future results.

We primarily rely on limited suppliers for mold making, manufacturing and alloying of our bulk amorphous alloys and parts.

We currently have one supplier located in China who fulfills the alloying, mold making and manufacturing of our bulk amorphous alloy parts. Our supplier may allocate its limited capacity to fulfill the production requirements of its other customers. In the event of a disruption of the operations of our supplier related to limited capacity, as well as other geo-political issues, we may not have other manufacturing sources immediately available. Such events could cause significant delays in shipments and may adversely affect our revenue, cost of goods sold and results of operations.

The restructuring plan that we adopted in July 2019 and the associated shift in business strategy may not result in the anticipated benefits.

In July 2019, the Company adopted the 2019 Restructuring Plan pursuant to which the Company elected to wind down its prior manufacturing operations at the Company's Lake Forest, CA facility and seek to outsource the manufacture of parts utilizing the Company's technology through its domestic and international manufacturing partners. In connection with the 2019 Restructuring Plan, the Company reduced its management staff and shifted its business strategy from internal manufacture of parts and products for customers toward the use and reliance of outsourced manufacturers, including Yihao, a China-based company that is an affiliate of our largest beneficial stockholder, our Chairman, Professor Lugee Li. The purpose of this shift was to preserve and maximize the value of the Company's assets by reducing the infrastructure and cost associated with maintaining and building manufacturing operations and maximizing the prospects of successfully and more rapidly commercializing amorphous alloy products by leveraging the manufacturing capabilities of Yihao and potentially other manufacturers. There is no assurance, however, that this strategy will enable the Company to more rapidly and successfully commercialize its products.

The recent outbreak of COVID-19 and measures intended to prevent its spread may have a significant negative impact on our business, results of operations, and financial condition.

The global pandemic resulting from the outbreak of the novel coronavirus ("COVID-19") has disrupted our operations beginning in March 2020. Federal, state, and local mandates implementing quarantines, "shelter in place" orders, business limitations and/or shutdowns (subject to exceptions for certain essential operations and businesses) aimed at limiting the spread of COVID-19, have resulted in delays to our planned development pipeline. While we are not currently experiencing any supply chain or labor force shortages, our ability to maintain our supply chain and labor force may have become challenging as a result of the COVID-19 pandemic. The COVID-19 pandemic and related circumstances may also adversely affect our ability to implement our growth plans, including delays in product development initiatives.

As this situation is ongoing and the duration and severity of the COVID-19 pandemic is uncertain at this time, it is difficult to forecast any long-term impacts on our future operating results. However, we expect the COVID-19 pandemic to adversely impact our development pipeline and, depending on the severity and longevity of the COVID-19 pandemic, the efforts taken to reduce its spread and the possibility of a resurgence of the COVID-19 outbreak could impact our asset values, including investments in debt securities and long-lived assets, and have a material adverse effect on our financial results, future operations, and liquidity.

Even after the COVID-19 pandemic has subsided, we may continue to experience negative impacts to our financial results due to COVID-19's global economic impact, including the availability of credit generally, decreases in our customers' discretionary spending on development projects, and any economic slowdown or recession that has occurred or may occur in the future.

Risk Related to Customer Relationships

If we cannot establish and maintain relationships with customers that incorporate our components and products into their finished goods, we will not be able to increase our revenue and commercialize our products.

Our business is based upon the commercialization of a new and unique materials technology. Our ability to increase our revenues will depend on our ability to successfully maintain and establish relationships with customers who are willing to incorporate our proprietary alloys and technology into their finished products. However, we believe that the size of our company and the novel nature of our technology and manufacturing process may continue to make it challenging to maintain and establish such relationships. In addition, we rely and will continue to rely to a large extent on the manufacturing, research, and development capabilities, as well as the marketing and distribution capabilities, of our customers in order to commercialize our products. Our future growth and success will depend in large part on our ability to enter into these relationships and the subsequent success of these relationships. Even if our products are selected for use in a customer's products, we still may not realize significant revenue from that customer if that customer's products are not commercially successful.

It may take significant time and cost for us to develop new customer relationships, which may delay our ability to generate additional revenue or achieve profitability.

Our ability to generate revenue from new customers is generally affected by the amount of time it takes for us to, among other things:

- identify a potential customer and introduce the customer to Liquidmetal alloys;
- work with the customer to select and design the parts to be fabricated from Liquidmetal alloys;
- make the molds and tooling to be used to produce the selected part;
- make prototypes and samples for customer testing;
- work with our customers to test and analyze prototypes and samples; and
- with respect to some types of products, such as medical devices, obtain regulatory approvals.

We believe that our average sales cycle (the time we deliver a proposal to a customer until the time our customer fully integrates our Liquidmetal alloys into its product) could be a significant period of time. Our history to date has demonstrated that the sales cycle could extend beyond one year. The time it takes to transition a customer from limited production to full-scale production runs will depend upon the nature of the processes and products into which our Liquidmetal alloys are integrated. Moreover, we have found that customers often proceed very cautiously and slowly before incorporating a fundamentally new and unique type of material into their products.

After we develop a customer relationship, it may take a significant amount of time for that customer to develop, manufacture, and sell finished goods that incorporate our components and products.

Our experience has shown that our customers will perform numerous tests and extensively evaluate our components and products before incorporating them into their finished products. The time required for testing, evaluating, and designing our components and products into a customer's products, and in some cases, obtaining regulatory approval, can be significant, with an additional period of time before a customer commences volume production of products incorporating our components and products, if ever. Moreover, because of this lengthy development cycle, we may experience a delay between the time we accrue expenses for research and development and sales and marketing efforts and the time when we generate revenue, if any. We may incur substantial costs in an attempt to transition a customer from initial testing to prototype and from prototype to final product. If we are unable to minimize these transition costs, or to recover the costs of these transitions from our customers, our operating results will be adversely affected.

A limited number of our customers generate a significant portion of our revenue.

For the near future, we expect that a significant portion of our revenue may be concentrated in a limited number of customers. A reduction, delay, or cancellation of orders from one or more of these customers or the loss of one or more customer relationships could significantly reduce our revenue and harm our business. Unless we establish long-term sales arrangements with these customers, they will have the ability to reduce or discontinue their purchases of our products on short notice.

We expect to rely on our customers and licensees to market and sell finished goods that incorporate our products and components, a process over which we will have little control.

Our future revenue growth and ultimate profitability will depend in part on the ability of our customers and licensees to successfully market and sell their finished goods that incorporate our products. We may have little control over our customers' and licensees' marketing and sales efforts. These marketing and sales efforts may be unsuccessful for various reasons, any of which could hinder our ability to increase revenue or achieve profitability. For example, our customers may not have or devote sufficient resources to develop, market, and sell their finished goods that incorporate our products. Because we typically will not have exclusive sales arrangements with our customers, they will not be precluded from exploring and adopting competing technologies. Also, products incorporating competing technologies may be more successful for reasons unrelated to the performance of Liquidmetal products or the marketing efforts of our customers and licensees.

Risk Related to Technological and Intellectual Property

Our growth depends on our ability to identify, develop, and commercialize new applications for our technology.

Our future growth and success will depend in part on our ability to identify, develop, and commercialize, either alone or in conjunction with our customers and partners, new applications and uses for Liquidmetal alloys. If we are unable to identify and develop new applications, we may be unable to develop new products or generate additional revenue. Successful development of new applications for our products may require additional investment, including costs associated with research and development and the identification of new customers. In addition, difficulties in developing and achieving market acceptance of new products would harm our business.

We may not be able to effectively compete with current suppliers of incumbent materials or producers of competing products.

The future growth and success of our Liquidmetal alloy business will depend in part on our ability to establish and retain a technological advantage over other materials for our targeted applications. For many of our targeted applications, we will compete with manufacturers of similar products that use different materials many of which have substantially greater financial and other resources than we do. These different materials may include plastics, zinc, titanium alloys, metal injection molding, or stainless steel, among others, and we will compete directly with suppliers of the incumbent material. In addition, in each of our targeted markets, our success will depend in part on the ability of our customers to compete successfully in their respective markets. Thus, even if we are successful in replacing an incumbent material in a finished product, we will remain subject to the risk that our customer will not compete successfully in its own market.

Our bulk amorphous alloy technology is still at an early stage of commercialization relative to many other materials.

Our bulk amorphous alloy technology is a relatively new technology as compared to many other material technologies, such as plastics and widely-used high-performance crystalline alloys. Historically, the successful commercialization of a new material technology has required the persistent improvement and refining of the technology over a sometimes lengthy period of time. Accordingly, we believe that our company's future success will be dependent on our ability to continue expanding and improving our technology platform by, among other things, constantly refining and improving our processes, optimizing our existing amorphous alloy compositions for various applications, and developing and improving new bulk amorphous alloy compositions. Our failure to further expand our technology base could limit our growth opportunities and hamper our commercialization efforts.

Future advances in materials science could render Liquidmetal alloys obsolete.

Academic institutions and business enterprises frequently engage in the research and testing of new materials, including alloys and plastics. Advances in materials science could lead to new materials that have a more favorable combination of performance, processing, and cost characteristics than our alloys. The future development of any such new materials could render our alloys obsolete and unmarketable or may impair our ability to compete effectively.

Risks Related to Human Resources

Our growth depends upon our ability to retain and attract a sufficient number of qualified employees.

Our business is based upon the commercialization of a new and unique materials technology. Our future growth and success will depend in part on our ability to retain key members of our management and engineering staff, who are familiar with this technology and the potential applications and markets for it. We do not have "key man" or similar insurance on any of the key members of our management and engineering staff. If we lose their services or the services of other key personnel, our financial results or business prospects may be harmed. Additionally, our future growth and success will depend in part on our ability to attract, train, and retain scientific engineering, manufacturing, sales, marketing, and management personnel. We cannot be certain that we will be able to attract and retain the personnel necessary to manage our operations effectively. Competition for experienced executives and engineers from numerous companies and academic and other research institutions may limit our ability to hire or retain personnel on acceptable terms. In addition, many of the companies with which we compete for experienced personnel have greater financial and other resources than we do. Moreover, the employment of otherwise highly qualified non-U.S. citizens may be restricted by applicable immigration laws.

We may not be able to successfully identify, consummate, integrate, or derive benefit from strategic partnerships.

As part of our business strategy, we intend to pursue strategic partnering transactions that provide access to new technologies, products, markets, and manufacturing capabilities. These transactions could include licensing agreements, joint ventures, or business combinations. We believe that these transactions will be particularly important to our future growth and success due to the size and resources of our company and the novel nature of our technology. For example, we may determine that we may need to license our technology to a larger manufacturer in order to penetrate a particular market. In addition, we may pursue transactions that will give us access to new technologies that are useful in connection with the composition, processing, or application of Liquidmetal alloys. We may not be able to successfully identify any potential strategic partnerships. Even if we do identify one or more potentially beneficial strategic partners, we may not be able to consummate transactions with these strategic partners on favorable terms or obtain the benefits we anticipate from such a transaction.

Risks Related to Our Global Business, Litigation, Laws and Regulation

We may derive some portion of our revenue from sales outside the United States, which may expose the Company to foreign commerce risks.

We may sell a portion of our products to customers outside of the United States, and our operations and revenue may be subject to risks associated with foreign commerce, including transportation delays and foreign tax and legal compliance. Moreover, customers may sell finished goods that incorporate our components and products outside of the United States, which indirectly expose us to additional foreign commerce risks.

A substantial increase in the price or interruption in the supply of raw materials for our alloys could have an adverse effect on our profitability.

Our proprietary alloy compositions are comprised of many elements, all of which are generally available commodity products. Although we believe that each of these raw materials is currently readily available in sufficient quantities from multiple sources on commercially acceptable terms, if the prices of these materials substantially increase or there is an interruption in the supply of these materials, such increase or interruption could adversely affect our profitability. For example, if the price of one of the elements included in our alloys substantially increases, we may not be able to pass the price increase on to our customers.

Our business could be subject to the potentially adverse consequences of exchange rate fluctuations.

We expect to conduct business in various foreign currencies and will be exposed to market risk from changes in foreign currency exchange rates and interest rates. Fluctuations in exchange rates between the U.S. dollar and such foreign currencies may have a material adverse effect on our business, results of operations, and financial condition and could specifically result in foreign exchange gains and losses. The impact of future exchange rate fluctuations on our operations cannot be accurately predicted. To the extent that the percentage of our non-U.S. dollar revenue derived from international sales increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates will increase further.

Our inability to protect our licenses, patents, trademarks, and proprietary rights in the United States and foreign countries could harm our business.

We own several patents relating to amorphous alloy technology, and we have other rights to amorphous alloy patents through an exclusive license from Caltech. Our success depends in part on our ability to obtain and maintain patent and other proprietary right protection for our technologies and products in the United States and other countries. If we are unable to obtain or maintain these protections, we may not be able to prevent third parties from using our proprietary rights. Specifically, we must:

- protect and enforce our owned and licensed patents and intellectual property;
- exploit our owned and licensed patented technology; and
- operate our business without infringing on the intellectual property rights of third parties.

Our licensed technology is comprised of several issued United States patents covering the composition, method of manufacturing, and application and use of the family of Liquidmetal alloys. We also hold several United States and corresponding foreign patents covering the manufacturing processes of Liquidmetal alloys and their use. Those patents have expiration dates between 2021 and 2036. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and we may encounter significant problems and costs in protecting our proprietary rights in these foreign countries.

In August 2010, we entered into a license transaction with Apple pursuant to which (i) we contributed substantially all of our intellectual property assets to a special-purpose, wholly-owned subsidiary, Crucible Intellectual Property (“CIP”), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, and (iii) CIP granted back to us a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use.

Patent law is still evolving relative to the scope and enforceability of claims in the fields in which we operate. Our patent protection involves complex legal and technical questions. Our patents and those patents for which we have license rights may be challenged, narrowed, invalidated, or circumvented. We may be able to protect our proprietary rights from infringement by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. Furthermore, others may independently develop similar or alternative technologies or design around our patented technologies. Litigation or other proceedings to defend or enforce our intellectual property rights could require us to spend significant time and money and could otherwise adversely affect our business.

Other companies or individuals may claim that we infringe their intellectual property rights, which could cause us to incur significant expenses or prevent us from selling our products.

Our success depends, in part, on our ability to operate without infringing on valid, enforceable patents or proprietary rights of third parties and without breaching any licenses that may relate to our technologies and products. Future patents issued to third parties may contain claims that conflict with our patents and that compete with our products and technologies, and third parties could assert infringement claims against us. Any litigation or interference proceedings, regardless of their outcome, may be costly and may require significant time and attention from our management and technical personnel. Litigation or interference proceedings could also force us to:

- stop or delay using our technology;

- stop or delay our customers from selling, manufacturing or using products that incorporate the challenged intellectual property;
- pay damages; or
- enter into licensing or royalty agreements that may be unavailable on acceptable terms.

Evolving regulation of corporate governance and public disclosure may result in additional expenses and continuing uncertainty.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the SEC XBRL mandate, new SEC regulations and International Financial Reporting Standards ("IFRS"), are creating uncertainty for public companies. As a result of these new rules and the size and limited resources of our company, we will incur additional costs associated with our public company reporting requirements, and we may not be able to comply with some of these new rules. In addition, these new rules could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and this could make it difficult for us to attract and retain qualified persons to serve on our board of directors.

We are presently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs. These new or changed laws, regulations, and standards are subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

The time and cost associated with complying with government regulations to which we could become subject could have a material adverse effect on our business.

Some of the applications for our Liquidmetal alloys that we have identified or may identify in the future may be subject to government regulations. For example, any medical devices made from our alloys likely will be subject to extensive government regulation in the United States by the FDA. Any medical device manufacturers to whom we sell Liquidmetal alloy products may need to comply with FDA requirements, including premarket approval or clearance under Section 510(k) of the Food Drug and Cosmetic Act,2 before marketing Liquidmetal alloy medical device products in the United States. These medical device manufacturers may be required to obtain similar approvals before marketing these medical devices in foreign countries. Any medical device manufacturers with which we jointly develop and sell medical device products may not provide significant assistance to us in obtaining required regulatory approvals. The process of obtaining and maintaining required FDA and foreign regulatory approvals could be lengthy, expensive, and uncertain. Additionally, regulatory agencies can delay or prevent product introductions. The failure to comply with applicable regulatory requirements can result in substantial fines, civil and criminal penalties, stop sale orders, loss or denial of approvals, recalls of products, and product seizures.

To the extent that our products have the potential for dual use, such as military and non-military applications, they may be subject to import and export restrictions of the U.S. government, as well as other countries. The process of obtaining any required U.S. or foreign licenses or approvals could be time-consuming, costly, and uncertain. Failure to comply with import and export regulatory requirements can lead to substantial fines, civil and criminal penalties, and the loss of government contracting and export privileges.

Risk Related to Stock Ownership and Corporate Governance

The existence of minority shareholders in our Liquidmetal Golf subsidiary creates potential for conflicts of interest.

We directly own 79% of the outstanding capital stock of Liquidmetal Golf, our subsidiary that has the exclusive right to commercialize our technology in the golf market. The remaining 21% of the Liquidmetal Golf stock is owned by approximately 95 shareholders of record. As a result, conflicts of interest may develop between us and the minority shareholders of Liquidmetal Golf. To the extent that our officers and directors are also officers or directors of Liquidmetal Golf, matters may arise that place the fiduciary duties of these individuals in conflicting positions.

Our executive officers, directors and insiders and entities affiliated with them hold a significant percentage of our common stock, and these shareholders may take actions that may be adverse to your interests.

As of December 31, 2021, our executive officers, directors and insiders and entities affiliated with them, in the aggregate, beneficially owned approximately 47.1% of our common stock. As a result, these shareholders, acting together, will be able to significantly influence all matters requiring shareholder approval, including the election and removal of directors and approval of significant corporate transactions such as mergers, consolidations and sales of assets. They also could dictate the management of our business and affairs. This concentration of ownership could have the effect of delaying, deferring or preventing a change in control or impeding a merger or consolidation, takeover or other business combination, which could cause the market price of our common stock to fall or prevent you from receiving a premium in such a transaction.

Our stock price has experienced volatility and may continue to experience volatility.

During 2021, the highest bid price for our common stock was $0.12 per share, while the lowest bid price during that period was $0.07 per share. The trading price of our common stock could continue to fluctuate widely due to:

- limited current liquidity and the possible need to raise additional capital;
- quarter-to-quarter variations in results of operations;
- announcements of technological innovations by us or our potential competitors;
- changes in or our failure to meet the expectations of securities analysts;
- new products offered by us or our competitors;
- announcements of strategic relationships or strategic partnerships;
- future sales of common stock, or securities convertible into or exercisable for common stock;
- adverse judgments or settlements obligating us to pay damages;
- future issuances of common stock in connection with acquisitions or other transactions;
- acts of war, terrorism, or natural disasters;
- low trading volume in our stock;
- developments relating to patents or property rights;
- government regulatory changes; or
- other events or factors that may be beyond our control.

In addition, the securities markets in general have experienced extreme price and trading volume volatility in the past. The trading prices of securities of many companies at our stage of growth have fluctuated broadly, often for reasons unrelated to the operating performance of the specific companies. These general market and industry factors may adversely affect the trading price of our common stock, regardless of our actual operating performance. If our stock price is volatile, we could face securities class action litigation, which could result in substantial costs and a diversion of management's attention and resources and could cause our stock price to fall.

Future sales of our common stock could depress our stock price.

Sales of a large number of shares of our common stock, or the availability of a large number of shares for sale, could adversely affect the market price of our common stock and could impair our ability to raise funds in additional stock offerings. In the event that we propose to register additional shares of common stock under the Securities Act of 1933 for our own account, certain shareholders are entitled to receive notice of that registration and to include their shares in the registration, subject to limitations described in the agreements granting these rights.

A limited public trading market exists for our common stock, which makes it more difficult for our shareholders to sell their common stock in the public markets.

Our common stock is currently traded under the symbol "LQMT" and currently trades at a low volume, based on quotations on the "Over-the-Counter" exchanges, meaning that the number of persons interested in purchasing our common stock at or near bid prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company which is still relatively unknown to stock analysts, stock brokers, institutional investors, and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and might be reluctant to follow an unproven company such as ours or purchase or recommend the purchase of our stock until such time as we became more viable. Additionally, many brokerage firms may not be willing to effect transactions in our securities. As a consequence, there may be periods of several days or more when trading activity in our stock is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give you any assurance that a broader or more active public trading market for our common stock will develop or be sustained, or that trading levels will be sustained.

We have never paid dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on our common stock to date. We currently intend to retain our future earnings, if any, to fund the development and growth of our businesses, and we do not anticipate paying any cash dividends on our capital stock for the foreseeable future. In addition, the terms of existing or any future debts may preclude us from paying dividends on our stock. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for the foreseeable future for our common shareholders.

FINRA sales practice requirements may also limit a shareholder's ability to buy and sell our stock.

The Financial Industry Regulatory Authority ("FINRA") has adopted rules that require a broker-dealer to have reasonable grounds for believing that an investment is suitable for a customer prior to recommending the investment to such customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low priced securities will not be suitable for at least some customers. The FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our stock and have an adverse effect on the market for our shares.

Antitakeover provisions of our certificate of incorporation and bylaws and provisions of applicable corporate law could delay or prevent a change of control that you may favor.

Provisions in our certificate of incorporation, our bylaws, and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our shareholders. These provisions could discourage potential takeover attempts and could adversely affect the market price of our shares. Because of these provisions, you might not be able to receive a premium on your investment in such a transaction. These provisions:

- authorize our board of directors, without shareholder approval, to issue up to 10,000,000 shares of "blank check" preferred stock that could be issued by our board of directors to increase the number of outstanding shares and prevent a takeover attempt;
- limit shareholders' ability to call a special meeting of our shareholders; and
- establish advance notice requirements to nominate directors for election to our board of directors or to propose matters that can be acted on by shareholders at shareholder meetings.

The provisions described above, as well as other provisions in our certificate of incorporation, our bylaws, and Delaware law could delay or make more difficult transactions involving a change in control of us or our management.

We rely extensively on information technology in our operations, and any material failure, inadequacy, interruption, or security breach of that technology could have a material adverse impact on our business.

We rely extensively on information technology systems across our operations, including reporting results of operations, collection and storage of personal data of customers, employees and other stakeholders, and various other processes and transactions. Some of these systems are managed by third-party service providers. We use third-party technology and systems for a variety of reasons, including, without limitation, encryption and authentication technology, employee email, content delivery to customers, back-office support, and other functions. Failure to follow applicable regulations related to those activities, or to prevent or mitigate data loss or other security breaches, including breaches of our business partners' technology and systems could expose us and/or our customers and vendors to a risk of loss or misuse of such information, which could adversely affect our operating results, result in regulatory enforcement, other litigation and potential liability, and otherwise harm our business. Our ability to effectively manage our business and coordinate the production, distribution, and sale of our products depends significantly on the reliability and capacity of these systems and third-party service providers. Although we have developed systems and processes that are designed to protect customer information and prevent data loss and other security breaches, including systems and processes designed to reduce the impact of a security breach at a third-party service provider, such measures cannot provide absolute security.

We have exposure to similar security risks faced by other companies that have data stored on their information technology systems. To our knowledge, we have not experienced any material breach of our cybersecurity systems. If we or our third-party service providers systems fail to operate effectively or are damaged, destroyed, or shut down, or there are problems with transitioning to upgraded or replacement systems, or there are security breaches in these systems, we could experience delays or decreases in product sales, and reduced efficiency of our operations. Any of the aforementioned could occur as a result of natural disasters, software or equipment failures, telecommunications failures, loss or theft of equipment, acts of terrorism, circumvention of security systems, or other cyber-attacks, including denial-of-service attacks. Additionally, any of these events could lead to violations of privacy laws, loss of customers, or loss, misappropriation or corruption of confidential information, trade secrets or data, which could expose us to potential litigation, regulatory actions, sanctions or other statutory penalties, any or all of which could adversely affect its business, and cause it to incur significant losses and remediation costs.

We will rely on the manufacturing operations of a third party controlled by our largest stockholder and Chairman, which presents a potential conflicts of interest.

As a result of the 2019 Restructuring Plan, we will rely, on Yihao to manufacture our products. Yihao is an affiliate of Professor Li and is indirectly controlled by Professor Li. Professor Li, through his affiliates, is the largest beneficial owner of our common stock and owns approximately 45.1% of our common stock and is able to exercise significant influence over all matters affecting us, including the election of directors, formation and execution of business strategy and approval of mergers, acquisitions and other significant corporate transactions, which may have an adverse effect on our stock price and ability to execute our strategic initiatives. As a result of this significant ownership and his affiliation with Yihao, as well as the future importance of Yihao as a manufacturer of the Company's products, Professor Li may have conflicts of interest and interests that are not aligned with those of other stockholders of the Company.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate office, consisting of approximately 41,000 square feet of warehouse and office space, is located in Lake Forest, California. We purchased the facility in February of 2017.

On January 23, 2020, we entered into a lease agreement pursuant to which we leased approximately 32,534 square foot portion of the facility to a commercial tenant. The lease term is for 5 years and 2 months commencing on March 1, 2020. The base rent payable under the Lease Agreement is $32,534 per month initially and is subject to periodic increases up to a maximum of approximately $54,000 per month. The tenant will pay approximately 79% of common operating expresses.

Item 3. Legal Proceedings

None.

Item 4. Mine Safety Disclosures

Not Applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

Our common stock is currently quoted on the "OTCQB Venture Marketplace" under the symbol "LQMT." On March 29, 2022, the last reported sales price of our common stock was $0.12 per share. As of March 29, 2022, we had 207 active record holders of our common stock.

The following table sets forth, on a per share basis, the range of high and low bid information for the shares of our common stock for each full quarterly period within the two most recent fiscal years and any subsequent interim period for which financial statements are included, as reported by the "OTCQB Venture Marketplace." These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

2021	High	Low
Fourth Quarter	$0.10	$0.08
Third Quarter	$0.12	$0.07
Second Quarter	$0.09	$0.07
First Quarter	$0.12	$0.08

2020	High	Low
Fourth Quarter	$0.14	$0.08
Third Quarter	$0.18	$0.07
Second Quarter	$0.08	$0.07
First Quarter	$0.11	$0.07

We have never paid a cash dividend on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future, and we plan to retain our earnings to finance our operations and future growth.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

This management's discussion and analysis should be read in conjunction with the consolidated financial statements and notes included elsewhere in this report on Form 10-K. All amounts described in this section are in thousands, except percentages, periods of time, and share and per share data.

This management's discussion and analysis, as well as other sections of this report on Form 10-K, may contain "forward-looking statements" that involve risks and uncertainties, including statements regarding our plans, future events, objectives, expectations, estimates, forecasts, assumptions or projections. Any statement that is not a statement of historical fact is a forward-looking statement, and in some cases, words such as "believe," "estimate," "project," "expect," "intend," "may," "anticipate," "plan," "seek," and similar expressions identify forward-looking statements. These statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or results, and undue reliance should not be placed on these statements. These risks and uncertainties include, but are not limited to, the matters discussed under the caption "Risk Factors" in Item 1A of this report and other risks and uncertainties discussed in filings made with the Securities and Exchange Commission (including risks described in subsequent reports on Form 10-Q, Form 10-K, Form 8-K, and other filings). Liquidmetal Technologies, Inc. disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

OVERVIEW

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary bulk alloys and composites that utilize the advantages offered by amorphous alloy technology. We design, develop, and sell custom products and parts from bulk amorphous alloys to customers in various industries. We also partner with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products.

Amorphous alloys are, in general, unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in other metals and alloys when they solidify. Liquidmetal alloys are proprietary amorphous alloys that possess a combination of performance, processing, and potential cost advantages that we believe will make them preferable to other materials in a variety of applications. The amorphous atomic structure of bulk alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. We believe the alloys and the molding technologies we employ can result in components for many applications that exhibit exceptional dimensional control and repeatability that rivals precision machining, excellent corrosion resistance, brilliant surface finish, high strength, high hardness, high elastic limit, alloys that are non-magnetic, and the ability to form complex shapes common to the injection molding of plastics. All of these characteristics are achievable from the molding process, so design engineers often do not have to select specific alloys to achieve one or more of the characteristics as is the case with crystalline materials. We believe these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

Our revenues are derived from i) selling our bulk amorphous alloy custom products and parts for applications which include, but are not limited to, non-consumer electronic devices, medical products, automotive components, and sports and leisure goods; ii) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development; and iii) product licensing and royalty revenue.

Our cost of sales consists primarily of the costs of manufacturing, which include raw alloy and direct labor costs. Selling, general, and administrative expenses currently consist primarily of salaries and related benefits, travel, consulting and professional fees, depreciation and amortization, insurance, office and administrative expenses, and other expenses related to our operations.

Research and development expenses represent salaries, related benefits expenses, consulting and contract services, expenses incurred for the design and testing of new processing methods, expenses for the development of sample and prototype products, and other expenses related to the research and development of Liquidmetal bulk alloys. Costs associated with research and development activities are expensed as incurred. We plan to enhance our competitive position by improving our existing technologies and developing advances in amorphous alloy technologies. We believe that our research and development efforts will focus on the discovery of new alloy compositions, the development of improved processing technology, and the identification of new applications for our alloys.

In July 2019, the Company adopted the 2019 Restructuring Plan pursuant to which the Company elected to wind down its prior manufacturing operations at the Company's Lake Forest, CA facility and seek to outsource the manufacture of parts utilizing the Company's technology through domestic and international manufacturing partners. In connection with the 2019 Restructuring Plan, the Company reduced its management staff and shifted its business strategy from internal manufacture of parts and products for customers toward the use and reliance of outsourced manufacturers, including Yihao, a China-based company that is an affiliate of our largest beneficial stockholder and Chairman, Professor Li.

SIGNIFICANT TRANSACTIONS

Yihao Manufacturing Agreement

On January 12, 2022, Liquidmetal Technologies entered into a manufacturing agreement (“Manufacturing Agreement”) with Dongguan Yihao Metal Materials Technology Co. Ltd. (“Yihao”) to become the primary outsourced manufacturer of the Company’s products. Under the Manufacturing Agreement, which has a term of five years, Yihao has agreed to serve as a non-exclusive contract manufacturer for amorphous alloy parts offered and sold by the Company at prices determined on a “cost-plus” basis. Yihao is an affiliate of Dongguan Eontec Co. Ltd. and Professor Lugee Li, our Chairman and largest beneficial owner of the Company’s capital stock.

Liquidmetal Golf License

On January 13, 2022, our Liquidmetal Golf subsidiary entered into a sublicense agreement (“LMG Sublicense Agreement”) with Amorphous Technologies Japan, Inc. (“ATJ”), a newly formed Japanese entity that was established by Twins Corporation, a sporting goods company operating in Japan. Under the agreement, LMG granted to ATJ a nonexclusive worldwide sublicense to the Company’s amorphous alloy technology and related trademarks to manufacture and sell golf clubs and golf related products. The LMG Sublicense Agreement has a term of three years and provides for the payment of a running royalty to LMG of 3% of the net sales price of licensed products.

Manufacturing Facility Purchase and Lease

On February 16, 2017, we purchased a 41,000 square foot manufacturing facility (the “Facility”) located in Lake Forest, CA, where operations commenced during July 2017. The purchase price for the Facility was $7,818. As a result of the 2019 Restructuring Plan, we have discontinued manufacturing operations in the Facility.

On January 23, 2020, 20321 Valencia, LLC, a Delaware limited liability company and our wholly owned subsidiary, entered into a lease agreement (the “Facility Lease”) pursuant to which we leased to MatterHackers, Inc., a Delaware corporation (“Tenant”), an approximately 32,534 square foot portion of the Facility. The lease term is for 5 years and 2 months and is scheduled to expire on April 30, 2025. The base rent payable under the Facility Lease is $32,534 per month initially and is subject to periodic increases up to a maximum of approximately $54,000 per month. Tenant will pay approximately 79% of common operating expresses. The Facility Lease has other customary provisions, including provisions relating to default and usage restrictions. The Facility Lease grants to Tenant a right to extend the lease for one additional 60-month period at market rental value.

2016 Purchase Agreement

On March 10, 2016, we entered into a Securities Purchase Agreement (the “2016 Purchase Agreement”) with Liquidmetal Technology Limited, a Hong Kong company (the “Investor”), which is controlled by our Chairman, Professor Lugee Li (“Professor Li”). The 2016 Purchase Agreement provided for the purchase by the Investor of a total of 405,000,000 shares of our common stock for an aggregate purchase price of $63,400. The transaction occurred in multiple closings, with the Investor having purchased 105,000,000 shares at a purchase price of $8,400 (or $0.08 per share) at the initial closing on March 10, 2016, and the remaining 200,000,000 shares at $0.15 per share and 100,000,000 shares at $0.25 per share for an aggregate purchase price of $55,000 on October 26, 2016.

In addition to the shares issuable under the 2016 Purchase Agreement, we issued to the Investor a warrant to acquire 10,066,809 shares of common stock (of which the right to exercise 2,609,913 of the warrant shares vested on March 10, 2016 and the right to exercise the remaining 7,456,896 warrant shares vested on October 26, 2016, all at an exercise price of $0.07 per share). The warrant will expire on the tenth anniversary of its issuance date.

The 2016 Purchase Agreement also provided that, with certain limited exceptions, if we issue any shares of common stock at any time through the fifth anniversary of the 2016 Purchase Agreement, the Investor will have a preemptive right to subscribe for and to purchase at the same price per share (or at market price, in the case of issuance of shares pursuant to stock options) the number of shares necessary to maintain its ownership percentage of our issued shares of common stock.

Eontec License Agreement

On March 10, 2016, in connection with the 2016 Purchase Agreement, we entered into a Parallel License Agreement (the “License Agreement”) with DongGuan Eontec Co., Ltd., a Hong Kong corporation (“Eontec”) pursuant to which we each entered into a cross-license of our respective technologies. Our Chairman, Professor Li, is also the Chairman of Eontec.

The License Agreement provides for the cross-license of certain patents, technical information, and trademarks between us and Eontec. In particular, we granted to Eontec a paid-up, royalty-free, perpetual license to our patents and related technical information to make, have made, use, offer to sell, sell, export, and import products in certain geographic areas outside of North America and Europe. In turn, Eontec granted to us a paid-up, royalty-free, perpetual license to Eontec's patents and related technical information to make, have made, use, offer to sell, sell, export, and import products in certain geographic areas outside of specified countries in Asia. The license granted by us to Eontec is exclusive (including to the exclusion of us) in the countries of Brunei, Cambodia, China (P.R.C and R.O.C.), East Timor, Indonesia, Japan, Laos, Malaysia, Myanmar, Philippines, Singapore, South Korea, Thailand, and Vietnam. The license granted by Eontec to us is exclusive (including to the exclusion of Eontec) in North America and Europe. The cross-licenses are non-exclusive in geographic areas outside of the foregoing exclusive territories.

Beyond the License Agreement, we collaborate with Eontec to accelerate the commercialization of amorphous alloy technology. This includes but is not limited to developing technologies to reduce the cost of amorphous alloys, working on die cast machine technology platforms to pursue broader markets, sharing knowledge to broaden our intellectual property portfolio, and utilizing Eontec's volume production capabilities as a third party contract manufacturer.

Eutectix Business Development Agreement

On January 31, 2020, the Company entered into a Business Development Agreement (the "Agreement") with Eutectix LLC, a Delaware limited liability company ("Eutectix"), which provides for collaboration, joint development efforts, and the manufacturing of products based on the Company's proprietary amorphous metal alloys. Under the Agreement, the Company has licensed to Eutectix specified equipment owned by the Company, including two injection molding machines, two diecasting machines, and other machines and equipment, all of which will be used to make product for Company customers and Eutectix customers. The licensed machines and equipment represent substantially all of the machinery and equipment then held by the Company. The Company has also licensed to Eutectix various patents and technical information related to the Company's proprietary technology. Under the Agreement, Eutectix will pay the Company a royalty of six percent (6%) of the net sales price of licensed products sold by Eutectix, and Eutectix will also manufacture for the Company product ordered by the Company. The Agreement has a term of five years, subject to renewal provisions and the ability of either party to terminate earlier upon specified circumstances.

Apple License Transaction

On August 5, 2010, we entered into a license transaction with Apple pursuant to which (i) we contributed substantially all of our intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, Crucible Intellectual Property, LLC ("CIP"), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, in exchange for a license fee, and (iii) CIP granted back to us a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use.

Under the agreements relating to the license transaction with Apple, we were obligated to contribute to CIP all intellectual property that we developed through February 2016. We are also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction.

Swatch Group License

In March 2009, we entered into a license agreement with Swatch Group, Ltd. ("Swatch") under which Swatch was granted a non-exclusive license to our technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches, but non-exclusive as to Apple. We will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.

RESULTS OF OPERATIONS

	For the years ended December 31,				
	2021		**2020**		
	in 000's	**% of Revenue**	**in 000's**	**% of Revenue**	
Revenue:					
Products	$ 790		$ 925		$ (135)
Licensing and royalties	21		64		(43)
Total revenue	**811**		**989**		**(178)**
Cost of sales	628	77%	621	63%	7
Gross profit	**183**	23%	**368**	37%	**(185)**
Selling, marketing, general and administrative	4,160	513%	3,798	384%	362
Research and development	84	10%	110	11%	(26)
Gain on disposal of long-lived assets	-	0%	(35)	-4%	35
Total operating expense	4,244		3,873		371
Operating loss	**(4,061)**		**(3,505)**		**(556)**
Lease income	529		484		45
Interest and investment income	154		378		(224)
Net loss	**$ (3,378)**		**$ (2,643)**		**$ (735)**

(a) Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue and operating expenses

Revenue. Total revenue decreased by $135 to $811 for the year ended December 31, 2021 from $989 for the year ended December 31, 2020. The decrease was attributable to lower product sale volumes associated with the Company's continued transition from internal manufacturing to outsourced manufacturing.

Cost of sales. Cost of sales was $628, or 77% of total revenue, for the year ended December 31, 2021, an increase from $621, or 63% of total revenue, for the year ended December 31, 2020. The increase in our cost of sales was primarily driven by lower product revenues with lower gross profit percentages. Once we are able to sustain and increase shipments of routine, commercial products and parts through our contract manufacturers, we expect our cost of sales percentages to decrease, stabilize, and be more predictable.

Gross profit. Our gross profit decreased by $185 from $368 as of December 31, 2020 to $183 as of December 31, 2021. Our gross margin percentage decreased from 37% as of December 31, 2020 to 23% as of December 31, 2021. Our gross profit percentages have fluctuated and may continue to fluctuate based on production volumes and quoted production prices per unit and may not be representative of our future business. If we are able to sustain and increase shipments of routine, commercial products and parts through future orders to third party contract manufacturers, we expect our gross profit percentages to stabilize, increase, and be more predictable.

Selling, marketing, general, and administrative expenses. Selling, marketing, general, and administrative expenses increased by $362 to $4,160, or 513% of revenue, for the year ended December 31, 2021 from $3,798, or 384% of revenue, for the year ended December 31, 2020. The increase in expenses was primarily attributable to stock base compensation and severance expense in connection with the separation agreements the Company entered into with our former COO and Vice President of Finance, Dr. Bruce Bromage and Mr. Bryce Van, respectively.

Research and development expenses. Research and development expenses decreased by $26 to $84, or 10% of revenue, for the year ended December 31, 2021, from $110, or 11% of revenue, for the year ended December 31, 2020. The decrease in expense was mainly due to reductions in employee compensation, and associated development initiatives from headcount reductions associated with the 2019 Restructuring Plan. Going forward, we will continue to perform research and development of new Liquidmetal alloys and related processing capabilities, albeit on a reduced basis.

Gain on disposal of fixed assets. During the year ended December 31, 2020, the Company recorded gains on the disposal of fixed assets of $35. There were no disposals during the year ended December 31, 2021.

Operating loss. Operating loss increased by $556 from $3,505 for the year ended December 31, 2020 to $4,061 for the year ended December 31, 2021. Fluctuations in our operating loss are primarily attributable to variations in operating expenses, as discussed above.

We continue to invest in our technology infrastructure to expedite the adoption of our technology, but we have experienced long sales lead times for customer adoption of our technology. Until that time when we can either (i) increase our revenues with shipments of routine, commercial products and parts through third party contract manufacturers or (ii) obtain significant licensing revenues, we expect to continue to have operating losses for the foreseeable future.

Non-operational income and expenses

Interest and investment income. Interest and investment income relates to interest earned from our cash deposits and investments in debt securities for the respective periods. Interest and investment income was $154 and $378 for the years ended December 31, 2021 and 2020, respectively. The decrease during 2021 is due to higher overall yields on debt securities as a result of the global economic recovery from the COVID-19 pandemic during 2021.

Lease income. Lease income relates to straight-line rental income received under the Facility Lease. Such amounts were $529 and $484 for the years ended December 31, 2021 and 2020, respectively.

Net loss. Our annual net losses of $3,378 as of December 31, 2021 and $2,643 as of December 31, 2020 are primarily reflective of operating expenses associated with our on-going business as well as non-operational income, discussed above.

LIQUIDITY AND CAPITAL RESOURCES

Cash used in operating activities

Cash used in operating activities totaled $2,730 for the year ended December 31, 2021 and $2,330 for the year ended December 31, 2020. The cash was primarily used to fund operating expenses related to our business and product development efforts.

Cash provided by (used in) investing activities

Cash provided by investing activities totaled $5,307 for the year ended December 31, 2021 and cash used in investing activities totaled $15,799 for the year ended December 31, 2020. Cash used in investing activities primarily consist of purchases of debt securities in line with our investment strategy.

Cash provided by financing activities

Cash provided by financing activities totaled $0 for the year ended December 31, 2021 and $0 for the year ended December 31, 2020.

Financing arrangements and outlook

The Company has a relatively limited history of selling bulk amorphous alloy products and components on a mass-production scale. Furthermore, the ability of contract manufacturers to produce the Company's products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of the Company's control, including the nature and design of the component, the customer's specifications, and required delivery timelines. These factors have previously required that the Company engage in equity sales under various stock purchase agreements to support its operations and strategic initiatives.

However, as of December 31, 2021, the Company had $4,091 in cash and restricted cash, as well as $22,119 in investments in debt securities. The Company views this total of $26,210 as readily available sources of liquidity in the event needed to advance the Company's existing strategy, and/or pursue an alternative strategy. As such, the Company anticipates that its current capital resources, when considering expected losses from operations, will be sufficient to fund the Company's operations for the foreseeable future.

OFF-BALANCE SHEET ARRANGEMENTS

An off-balance sheet arrangement is any transaction, agreement or other contractual arrangement involving an unconsolidated entity under which a company has (1) made guarantees, (2) a retained or a contingent interest in transferred assets, (3) an obligation under derivative instruments classified as equity, or (4) any obligation arising out of a material variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to our Company, or that engages in leasing, hedging, or research and development arrangements with our Company. As of December 31, 2021, the Company did not have any off-balance sheet arrangements.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates and assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions.

We believe that the following accounting policies are the most critical to our consolidated financial statements since these policies require significant judgment or involve complex estimates that are important to the portrayal of our financial condition and operating results:

- We recognize revenue pursuant to applicable accounting standards including FASB ASC Topic 606 ("ASC 606"), Revenue from Contracts with Customers. ASC 606 summarizes certain points in applying generally accepted accounting principles to revenue recognition in financial statements and provides guidance on revenue recognition issues in the absence of authoritative literature addressing a specific arrangement or a specific industry.

  Our revenue recognition policy complies with the requirements of ASC 606. As a majority of our sales revenue continues to be recognized when products are shipped, and there was no change in the recognition model historically applied to active license and royalty contracts under the new revenue standard, there was no adjustment to the opening balance of retained earnings. The impact to our results of operations is not material, on an on-going basis, because the analysis of our contracts under the new revenue standard supports a recognition model consistent with our previous revenue recognition model. Revenue on the majority of our contracts will continue to be recognized over time because of the continuous transfer of control to the customer.

  Products: Product revenues are primarily generated from the sale and prototyping of molds and bulk alloy products. Revenue is recognized when i) persuasive evidence of an arrangement exists, ii) delivery has occurred, iii) the sales price is fixed or determinable, iv) collection is probable and v) all obligations have been substantially performed pursuant to the terms of the arrangement. When we receive consideration, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, we record deferred revenue, which represents a contract liability. We will recognize deferred revenue as products revenue after it has transferred control of the goods or services to the customer and all revenue recognition criteria are met. Such amounts are not expected to be material on an ongoing basis.

  Licensing and royalties: License revenue arrangements in general provide for the grant of an exclusive or non-exclusive right to manufacture and/or sell products covered by patented technologies owned or controlled by us. The intellectual property rights granted may be perpetual in nature, extending until the expiration of the related patents, or can be granted for a defined period of time. Licensing revenues that are one-time fees upon the granting of the license are recognized when i) the license term begins in a manner consistent with the nature of the transaction and the earnings process is complete, ii) when collectability is reasonably assured or upon receipt of an upfront fee, and iii) when all other revenue recognition criteria have been met. Pursuant to the terms of these agreements, we have no further obligation with respect to the grant of the license. Licensing revenues that are related to royalties are recognized as the royalties are earned over the related period.

  Practical Expedients and Exemptions: We generally expense sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within selling, marketing, general and administrative expenses. We do not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount for which it has the right to invoice for services performed.

- We value our long-lived assets at the lower of cost or fair market value. We review long-lived assets to be held and used in operations for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may be impaired. These evaluations may result from significant decreases in the overall market outlook for our technology or the market price of an asset, a significant adverse change in the extent or manner in which an asset is being used in its physical condition, a significant adverse change in legal factors or in the business climate that could affect the value of an asset, as well as economic or operational analyses. If we concludes that the carrying value of certain assets will not be recovered based on expected undiscounted future cash flows, an impairment write-down is recorded to reduce the assets to their estimated fair value. Fair value is determined via market, cost and income based valuation techniques, as appropriate. The fair value is measured on a nonrecurring basis using a combination of quoted prices for similar assets in active markets and other unobservable adjustments to historical cost (Level 3) inputs. No cash impairment charges were recorded for the years ended December 31, 2021 and December 31, 2020.

- We record valuation allowances to reduce our deferred tax assets to the amounts deemed more likely than not of being realized. While we consider taxable income in assessing the need for a valuation allowance, in the event we determine we would be able to realize our deferred tax assets in the future in excess of the net recorded amount, an adjustment would be made and income increased in the period of such determination. Likewise, in the event we determine we would not be able to realize all or part of our deferred tax assets in the future, an adjustment would be made and charged to income in the period of such determination.

- We account for share-based compensation in accordance with the fair value recognition provisions of FASB ASC Topic 718, *Share-based Payment*, which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the consolidated financial statements based on their fair values. The fair value of stock options is calculated by using the Black-Scholes option pricing formula that requires estimates for expected volatility, expected dividends, the risk-free interest rate and the term of the option. If any of the assumptions used in the Black-Scholes model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period.

- Our inventory is stated at the lower of cost or estimated net realizable value. The cost of inventories is determined on the basis of weighted-average cost. We perform an analysis of our inventory balances at least quarterly to determine if the carrying amount of inventories exceeds their net realizable value. The analysis of estimated net realizable value is based on customer orders, market trends and historical pricing. If the carrying amount exceeds the estimated net realizable value, the carrying amount is reduced to the estimated net realizable value.

- We invest excess funds in debt securities to maximize investment yield, while maintaining liquidity and minimizing credit risk. Debt securities are carried at fair value and consist primarily of investments in obligations of the United States Treasury, various U.S. and foreign corporations, and certificates of deposits. We classify our investments in debt securities as available-for-sale with all unrealized gains or losses included as part of other comprehensive income. We evaluate our debt securities with unrealized losses on a quarterly basis for potential other-than-temporary impairments in value. As a result of these assessments, we did not recognize any other-than-temporary impairment losses considered to be credit related for the years ended December 31, 2021 and 2020.

RECENT ACCOUNTING PRONOUNCEMENTS

Financial Instruments- Credit Losses

In June 2016, the FASB issued an accounting standards update which changes the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. This update replaces the existing incurred loss impairment model with an expected loss model (referred to as the Current Expected Credit Loss model, or "CECL"). The standard update, and its related amendments, will become effective for the fiscal year beginning on January 1, 2023. The Company is in the process of assessing the impact of this standard update, and its related amendments, on its consolidated financial statements, but is not expecting it will have a material impact on the Company’s consolidated financial statements.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the AICPA and the SEC did not or are not believed by management to have a material impact on the Company's present or future consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

None.

Item 8. Financial Statements

The financial statements required by this item can be found beginning on page 49 of this Annual Report on Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures

On December 15, 2021, the Board of Directors (the "Board") of Liquidmetal Technologies, Inc. (the "Company") approved the engagement of BF Borgers CPA, PC ("BF Borgers") as the independent registered public accounting firm for its fiscal year ending December 31, 2021. The engagement was effective on December 16, 2021, the date on which the Company transmitted the executed engagement letter to BF Borgers. Accordingly, SingerLewak LLP ("SingerLewak"), who had served as the Company's independent registered public accounting firm since 2011, was dismissed as the Company's independent registered public accounting firm as of December 15, 2021 by the the Board of Directors.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Under the supervision and with the participation of our management, including our Chief Executive Officer (Principal Executive/Financial Officer), we conducted an evaluation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15(d)-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based on this evaluation, our Chief Executive Officer (Principal Executive/Financial Officer) concluded that our disclosure controls and procedures were effective as of December 31, 2021 (the end of the period covered by this report).

Changes in Internal Controls. There were no changes in our internal control over financial reporting (as that term is defined in Rules 13a-15(f) or 15d-15(f) under the Exchange Act) during the year ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting. The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and the related rule of the SEC, management assessed the effectiveness of the Company's internal control over financial reporting using the *Internal Control-Integrated Framework (2013)* developed by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, management concluded that the company's internal control over financial reporting was effective as of December 31, 2021. Management has not identified any material weaknesses in the Company's internal control over financial reporting as of December 31, 2021.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Set forth below is a table identifying our directors and executive officers as of March 29, 2022:

Name	Age	Position
Lugee Li	61	Chairman of the Board
Tony Chung	52	Chief Executive Officer, Director
Isaac Bresnick	37	President, Director
Abdi Mahamedi	58	Vice Chairman of the Board
Vincent Carrubba	61	Director

Professor Lugee Li ("*Professor Li*"*)* was elected by our board of directors to serve as our Chief Executive Officer in December 2016. Pursuant to the terms of the 2016 Purchase Agreement, Professor Li was appointed as a member of our board of directors in March 2016 and became Chairman of our board of directors in October 2016. Professor Li is the founder, Chairman, and shareholder of DongGuan Eontec Co. Ltd. ("Eontec"), a Hong Kong company listed on the Shenzen Stock Exchange engaged in the production of precision die-cast products and the research and development of new materials. Professor Li founded Eontec in 1993 and has served as its Chairman since that date. At Eontec, Professor Li is responsible for strategic development and research and development. Professor Li is also the founder and sole shareholder of Leader Biomedical Limited, a Hong Kong company engaged in the supply of biomaterials and surgical implants. Professor Li serves as an analyst for the Institute of Metal Research at the Chinese Academy of Sciences and serves part-time as a professor at several universities in China. Professor Li owns Liquidmetal Technology Limited, a Hong Kong company and the Investor in our 2016 Purchase Agreement.

Tony Chung was appointed as the Company's Chief Executive Officer on July 6, 2021 and has served as a Director since August 2017. Mr. Chung had previously served as the Company's Chief Financial Officer from December 2008 to August 2017. Prior to re-joining the Company as an executive, he was the Chief Financial Officer of Solarcity, currently a division of Tesla Inc., that provides advanced solar technology solutions. Mr. Chung also served as the Managing Director of Baypoint Ventures, a technology investment fund. Mr. Chung is an Attorney and received a B.S. degree in business from UC Berkeley and a J.D. Degree from PCU Law School.

Isaac Bresnick began serving as a Director in October 2016 and was appointed to the role of President on July 6, 2021. Prior to being appointed as President, he was the Executive Administrator of the Company since November 2016. From October 2014 to November 2016, Mr. Bresnick served as Legal and Regulatory Affairs Director for the Leader Biomedical Group, a private company based in Hong Kong and operating from Amsterdam, the Netherlands. At Leader Biomedical, Mr. Bresnick was responsible for the direction and management of legal affairs, regulatory affairs, quality control and quality assurance, as well as for advising executive management of affiliated companies. From July 2013 to October 2017, Mr. Bresnick served as Director of aap Joints GmbH, a private company in Berlin, Germany. From January 2013 through June 2013, Mr. Bresnick provided full-time consulting services to AAP Orthopedics Ltd., a BVI company. Mr. Bresnick is an Attorney and received his J.D. from the University of Connecticut School of Law in 2013, and his B.S. in Industrial Design from the University of Bridgeport in 2008. After completion of his undergraduate studies and continuing through his enrollment at the University of Connecticut, Mr. Bresnick worked as Senior Arrangements Designer for Electric Boat Corporation, a subsidiary of General Dynamics, from June 2008 to December 2012.

Abdi Mahamedi has served as a director since May 2009 and served as Chairman of the board of directors from March 2010 through October 2016 and is currently the Vice-Chairman. Since 1987, Mr. Mahamedi has served as the President and Chief Executive Officer of Carlyle Development Group of Companies ("CDG"), which develops and manages residential and commercial properties in the United States on behalf of investors worldwide. In his role as President and Chief Executive Officer, Mr. Mahamedi evaluates and supervises all of the investment activities and management personnel of CDG. Prior to joining CDG, Mr. Mahamedi founded Emanuel Land Company, a subsidiary of Emanuel & Company, a Wall Street investment banking firm, and served as a managing director for Emanuel Land Company from 1986 to 1987. In 1983, Mr. Mahamedi received his B.S.E. degree in Civil and Structural Engineering from the University of Pennsylvania, and in 1984 he received his M.S.E. degree in Civil and Structural Engineering from the University of Pennsylvania.

Vincent Carrubba began serving on our board of directors in October 2016. From September 2014 through the present, Mr. Carrubba has served as the CEO of Admiral Composite Technologies Inc. ("Admiral"). During his time at Admiral, Mr. Carrubba has helped to develop new technologies for environmentally responsible and innovative building materials which represent Admiral's product lines. Mr. Carrubba has also served as Admiral's Chairman since its inception in 2009. From September 2014 through the present, Mr. Carrubba has served as the CEO of Asia Sourcing & Communications USA Inc. and he has served as its Chairman since its inception in 2013. From 2002 through August 2014, Mr. Carrubba served as the Director of research and development for Interdynamics Inc. and IDQ Holdings, where he was responsible for all research and development and quality control matters, including the management of engineering, legal, patenting, regulatory, insurance and consumer relations matters. From 1989 through 1992, Mr. Carrubba designed and installed the New York Stock Exchange telecommunications and information technology systems. Mr. Carrubba has held engineering and executive positions with Xerox, General Electric, Bristol-Meyers Squibb and AT&T and he is the inventor of several patents related to telecommunications, professional tools and consumer products. Mr. Carrubba received a Bachelor of Arts degree in Engineering Science and a Bachelor of Science Degree in Mechanical Engineering from Columbia University's School of Engineering and Applied Science (SEAS) in 1982.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of Exchange Act requires the Company's directors and officers, and persons who own more than 10% of a registered class of the Company's equity securities, to file initial reports of ownership and reports of changes in ownership with the SEC. Such persons also are required to furnish the Company with copies of all Section 16(a) reports they file.

Based solely on its review of the copies of such reports received by it with respect to fiscal year 2021 or written representations from certain reporting persons, the Company believes that all filing requirements applicable to its directors and officers and persons who own more than 10% of a registered class of the Company's equity securities have been complied with, on a timely basis, for fiscal year 2021.

Code of Ethics

Our board of directors has adopted a written Code of Ethics for Chief Executive Officer and Senior Financial and Accounting Officers that applies to our Principal Executive Officer, Principal Financial Officer, Principal Accounting Officer or Controller, or persons performing similar functions. A current copy of the code is filed as an exhibit to this report on Form 10-K and is also available on our website, www.liquidmetal.com, in the "Investors" section. In addition, we intend to post on our website, www.liquidmetal.com, all disclosures that are required by law concerning any amendments to, or waivers from, any provision of the Code of Ethics for Chief Executive Officer and Senior Financial and Accounting Officers.

Item 11. Executive Compensation

Executive Benefits and Perquisites

Set forth below is information regarding compensation earned by or paid or awarded to the following executive officers of the Company during the year ended December 31, 2021: (i) Professor Li, our Chairman and Former CEO / President (ii) Tony Chung, our Chief Executive Officer and Principal Financial Officer; (iii) Isaac Bresnick, our President; (iv) Bruce Bromage, our Former Chief Operating Officer, and (v) Bryce Van, our Former Vice President of Finance. These persons are hereafter referred to as our "named executive officers." The identification of such named executive officers is determined based on the individual's total compensation for the year ended December 31, 2021, as reported below in the Summary Compensation Table.

Summary Compensation Table

The following table sets forth for each of the named executive officers: (i) the dollar value of base salary and bonus earned during the years ended December 31, 2021 and 2020 (ii) the aggregate grant date fair value of stock and option awards granted during 2021 and 2020, computed in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 718 (R); (iii) the dollar value of earnings for services pursuant to awards granted during 2021 and 2020 under non-equity incentive plans; (iv) non-qualified deferred compensation earnings during 2021 and 2020; (v) all other compensation for 2021 and 2020; and, finally, (vi) the dollar value of total compensation for 2021 and 2020.

Name and Principal Position	Year	Salary	Severance	Bonus	Stock Awards	Option Awards	Total
Lugee Li, *Chairman, Former Chief Executive Officer, Former President*	2021	$ -	$ -	$ -	$ -	$ -	$ -
	2020	$ -	$ -	$ -	$ -	$ -	$ -
Tony Chung, *Chief Executive Officer and Chief Financial Officer*	2021	$ 108,923	$ -	$ 20,000	$ -	$ 308,453(1)	$ 437,376
	2020	$ -	$ -	$ -	$ -	$ -	$ -
Isaac Bresnick, *President and Former Executive Administrator*	2021	$ 154,000	$ -	$ -	$ -	$ 49,022(2)	$ 203,022
	2020	$ 154,000	$ -	$ -	$ -	$ -	$ 154,000
Bruce Bromage, *Former Chief Operating Officer*	2021	$ 256,303	$ 316,285(3)	$ -	$ -	$ -	$ 572,588
	2020	$ 291,000	$ -	$ -	$ -	$ -	$ 291,000
Bryce Van, *Former Vice President- Finance*	2021	$ 226,154	$ 252,890(4)	$ -	$ -	$ -	$ 479,044
	2020	$ 245,000	$ -	$ -	$ -	$ -	$ 245,000

(1) Options to purchase 7,500,000 shares of our common stock were awarded to Mr. Chung on July 7, 2021.
(2) Options to purchase 900,000 shares of our common stock were awarded to Mr. Bresnick on December 15, 2021.

(3) On August 30, 2021, the Company and Bruce Bromage, the Company's Former Chief Operating Officer, entered into a Separation Agreement and General Release pursuant to which Dr. Bromage agreed to resign as an officer and employee of the Company and the Company and Dr. Bromage agreed to terminate Dr. Bromage's employment agreement with Dr. Bromage's employment which was previously set to end on September 30, 2021 (the "Bromage Separation Agreement"). The Bromage Separation Agreement provided for the payment of severance compensation to Dr. Bromage in the form of a lump sum equal to $316,285.00 (subject to tax withholdings). In addition, it provided for the accelerated vesting of the remaining 2,430,000 unvested stock options held by Dr. Bromage as of the termination date and the extension of the exercise period of his options until the earlier of the second anniversary of the termination date outlined in the Bromage Separation Agreement or the date on which such options would otherwise expire and terminate in accordance with its terms if Dr. Bromage had not resigned. This resulted in a total of 10,329,692 stock options being exercisable by Dr. Bromage as of the termination date. In connection with the Bromage Separation Agreement, Dr. Bromage granted the Company general releases subject to customary exceptions.

(4) On August 30, 2021, the Company and Bryce Van, the Company's Vice President of Finance, entered into a Separation Agreement and General Release pursuant to which Mr. Van agreed to resign as an officer and employee of the Company and the Company and Mr. Van agreed to terminate Mr. Van's employment agreement with Mr. Van's employment which was previously set to end on October 15, 2021 (the "Van Separation Agreement"). The Van Separation Agreement provided for the payment of severance compensation to Mr. Van in the form of a lump sum equal to $252,889.69 (subject to tax withholdings). In addition, it provided for the extension of the exercise period of his options until the earlier of the second anniversary of the termination date outlined in the Van Separation Agreement or the date on which such options would otherwise expire and terminate in accordance with its terms if Mr. Van had not resigned. This resulted in a total of 2,046,500 stock options being exercisable by Mr. Van as of the termination date. Under the Van Separation Agreement, Mr. Van agreed to be available to provide assistance to the Company by telephone with no additional consideration for sixty days following the termination date. In connection with the Van Separation Agreement, Mr. Van granted the Company general releases subject to customary exceptions.

Outstanding Equity Awards at 2021 Fiscal Year-End

The following table sets forth information on outstanding option and stock awards held by the named executive officers at December 31, 2021, including the number of shares underlying both exercisable and un-exercisable portions of each stock option as well as the exercise price and expiration date of each outstanding option.

	Option Awards				
Name	**Number of Securities Underlying Unexercised Options Exercisable**	**Number of Securities Underlying Unexercised Options Unexercisable**	**Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options**	**Option Exercise Price**	**Option Expiration Date**
Lugee Li	700,000	-	-	$ 0.13	5/4/2026
		200,000(1)		$ 0.09	12/14/2031
Tony Chung	75,000	-	-	$ 0.38	10/17/2027
	240,000	-	-	$ 0.14	11/14/2028
	2,500,000	5,000,000(2)		$ 0.07	7/6/2031
Isaac Bresnick	700,000		-	$ 0.25	12/13/2026
	240,000	-	-	$ 0.23	2/7/2027
		900,000(3)		$ 0.09	12/14/2031

(1) The shares underlying these grants vest 33% following the first anniversary of the grant date of December 15, 2021, and on a monthly basis following such date for the remaining two years thereof.

(2) The shares underlying these grants vest 2,500,000 following the first anniversary of the grant date of July 6, 2021, and 2,500,000 following the second anniversary of the grand date of July 6, 2021.

(3) The shares underlying these grants vest 33% following the first anniversary of the grant date of December 15, 2021, and on a monthly basis following such date for the remaining two years thereof.

Employment Agreements and Change of Control Agreement

No named executive has an employment agreement or change of control agreement with the Company as of December 31, 2021, except as follows.

On July 6, 2021, the Board appointed Tony Chung, a director of the Company, as the Company's Chief Executive Officer. Pursuant to an offer letter agreement dated July 6, 2021, Mr. Chung receives a base annual salary of $240,000 and a $20,000 signing bonus that was paid on October 29, 2021. Additionally on July 7, 2021, Mr. Chung received an option grant under the Company's 2015 Equity Incentive Plan to purchase up to 7,500,000 shares of Company common stock. The option has an exercise price of $0.07 per share and will expire 10 years from the date of grant unless it terminates earlier upon a termination of service. The shares covered by the option will vest in three tranches ("Tranche 1", "Tranche 2", and "Tranche 3"). Under Tranche 1, 2,500,000 shares covered by the option will vest after ninety days of employment, although thereafter any shares received from option exercises will be subject to time-based lock-up provisions. Under Tranche 2, 2,500,000 shares covered by the option will vest at the first anniversary of employment. Under Tranche 3, 2,500,000 covered by the option will vest at the second anniversary of employment. Shares received from option exercises under Tranche 2 and Tranche 3 will be subject to a combination of market-price based and time-based lock-up provisions. The terms of the option are subject to the provisions of the 2015 Equity Incentive Plan. Mr. Chung will serve on an "at-will" basis.

Potential Payments Upon Termination or Change in Control

The following table and summary set forth estimated potential payments the Company would be required to make to our named executive officers upon termination of employment or change in control of the Company, pursuant to each executive's employment agreement or change of control agreement in effect at year end. Except as otherwise indicated, the table assumes that the triggering event occurred on December 31, 2021.

Name	Benefit	Termination without Cause ($)	Death ($)	Termination Following Change of Control ($)
Lugee Li (1)	Salary	-	-	-
	Bonus	-	-	-
	Equity Acceleration	-	-	-
	Benefits Continuation	-	-	-
	Total Value	-	-	-
Tony Chung (2)	Salary	-	-	-
	Bonus	-	-	-
	Equity Acceleration	-	-	88,404
	Benefits Continuation	-	-	-
	Total Value	-	-	88,404
Isaac Bresnick (3)	Salary	-	-	-
	Bonus	-	-	-
	Equity Acceleration	-	-	-
	Benefits Continuation	-	-	-
	Total Value	-	-	-

(1) Professor Li does not have an employment or change of control agreement.
(2) If there is a Change of Control (as defined under the 2015 Equity Incentive Plan) during Mr. Chung's employment with the Company, all of his 7,500,000 stock options shall vest immediately, and Mr. Chung may exercise and sell all his option shares relating to such options without lockup or restrictions.
(3) Mr. Bresnick does not have an employment or change of control agreement.

401(k) Savings Plan

We have adopted a tax-qualified employee savings and retirement plan, or 401(k) plan that covers all of our employees. Pursuant to our 401(k) plan, participants may elect to reduce their current compensation, on a pre-tax basis, by an amount up to the statutorily prescribed annual limit and have the amount of the reduction contributed to the 401(k) plan. The 401(k) plan permits us, in our sole discretion, to make additional employer contributions to the 401(k) plan. However, we do not currently make employer contributions to the 401(k) plan and may not do so in the future. As such, contributions by employees or by us to the 401(k) plan, and the income earned on plan contributions, are not taxable to employees until withdrawn from the 401(k) plan, and we can deduct our contributions, if any, at the time they are made.

Director Compensation

The following table sets forth information regarding the compensation received by each of our non-employee directors serving during the year ended December 31, 2021:

Name	Fees Earned or Paid in Cash ($)	Stock Awards($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Lugee Li			$ 10,894(1)	-	-	-	$ 10,894
Abdi Mahamedi	$ 18,750	-	$ 10,894(2)	-	-	-	$ 29,644
Vincent Carrubba	$ 50,000	-	$ 10,894(3)	-	-	-	$ 60,894
Tony Chung	$ 11,250	-	$ -	-	-	-	$ 11,250

(1) Options to purchase 200,000 shares of our common stock were awarded to Mr. Li on December 15, 2021 respectively.
(2) Options to purchase 200,000 shares of our common stock were awarded to Mr. Mahamedi on December 15, 2021 respectively.
(3) Options to purchase 200,000 shares of our common stock were awarded to Mr. Carrubba on December 15, 2021 respectively.

Our non-employee directors receive certain compensation for their services and are reimbursed for expenses incurred in attending board and committee meetings, as determined by the board of directors. Mr. Currubba received a base fee of $50,000 during 2021. Mr. Mahamedi and Mr. Chung each received an annual base fee of $18,750 and $11,250 during 2021, respectively. All fees are paid quarterly in arrears. Mr. Li, Mr. Mahamedi, and Mr. Carrubba received option awards of $10,894 during 2021.

We have a 2012 Equity Incentive Plan and a 2015 Equity Incentive Plan pursuant to which our non-employee directors may receive stock options. Each non-employee directors may be entitled to receive options on a case by case basis, in an amount determined by our board of directors or its compensation committee in its respective discretion, to purchase shares of common stock upon initial election to the board of directors. In determining the number of options granted to a director upon initial election, the compensation committee uses its judgment and, consistent with our compensation objectives, maintains the flexibility necessary to recruit qualified and experienced directors. All options granted under the plans have an exercise price equal to the fair market value of our common stock on the date of the grant. These stock options have a 10-year term and are exercisable pursuant to an equal 3-year vesting schedule, and remain exercisable for certain periods of time after a person is no longer a director.

No director who is an employee will receive separate compensation for services rendered as a director. However, our employee directors are eligible to participate in our 2012 and 2015 Equity Incentive Plans.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

The following table sets forth certain information regarding the beneficial ownership of our common stock as of March 29, 2022 by:

- each person known by us to be a beneficial owner of more than 5.0% of our outstanding common stock;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

The number and percentage of shares beneficially owned is determined under the rules of the SEC and is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership for each individual includes any shares as to which the individual has sole or shared voting power or investment power and also any shares which the individual has the right to acquire beneficial ownership of within 60 days of March 29, 2022 through the exercise of any stock option or other right. Unless otherwise indicated in the footnotes, each person has sole voting and investment power with respect to the shares shown as beneficially owned.

A total of 917,285,149 shares of our common stock were issued and outstanding as of March 29, 2022. Unless otherwise indicated, the address of all directors and named executive officers is 20321 Valencia Circle, Lake Forest, California 92630.

Name of Beneficial Owner	Common Stock Number of Shares(1)		Percent of Class(1)
Directors and Named Executive Officers			
Lugee Li	417,126,959	(2)	44.9%
Abdi Mahamedi	16,288,336	(3)	1.8%
Vincent Carrubba	1,206,667	(4)	*
Tony Chung	2,900,250	(5)	*
Isaac Bresnick	940,000	(6)	*
All directors and executive officers as a group (5 persons)	438,462,212		46.9%
5% Shareholders			
Liquidmetal Technology Limited Room 906, Tai Tung Building, 8 Fleming Rd Wanchai, Hong Kong	415,066,809	(7)	44.8%

*Less than one percent

(1) Shares of common stock beneficially owned and the respective percentages of beneficial ownership of common stock assumes the exercise or conversion of all options, warrants and other securities convertible into common stock, beneficially owned by such person or entity currently exercisable or exercisable within 60 days of March 29, 2022. Shares issuable pursuant to the exercise of stock options and warrants exercisable within 60 days of March 29, 2022, or securities convertible into common stock within 60 days of March 29, 2022, are deemed outstanding and held by the holder of such shares of common stock, options, warrants, or other convertible securities, for purposes of computing the percentage of outstanding common stock beneficially owned by such person, but are not deemed outstanding for computing the percentage of outstanding common stock beneficially owned by any other person. The percentage of common stock beneficially owned is based on 917,285,149 shares of common stock outstanding as of March 29, 2022.

(2) Includes:

(a) 405,000,000 shares of common stock held of record by Liquidmetal Technology Limited. Professor Li is the majority owner, officer, and director of Liquidmetal Technology Limited and has the power to direct the voting and disposition of such shares;

(b) 10,066,809 shares issuable pursuant to a Warrant held by Liquidmetal Technology Limited which is exercisable currently or within 60 days of March 29, 2022. Professor Li is the majority owner, officer, and director of Liquidmetal Technology Limited and has the power to direct the voting and disposition of such shares;

(c) 1,360,150 shares of common stock held of record by Professor Li; and

(d) 700,000 shares issuable pursuant to outstanding stock options which are exercisable currently or within 60 days of March 29, 2022. Does not include 200,000 shares that are issuable pursuant to outstanding stock options, held by Professor Li, that are not exercisable currently or within 60 days of March 29, 2022.

(3) Includes:

(a) 13,858,908 shares of common stock held of record by Carlyle Holdings, LLC. Mr. Mahamedi has the power to direct the voting and disposition of such shares as the president and sole shareholder of Carlyle Development Group, Inc., which is a managing member of Carlyle Holdings, LLC;

(b) 759,428 shares of common stock held of record by Mr. Mahamedi; and

(c) 1,670,000 shares issuable pursuant to outstanding stock options which are exercisable currently or within 60 days of March 29, 2022. Does not include 200,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of March 29, 2022.

(4) Includes 1,206,667 shares issuable pursuant to outstanding stock options, held of record by Mr. Carrubba, which are exercisable currently or within 60 days of March 29, 2022. Does not include 200,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of March 29, 2022.

(5) Includes:

(a) 85,250 shares of common stock held of record by Mr. Chung; and

(b) 2,815,000 shares issuable pursuant to outstanding stock options which are exercisable currently or within 60 days of March 29, 2022. Does not include 5,000,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of March 29, 2022.

(6) Includes 940,000 shares issuable pursuant to outstanding stock options, held of record by Mr. Bresnick, which are exercisable currently or within 60 days of March 29, 2022. Does not include 900,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of March 29, 2022.

(7) Includes:

(a) 405,000,000 shares of common stock held of record by Liquidmetal Technology Limited; and
(b) 10,066,809 shares issuable pursuant to a Warrant held by Liquidmetal Technology Limited which is exercisable currently or within 60 days of March 29, 2022.

Equity Compensation Plan Information

Our executive officers, directors, and all of our employees are allowed to participate in our equity incentive plans. We believe that providing them with the ability to participate in such plans provides them with a further incentive towards ensuring our success and accomplishing our corporate goals.

The following table provides information regarding the securities authorized for issuance under our equity compensation plans as of December 31, 2021:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights [a]	Weighted-average exercise price of outstanding options, warrants, and rights [b]	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column [a]) [c]
Equity compensation plans approved by stockholders	27,450,859	$ 0.17	22,334,757

The number of securities, and types of plans available for future issuances of stock options, as of December 31, 2021 was as follows:

Plan Name	Options and Warrants for Common Shares			
	Authorized	Exercised	Outstanding	Available
2012 Equity Incentive Plan	30,000,000	9,892,253	7,009,192	13,098,555
2015 Equity Incentive Plan	40,000,000	10,322,131	20,441,667	9,236,202
Total Stock Options	70,000,000	20,214,384	27,450,859	22,334,757

2012 Equity Incentive Plan

On June 28, 2012, the Company adopted the 2012 Equity Incentive Plan ("2012 Plan"), with the approval of the shareholders, which provided for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. The purpose of the 2012 Plan is to advance the interests of our shareholders by enhancing our ability to attract, retain, and motivate persons who make or are expected to make important contributions to the Company and its subsidiaries by providing such persons with equity ownership opportunities and performance-based incentives, thereby better aligning their interests with those of our shareholders.

The 2012 Plan provides for the granting to employees of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and for the granting to employees and consultants of non-statutory stock options. In addition, it permits the granting of stock appreciation rights, or SARs, with or independently of options, as well as stock bonuses and rights to purchase restricted stock. A total of 30 million shares of our common stock may be granted under the 2012 Plan, and all options granted under this plan had exercise prices that were equal to the fair market value on the date of grant.

There were 5,609,192 outstanding options or stock awards at a weighted average price of $0.20 under the 2012 Plan as of December 31, 2021. There were 5,609,192 options exercisable and 9,892,253 shares had been issued upon exercise of options under the 2012 Plan as of December 31, 2021.

2015 Equity Incentive Plan

On January 27, 2015, the Company adopted the 2015 Equity Incentive Plan ("2015 Plan"), which provided for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. The purpose of the 2015 Plan is to advance the interests of our shareholders by enhancing our ability to attract, retain, and motivate persons who make or are expected to make important contributions to the Company and its subsidiaries by providing such persons with equity ownership opportunities and performance-based incentives, thereby better aligning their interests with those of our shareholders.

The 2015 Plan provides for the granting to employees and consultants of non-statutory stock options. In addition, it permits the granting of stock appreciation rights, or SARs, with or independently of options, as well as stock bonuses and rights to purchase restricted stock. A total of 40 million shares of our common stock may be granted under the 2015 Plan, and all options granted under this plan had exercise prices that were equal to the fair market value on the date of grant.

There were 19,841,667 outstanding options or stock awards at a weighted average price of $0.12 under the 2015 Plan as of December 31, 2021. There were 14,841,667 options exercisable and 10,322,131 shares had been issued upon exercise of options under the 2015 Plan as of December 31, 2021.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Transactions with Related Persons

On March 10, 2016, the Company entered into the 2016 Purchase Agreement with Liquidmetal Technology Limited, providing for the purchase of 405,000,000 shares of the Company's common stock for an aggregate purchase price of $63,400. Liquidmetal Technology Limited was a newly formed company owned by Professor Li. In connection with the 2016 Purchase Agreement and also on March 10, 2016, the Company and Eontec, entered into a license agreement pursuant to which the Company and Eontec entered into a cross-license of their respective technologies. Eontec is a publicly held Hong Kong corporation of which Professor Li is the Chairman. Eontec is also an affiliate of Yihao. Yihao is currently the Company's primary contract manufacturer. As of December 31, 2021, Professor Li is a greater-than 5% beneficial owner of the Company and serves as the Company's Chairman. Equipment and services procured from Eontec, and their affiliates, were $477 and $478 during the years ended December 31, 2021 and 2020, respectively.

On August 30, 2021, the Company and Bruce Bromage, the Company's Chief Operating Officer, entered into a Separation Agreement and General Release pursuant to which Dr. Bromage agreed to resign as an officer and employee of the Company and the Company and Dr. Bromage agreed to terminate Dr. Bromage's employment agreement with Dr. Bromage's employment which was previously set to end on September 30, 2021 (the "Bromage Separation Agreement"). The Bromage Separation Agreement provided for the payment of severance compensation to Dr. Bromage in the form of a lump sum equal to $316,285.00 (subject to tax withholdings). In addition, it provided for the accelerated vesting the remaining 2,430,000 unvested stock options held by Dr. Bromage as of the termination date and the extension of the exercise period of his options until the earlier of the second anniversary of the termination date outlined in the Bromage Separation Agreement or the date on which such options would otherwise expire and terminate in accordance with its terms if Dr. Bromage had not resigned. This resulted in a total of 10,329,692 stock options being exercisable by Dr. Bromage as of the termination date. In connection with the Bromage Separation Agreement, Dr. Bromage granted the Company general releases subject to customary exceptions.

On August 30, 2021, the Company and Bryce Van, the Company's Vice President- Finance, entered into a Separation Agreement and General Release pursuant to which Mr. Van agreed to resign as an officer and employee of the Company and the Company and Mr. Van agreed to terminate Mr. Van's employment agreement with Mr. Van's employment which was previously set to end on October 15, 2021 (the "Van Separation Agreement"). The Van Separation Agreement provided for the payment of severance compensation to Mr. Van in the form of a lump sum equal to $252,889.69 (subject to tax withholdings). In addition, it provided for the extension of the exercise period of his options until the earlier of the second anniversary of the termination date outlined in the Van Separation Agreement or the date on which such options would otherwise expire and terminate in accordance with its terms if Mr. Van had not resigned. This resulted in a total of 2,046,500 stock options being exercisable by Mr. Van as of the termination date. Under the Van Separation Agreement, Mr. Van agreed to be available to provide assistance to the Company by telephone with no additional consideration for sixty days following the termination date. In connection with the Van Separation Agreement, Mr. Van granted the Company general releases subject to customary exceptions.

Review, Approval or Ratification of Transactions with Related Persons

Our policy is to require that any transaction with a related party required to be reported under applicable SEC rules, other than compensation-related matters, be reviewed and approved or ratified by the board of directors. The board of directors has not adopted specific procedures for review of, or standards for approval of, these transactions, but instead reviews such transactions on a case by case basis. Our policy is to require that all compensation-related matters be recommended for board of director approval. During the last fiscal year no transactions with a related party occurred that required a waiver of this policy and no transactions with a related party occurred in which we did not follow this policy.

Director Independence

Our board of directors currently has five members – Lugee Li, Isaac Bresnick, Abdi Mahamedi, Vincent Carrubba, and Tony Chung. Our board of directors has determined that Mr. Mahamedi and Mr. Carrubba are "independent directors" as such term is defined by the rules of the NASDAQ Stock Market, Inc.

Item 14. Principal Accountant Fees and Services

Audit Fees for 2021 and 2020

The following table summarizes the aggregate fees billed to us by SingerLewak LLP, our former principal accountants, and BF Borgers CPA, PC, our principal accounts, for professional services during the years ended December 31, 2021 and December 31, 2020:

Fees	**2021**	**2020**
Audit Fees (1)	$ 120,150	$ 142,409
All Other Fees	-	-
Total Fees	$ 120,150	$ 142,409

(1) *Audit Fees.*

Fees for audit services billed in 2021 consisted of:

- Progress billings for the audits of the Company's financial statements for 2020 and 2021; and
- Review of the Company's quarterly financial statements for 2021.

Fees for audit services billed in 2020 consisted of:

- Progress billings for the audits of the Company's financial statements for 2019 and 2020; and
- Review of the Company's quarterly financial statements for 2020.

Board of Director Pre-Approval Policies

Our board of directors pre-approves all audit and permissible non-audit services provided by our independent public accountants on a case-by-case basis. Our board of directors approved 100% of the services performed by and BF Borgers CPA, PC and SingerLewak LLP in 2021 and 2020 and no non-audit related services were provided by SingerLewak LLP in either of 2021 or 2020.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are filed as a part of this report:

1. *Financial Statements*. See the Index to Consolidated Financial Statements on page -45.

2. *Exhibits*. See Item 15(b) below.

(b) *Exhibits*. The exhibits listed on the Exhibit Index, which appears at the end of this Item 15, are filed as part of, or are incorporated by reference into, this report.

EXHIBIT INDEX

Exhibit Number	Document Description
3.1	Amended and Restated Certificate of Incorporation *(incorporated by reference to Exhibit 3.1 to the Form 8-K filed on May 20, 2016).*
3.2	Amended and Restated ByLaws of Liquidmetal Technologies, Inc. (*incorporated by reference to Exhibit 3.1 to the Form 8-K filed on October 5, 2015).*
4.1	Reference is made to Exhibits 3.1 and 3.2.
4.2	Form of Common Stock Certificate *(incorporated by reference to Exhibit 4.2 to the Form 10-Q filed on August 14, 2003).*
4.3	Description of Securities Registered Under Section 12 of the Securities Exchange Act of 1934, as amended. (*incorporated by reference to Exhibit 4.3 to the Form 10-K filed on March 9, 2021).*
10.1	Amended and Restated License Agreement, dated September 1, 2001, between Liquidmetal Technologies, Inc. and California Institute of Technology *(incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed on November 20, 2001 (Registration No. 333-73716)).*
10.2**	Master Transaction Agreement, dated August 5, 2010, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC *(incorporated by reference from Exhibit 10.3 to the Form 10-Q filed on November 4, 2010).*
10.3*	Liquidmetal Technologies, Inc. 2012 Equity Incentive Plan (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on July 2, 2012).*
10.4	Common Stock Purchase Warrant, dated June 1, 2012, issued to Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.39 to the Registration Statement on Form S-1 filed July 18, 2012*)
10.5	Common Stock Purchase Warrant, dated June 28, 2012, issued to Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.40 to the Registration Statement on Form S-1 filed July 18, 2012*)
10.6	Amendment Number One to Master Transaction Agreement and Other Transaction Documents, dated June 15, 2012, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC. (*incorporated by reference from Exhibit 10.41 to the Registration Statement on Form S-1 (Amendment No. 1) filed on August 3, 2012*).
10.7	Amendment Number Two to Master Transaction Agreement and Other Transaction Documents, dated May 19, 2014, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC. (*incorporated by reference from Exhibit 10.1 on the Form 10-Q filed on August 12, 2014).*
10.8	Settlement Agreement and Mutual General Release, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on May 20, 2014).*
10.9	Amended and Restated VPC Sublicense Agreement, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.2 to the Form 8-K filed on May 20, 2014).*

10.10	Amended and Restated Registration Rights Agreement, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.3 to the Form 8-K filed on May 20, 2014).*
10.11	Amended and Restated Mutual Nondisclosure Agreement, dated May 20, 2014, between Liquidmetal Technologies, Inc. and Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.4 to the Form 8-K filed on May 20, 2014).*
10.12	Amended and Restated Common Stock Purchase Warrant, dated May 20, 2014, issued to Visser Precision Cast, LLC. (*incorporated by reference from Exhibit 10.5 to the Form 8-K filed on May 20, 2014).*
10.13*	Liquidmetal Technologies, Inc. 2015 Equity Incentive Plan (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on February 9, 2015).*
10.14	Amendment Number Three to Master Transaction Agreement and Other Transaction Documents, dated June 17, 2015, among Apple Inc., Liquidmetal Technologies, Inc., Liquidmetal Coatings, LLC and Crucible Intellectual Property, LLC (*incorporated by reference from Exhibit 10.1 on the Form 10-Q filed on August 6, 2015).*
10.21	Form of Director and Officer Indemnification Agreement *(incorporated by reference from Exhibit 10.1 to the Form 8-K filed on October 5, 2015).*
10.22	Form of Amended and Restated Director and Officer Indemnification Agreement *(incorporated by reference from Exhibit 10.2 to the Form 8-K filed on October 5, 2015).*
10.23	Stock Purchase Warrant, dated March 10, 2016, issued to Liquidmetal Technology Limited by Liquidmetal Technologies, Inc. (*incorporated by reference from Exhibit 4.1 to the Form 8-K filed on March 14, 2016*).
10.24	Securities Purchase Agreement, dated March 10, 2016, between Liquidmetal Technologies, Inc. and Liquidmetal Technology Limited (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on March 14, 2016*).
10.25	Parallel License Agreement, dated March 10, 2016, between Liquidmetal Technologies, Inc. and DongGuan Eontec Co., Ltd. (*incorporated by reference from Exhibit 10.2 to the Form 8-K filed on March 14, 2016*).
10.26	Amendment to Securities Purchase Agreement, dated August 17, 2016, between Liquidmetal Technologies, Inc. and Liquidmetal Technology Limited (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on August 17, 2016*).
10.30	Standard Industrial/Commercial Multi-Tenant Lease – Net, dated January 23, 2020, between 20321 Valencia, LLC and MatterHackers, Inc. (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on January 29, 2020*).
10.31	Business Development Agreement, dated January 31, 2020, between Liquidmetal Technologies, Inc. and Eutectix, LLC. (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on February 5, 2020*).
10.32**	Manufacture Supply Agreement dated January 12, 2022, between the Company's majority-owned Liquidmetal Golf subsidiary and Dongguan Yihao Metal Materials Technology Co. Ltd. (*incorporated by reference from Exhibit 10.36 to the Form 8-K filed on January 19, 2022*).
10.33	Liquidmetal Golf License Agreement dated January 13, 2022, between Liquidmetal Technologies, Inc. and Amorphous Technologies Japan, Inc. (*incorporated by reference from Exhibit 10.37 to the Form 8-K filed on January 19, 2022*).
10.34*	Separation Agreement and General Release, dated August 30, 2021, between Liquidmetal Technologies, Inc. and Bruce Bromage (*incorporated by reference from Exhibit 10.1 to the Form 8-K filed on August 30, 2021*).
10.35*	Separation Agreement and General Release, dated August 30, 2021, between Liquidmetal Technologies, Inc. and Bryce Van (*incorporated by reference from Exhibit 10.2 to the Form 8-K filed on August 30, 2021*).
21.1	Subsidiaries of the Registrant (*incorporated by reference from Exhibit 21.1 to the Registration Statement on S-1 filed July 18, 2012*).

23.1 Consent of BF Borgers CPA, PC.

24.1 Power of Attorney relating to subsequent amendments (included on the signature page(s) of this report).

31.1 Certification of Principal Executive Officer and Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as amended.

32.1 Certification pursuant to 18 U.S.C. Section 1350.

101 The following financial statements from Liquidmetal Technologies, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2021, formatted in Inline XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Other Comprehensive Loss, (iv) Consolidated Statements of Shareholder's Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements.

104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Denotes a management contract or compensatory plan or arrangement.

** Portions of this exhibit have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the Securities and Exchange Commission.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Liquidmetal Technologies, Inc.

By: /s/ Tony Chung
Tony Chung
Chief Executive Officer
(Principal Executive and Financial Officer)

Date: March 29, 2022

Table of Contents

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Tony Chung and each of them, jointly and severally, his attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each said attorneys-in-fact or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Tony Chung Tony Chung	Chief Executive Officer and Director (Principal Executive and Financial Officer)	March 29, 2022
/s/ Lugee Li Lugee Li	Chairman and Director	March 29, 2022
/s/ Isaac Bresnick Isaac Bresnick	President and Director	March 29, 2022
/s/ Abdi Mahamedi Abdi Mahamedi	Director	March 29, 2022
/s/ Vincent Carrubba Vincent Carrubba	Director	March 29, 2022

Certifications provided as Exhibits.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the shareholders and the board of directors of LIQUIDMETAL TECHNOLOGIES INC.:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of LIQUIDMETAL TECHNOLOGIES INC. (the "Company") as of December 31, 2021, the related consolidated statements of operations and comprehensive income (loss), shareholders' equity, and cash flow for the year ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021, and the results of its operations and its cash flow for the year ended December 31, 2021, in conformity with accounting principles generally accepted in the United States.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the financial statements that were communicated or are required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved especially challenging, subjective, or complex judgments.

We determined that there are no critical audit matters.

/s/ BF Borgers CPA PC
BF Borgers CPA PC

We have served as the Company's auditor since 2021
Lakewood, CO
March 29, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Liquidmetal Technologies, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Liquidmetal Technologies, Inc. and its subsidiaries (collectively, the "Company") as of December 31, 2020, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for the year then ended, and the related notes to the consolidated financial statements (collectively, the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provide a reasonable basis for our opinion.

/s/ SingerLewak LLP

We served as the Company's auditor from 2011 to 2021.

Los Angeles, California
March 9, 2021

LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2021	December 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,091	$ 1,514
Restricted cash	5	5
Investments in debt securities- short term	13,852	14,720
Trade accounts receivable, net of allowance for doubtful accounts	147	271
Inventory	35	43
Prepaid expenses and other current assets	505	465
Total current assets	$ 18,635	$ 17,018
Investments in debt securities- long term	8,267	12,768
Property and equipment, net	8,295	8,614
Patents and trademarks, net	102	158
Other assets	306	251
Total assets	$ 35,605	$ 38,809
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	112	205
Accrued liabilities	246	315
Deferred revenue	56	-
Total current liabilities	$ 414	$ 520
Long-term liabilities		
Other long-term liabilities	899	899
Total liabilities	$ 1,313	$ 1,419
Shareholders' equity:		
Preferred Stock, $0.001 par value; 10,000,000 shares authorized; 0 shares issued and outstanding at December 31, 2021 and December 31, 2020, respectively	-	-
Common stock, $0.001 par value; 1,100,000,000 shares authorized; 914,449,957 and 914,449,957 shares issued and outstanding at December 31, 2021 and December 31, 2020, respectively	914	914
Warrants	18,179	18,179
Additional paid-in capital	287,641	287,183
Accumulated deficit	(272,303)	(268,926)
Accumulated other comprehensive income	(62)	116
Non-controlling interest in subsidiary	(77)	(76)
Total shareholders' equity	$ 34,292	$ 37,390
Total liabilities and shareholders' equity	$ 35,605	$ 38,809

The accompanying notes are an integral part of the consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)

	Years Ended December 31, 2021	Years Ended December 31, 2020
Revenue		
Products	$ 790	$ 925
Licensing and royalties	21	64
Total revenue	811	989
Cost of sales	628	621
Gross profit	183	368
Operating expenses		
Selling, marketing, general and administrative	4,160	3,798
Research and development	84	110
Gain on disposal of long-lived assets	-	(35)
Total operating expenses	4,244	3,873
Operating loss	(4,061)	(3,505)
Lease income	529	484
Interest and investment income	154	378
Loss before income taxes	(3,378)	(2,643)
Income taxes	-	-
Net loss	(3,378)	(2,643)
Net loss attributable to non-controlling interest	1	1
Net loss attributable to Liquidmetal Technologies shareholders	(3,377)	(2,642)
Per common share basic and diluted:		
Net loss per common share attributable to Liquidmetal Technologies shareholders, basic	$ (0.00)	$ (0.00)
Net loss per common share attributable to Liquidmetal Technologies shareholders, diluted	$ (0.00)	$ (0.00)
Number of weighted average shares - basic	914,449,957	914,449,957
Number of weighted average shares - diluted	914,449,957	914,449,957

The accompanying notes are an integral part of the consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands, except share and per share data)

	Years Ended December 31, 2021	Years Ended December 31, 2020
Net loss	$ (3,378)	$ (2,643)
Other comprehensive income (loss), net of tax		
Net unrealized gains (losses) on available-for-sale securities	(178)	114
Other comprehensive income (loss), net of tax	(178)	114
Comprehensive loss	$ (3,556)	$ (2,529)
Less: Comprehensive loss attributable to noncontrolling interests	1	1
Comprehenisve loss attributable to Liquidmetal Technologies shareholders	$ (3,555)	$ (2,528)

The accompanying notes are an integral part of the consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands, except share and per share data)

	Preferred Shares	Common Shares	Common Stock	Warrants part of Additional Paid-in Capital	Additional Paid-in Capital	Accumulated Deficit	Accumulated other comprehensive income	Non-controlling Interest	Total
Balance, December 31, 2019	**-**	**914,449,957**	**$ 914**	**$ 18,179**	**$ 286,832**	**$ (266,284)**	**$ 2**	**$ (75)**	**$ 39,568**
Stock-based compensation	-	-	-	-	351	-	-	-	351
Net loss	-	-	-	-	-	(2,642)	-	(1)	(2,643)
Other comprehensive income	-	-	-	-	-	-	114	-	114
Balance, December 31, 2020	**-**	**914,449,957**	**914**	**18,179**	**287,183**	**(268,926)**	**116**	**(76)**	**37,390**
Stock-based compensation	-	-	-	-	458	-	-	-	458
Net loss	-	-	-	-	-	(3,377)	-	(1)	(3,378)
Other comprehensive income	-	-	-	-	-	-	(178)	-	(178)
Balance, December 31, 2021	**-**	**914,449,957**	**914**	**18,179**	**287,641**	**(272,303)**	**(62)**	**(77)**	**34,292**

The accompanying notes are an integral part of the consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands, except share and per share data)

	Years Ended December 31, 2021	Years Ended December 31, 2020
Operating activities:		
Net loss	$ (3,378)	$ (2,643)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	375	402
Realized investment gains	(116)	(2)
Stock-based compensation	458	351
Bad debt expense	-	226
Impairment of long-lived assets	-	-
Gain on disposal of long-lived assets	-	(35)
Changes in operating assets and liabilities:		
Trade accounts receivable	124	(194)
Inventory	8	(31)
Prepaid expenses and other current assets	(40)	(143)
Other assets and liabilities	(55)	(194)
Accounts payable and accrued liabilities	(162)	33
Deferred revenue	56	-
Net cash used in operating activities	**(2,730)**	**(2,230)**
Investing Activities:		
Purchases of property and equipment	-	(116)
Proceeds from disposal of fixed assets	-	200
Purchases of debt securities	(19,310)	(26,719)
Proceeds from sales of debt securities	24,617	10,836
Net cash provided by (used in) investing activities	**5,307**	**(15,799)**
Net increase (decrease) in cash, cash equivalents, and restricted cash	2,577	(18,029)
Cash, cash equivalents, and restricted cash at beginning of period	1,519	19,548
Cash, cash equivalents, and restricted cash at end of period	**$ 4,096**	**$ 1,519**
Supplemental Schedule of Non-Cash Investing Activities:		
Settlement of contract liability from disposal of fixed assets	-	420

The accompanying notes are an integral part of the consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

1. Description of Business

Liquidmetal Technologies, Inc. (the "Company") is a materials technology company that develops and commercializes products made from amorphous alloys. The Company's family of alloys consists of a variety of bulk alloys and composites that utilize the advantages offered by amorphous alloys technology. The Company designs, develops, and sells products and custom parts from bulk amorphous alloys to customers in a wide range of industries. The Company also partners with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products.

Amorphous alloys are, in general, unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in other metals and alloys when they solidify. Liquidmetal alloys are proprietary amorphous alloys that possess a combination of performance, processing, and potential cost advantages that the Company believes will make them preferable to other materials in a variety of applications. The amorphous atomic structure of bulk alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. The Company believes that the alloys and the molding technologies it employs may result in components, for many applications, that exhibit: exceptional dimensional control and repeatability that rivals precision machining, excellent corrosion resistance, brilliant surface finish, high strength, high hardness, high elastic limit, alloys that are non-magnetic, and the ability to form complex shapes common to the injection molding of plastics. Interestingly, all of these characteristics are achievable from the molding process, so design engineers often do not have to select specific alloys to achieve one or more of the characteristics as is the case with crystalline materials. The Company believes these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, the Company believes these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

The Company's revenues are derived from i) selling bulk Liquidmetal alloy products to customers who produce medical devices, automotive assemblies, sports and leisure goods, and non-consumer electronic devices, ii) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development, iii) product licensing and royalty revenue, and iv) research and development revenue. The Company expects that these sources of revenue will continue to significantly change the character of the Company's revenue mix.

2. Summary of Significant Accounting Policies

Principles of Consolidation. The consolidated financial statements include the accounts of Liquidmetal Technologies, Inc., its special-purpose wholly-owned subsidiary, Crucible Intellectual Property LLC, 20321 Valencia LLC, and Liquidmetal Golf. All intercompany balances and transactions have been eliminated.

Non-Controlling Interest. The results of operations attributable to the non-controlling interest of Liquidmetal Golf are presented within equity and are shown separately from the Company's equity.

Revenue Recognition. Revenue is recognized pursuant to applicable accounting standards including FASB ASC Topic 606 ("ASC 605"), Revenue from Contracts with Customers. ASC 606 summarizes certain points in applying generally accepted accounting principles to revenue recognition in financial statements and provides guidance on revenue recognition issues in the absence of authoritative literature addressing a specific arrangement or a specific industry.

The Company's revenue recognition policy complies with the requirements of ASC 606. As a majority of the Company's sales revenue continues to be recognized when products are shipped, and there was no change in the recognition model historically applied to active license and royalty contracts under the new revenue standard, there was no adjustment to the opening balance of retained earnings. The impact to the Company's results of operations is not material, on an on-going basis, because the analysis of the Company's contracts under the new revenue standard supports a recognition model consistent with the Company's previous revenue recognition model. Revenue on the majority of the Company's contracts will continue to be recognized over time because of the continuous transfer of control to the customer.

Products. Product revenues are primarily generated from the sale and prototyping of molds and bulk alloy products. Revenue is recognized when i) persuasive evidence of an arrangement exists, ii) delivery has occurred, iii) the sales price is fixed or determinable, iv) collection is probable and v) all obligations have been substantially performed pursuant to the terms of the arrangement. When the Company receives consideration, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, it records deferred revenue, which represents a contract liability. The Company will recognize deferred revenue as products revenue after it has transferred control of the goods or services to the customer and all revenue recognition criteria are met. Such amounts are not expected to be material on an ongoing basis.

LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

Licensing and royalties. License revenue arrangements in general provide for the grant of an exclusive or non-exclusive right to manufacture and/or sell products covered by patented technologies owned or controlled by the Company. The intellectual property rights granted may be perpetual in nature, extending until the expiration of the related patents, or can be granted for a defined period of time. Licensing revenues that are one-time fees upon the granting of the license are recognized when i) the license term begins in a manner consistent with the nature of the transaction and the earnings process is complete, ii) when collectability is reasonably assured or upon receipt of an upfront fee, and iii) when all other revenue recognition criteria have been met. Pursuant to the terms of these agreements, the Company has no further obligation with respect to the grant of the license. Licensing revenues that are related to royalties are recognized as the royalties are earned over the related period.

Practical Expedients and Exemptions. The Company generally expenses sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within selling, marketing, general and administrative expenses. The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which the Company recognizes revenue at the amount for which it has the right to invoice for services performed.

Cash and cash equivalents. The Company considers all highly-liquid investments with maturity dates of three months or less when purchased to be cash equivalents. The Company limits the amount of credit exposure to each individual financial institution and places its temporary cash into investments of high credit quality with a financial institution that exceeds federally insured limits. The Company has not experienced any losses related to these balances and believes its credit risk to be minimal. As of December 31, 2021 and 2020, the Company held deposits of $3,895 and $1,328, respectively, in such highly-liquid investments.

Investments in debt securities. The Company will invest excess funds to maximize investment yield, while maintaining liquidity and minimizing credit risk. Debt securities are carried at fair value and consist primarily of investments in obligations of the United States Treasury, various U.S. and foreign corporations, and certificates of deposits. The Company classifies its investments in debt securities as available-for-sale with all unrealized gains or losses included as part of other comprehensive income. The Company evaluates its debt securities with unrealized losses on a quarterly basis for potential other-than-temporary impairments in value. As a result of this assessment, the Company did not recognize any other-than-temporary impairment losses considered to be credit related for the years ended December 31, 2021 and 2020.

Trade Accounts Receivable. The Company grants credit to its customers generally in the form of short-term trade accounts receivable. The creditworthiness of customers is evaluated prior to signing a contract with the customer. As of December 31, 2021, two customers represented 89%, or $130, of the total outstanding trade accounts receivable. As of December 31, 2020, one customer represented 99%, or $270, of the total outstanding trade accounts receivable. During 2021, there were three major customers, who together accounted for 82% of total revenue. During 2020, there were four major customers, who together accounted for 93% of total revenue. In the future, the Company expects that a significant portion of the revenue may continue to be concentrated in a limited number of customers, even if the bulk alloys business grows.

The allowance for doubtful accounts reflects management's best estimate of probable losses inherent in the trade accounts receivable. Management primarily determines the allowance based on the aging of accounts receivable balances, historical write-off experience, customer concentrations, customer creditworthiness and current industry and economic trends. The Company's provisions for uncollectible receivables are included in selling, marketing, general and administrative expense in the consolidated statements of operations. At December 31, 2021 and 2020, the Company had recorded an allowance for doubtful accounts of $0 and $234, respectively.

Inventory. Inventory is stated at the lower of weighted-average cost or net realizable value. Inventory is recorded at actual cost when purchased and then expensed at weighted-average cost as used in production and/or shipped to satisfy customer orders. We perform an analysis of our inventory balances at least quarterly to determine if the carrying amount of inventories exceeds their net realizable value. The analysis of estimated net realizable value is based on customer orders, market trends and historical pricing. If the carrying amount exceeds the estimated net realizable value, the carrying amount is reduced to the estimated net realizable value.

Property and Equipment. Property and equipment are stated at cost less accumulated depreciation and amortization. Additions and major renewals are capitalized. Repairs and maintenance are charged to expense as incurred. Upon disposal, the related cost and accumulated depreciation are removed from the accounts, with the resulting gain or loss included in operating income. Depreciation is provided principally on the straight-line method over the estimated useful lives of the assets, which range from one to five years.

Intangible Assets. Intangible assets consist of the costs incurred to purchase patent rights and costs incurred to register and maintain patents and trademarks. Intangible assets are reported at cost, net of accumulated amortization. Patents and trademarks are amortized using the straight-line method over a period based on their contractual lives ranging from ten to seventeen years.

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Impairment of Long-lived Assets. The Company reviews long-lived assets to be held and used in operations for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may be impaired. These evaluations may result from significant decreases in the overall market outlook for the Company's technology or the market price of an asset, a significant adverse change in the extent or manner in which an asset is being used in its physical condition, a significant adverse change in legal factors or in the business climate that could affect the value of an asset, as well as economic or operational analyses. If the Company concludes that the carrying value of certain assets will not be recovered based on expected undiscounted future cash flows, an impairment write-down is recorded to reduce the assets to their estimated fair value. Fair value is determined via market, cost and income based valuation techniques, as appropriate. The fair value is measured on a nonrecurring basis using a combination of quoted prices for similar assets in active markets and other unobservable adjustments to historical cost (Level 3) inputs. No such charges were recorded for the years ended December 31, 2021 and December 31, 2020.

Fair Value Measurements. The estimated fair values of financial instruments reported in the consolidated financial statements have been determined using available market information and valuation methodologies, as applicable. The fair value of cash and restricted cash approximate their carrying value due to their short maturities and are classified as Level 1 instruments within the fair value hierarchy.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Entities are required to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value based upon the following fair value hierarchy:

Level 1 — Quoted prices in active markets for identical assets or liabilities;

Level 2 — Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

As of December 31, 2021, the following table represents the Company's fair value hierarchy for items that are required to be measured at fair value on a recurring basis:

	Fair Value	Level 1	Level 2	Level 3
Investments in debt securities (short-term)	13,852	10,138	3,714	-
Investments in debt securities (long-term)	8,267	199	8,068	-

As of December 31, 2020, the following table represents the Company's fair value hierarchy for items that are required to be measured at fair value on a recurring basis:

	Fair Value	Level 1	Level 2	Level 3
Investments in debt securities (short-term)	14,720	8,939	5,781	-
Investments in debt securities (long-term)	12,768	-	12,768	-

Non-recurring fair value measurements. Certain assets and liabilities are measured at fair value on a nonrecurring basis. In other words, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments only in certain circumstances (for example, when there is evidence of impairment). No such losses were recorded during the year ended December 31, 2021 and 2020.

Research and Development Expenses. Research and development expenses represent salaries, related benefits expense, expenses incurred for the design and testing of new processing methods and other expenses related to the research and development of Liquidmetal alloys. Development costs incurred in research and development activities are expensed as incurred.

Advertising and Promotion Expenses. Advertising and promotion expenses are expensed when incurred. Advertising and promotion expenses were $63 and $61, for the years ended December 31, 2021 and 2020, respectively.

Legal Costs. Legal costs are expensed as incurred.

Stock-Based Compensation. The Company accounts for share-based compensation in accordance with the fair value recognition provisions of FASB ASC Topic 718, *Share-based Payment*, which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the consolidated financial statements based on their fair values. The fair value of stock options is calculated by using the Black-Scholes option pricing formula that requires estimates for expected volatility, expected dividends, the risk-free interest rate and the term of the option. If any of the assumptions used in the Black-Scholes model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period.

Income Taxes. Income taxes are provided under the asset and liability method as required by FASB ASC Topic 740, *Accounting for Income Taxes*. Under this method, deferred income taxes are recognized for the tax consequences of "temporary differences" by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. The effect of a tax rate change on deferred taxes is recognized in operations in the period that the change in the rate is enacted. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized. Under the provisions of FASB ASC Topic 740, the Company had no material unrecognized tax positions and no adjustments to liabilities or operations were required. The Company, when applicable, will recognize interest and penalties related to uncertain tax positions in income tax expense. There was no expense related to interest and penalties for the years ended December 31, 2021 and 2020, respectively.

Earnings Per Share. Basic earnings per share ("EPS") is computed by dividing earnings (losses) attributable to common shareholders by the weighted average number of common shares outstanding for the periods. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported periods. Actual results could differ from those estimates. These management estimates are primarily related to impairment of long-lived assets, allowance for bad debt, warrant valuations, and inventory valuation.

Subsequent Events. The Company evaluated subsequent events through the filing of its Annual Report on Form 10-K with the SEC.

Supplemental Cash Flow Information. Cash payments for interest were $0 for each of the years ended December 31, 2021 and 2020, respectively.

Recent Accounting Pronouncements.

Financial Instruments- Credit Losses

In June 2016, the FASB issued an accounting standards update which changes the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. This update replaces the existing incurred loss impairment model with an expected loss model (referred to as the Current Expected Credit Loss model, or "CECL"). The standard update, and its related amendments, will become effective for the fiscal year beginning on January 1, 2023. The Company is in the process of assessing the impact this standard update, and its related amendments, on its consolidated financial statements, but is not expecting it will have a material impact on its consolidated financial statements.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the AICPA and the SEC did not or are not believed by management to have a material impact on the Company's present or future consolidated financial statements.

3. Significant Transactions

Yihao Manufacturing Agreement

On January 12, 2022, the Company entered into a manufacturing agreement ("Manufacturing Agreement") with Dongguan Yihao Metal Materials Technology Co. Ltd. ("Yihao") to become the primary contract manufacturer of the Company's products. Under the Manufacturing Agreement, which has a term of five years, Yihao has agreed to serve as a non-exclusive contract manufacturer for amorphous alloy parts offered and sold by the Company at prices determined on a "cost-plus" basis. Yihao is an affiliate of Dongguan Eontec Co. Ltd. and Professor Lugee Li, our Chairman and largest beneficial owner of the Company's capital stock (See Footnote 21 Subsequent Events).

2019 Restructuring Plan

In July 2019, the Company adopted a restructuring plan pursuant to which the Company elected to wind down its prior manufacturing operations at the Company's Lake Forest, CA facility and proceeded to outsource the manufacture of parts utilizing the Company's technology through its domestic and international manufacturing partners (the "2019 Restructuring Plan"). In connection with the 2019 Restructuring Plan, the Company reduced its management staff and shifted its business strategy from internal manufacture of parts and products for customers toward the use and reliance of outsourced manufacturers, which will initially be Dongguan Yihao Metals Materials Technology Co., Ltd. ("Yihao"), a China-based company that is an affiliate of our largest beneficial stockholder, CEO and Chairman, Professor Lugee Li.

Manufacturing Facility Purchase and Lease

On February 16, 2017, the Company purchased a 41,000 square foot manufacturing facility (the "Facility") located in Lake Forest, CA, where operations commenced during July 2017. The purchase price for the Facility was $7,818. As a result of the 2019 Restructuring Plan, the Company has discontinued manufacturing operations in the Facility.

On January 23, 2020, 20321 Valencia, LLC, a Delaware limited liability company and wholly owned subsidiary of the Company, entered into a lease agreement (the "Facility Lease") pursuant to which the Company leased to MatterHackers, Inc., a Delaware corporation ("Tenant"), an approximately 32,534 square foot portion of the Facility. The lease term is for 5 years and 2 months and is scheduled to expire on April 30, 2025. The base rent payable under the Facility Lease is $32,534 per month initially and is subject to periodic increases up to a maximum of approximately $54,000 per month. Tenant will pay approximately 79% of common operating expresses. The Facility Lease has other customary provisions, including provisions relating to default and usage restrictions. The Facility Lease grants to Tenant a right to extend the lease for one additional 60-month period at market rental value.

2016 Purchase Agreement

On March 10, 2016, the Company entered into a Securities Purchase Agreement (the "2016 Purchase Agreement") with Liquidmetal Technology Limited, a Hong Kong company (the "Investor"), which is controlled by the Company's Chairman, Professor Li. The 2016 Purchase Agreement provided for the purchase by the Investor of a total of 405,000,000 shares of the Company's common stock for an aggregate purchase price of $63,400. The transaction occurred in multiple closings, with the Investor having purchased 105,000,000 shares at a purchase price of $8,400 (or $0.08 per share) at the initial closing on March 10, 2016 and the remaining 200,000,000 shares at $0.15 per share and 100,000,000 shares at $0.25 per share for an aggregate purchase price of $55,000 on October 26, 2016.

In addition to the shares issuable under the 2016 Purchase Agreement, the Company issued to the Investor a warrant to acquire 10,066,809 shares of common stock (of which the right to exercise 2,609,913 of the warrant shares vested on March 10, 2016 and the right to exercise the remaining 7,456,896 warrant shares vested on October 26, 2016 at an exercise price of $0.07 per share). The warrant will expire on the tenth anniversary of its issuance date.

The 2016 Purchase Agreement also provided that, with certain limited exceptions, if the Company issues any shares of common stock at any time through the fifth anniversary of the 2016 Purchase Agreement, the Investor will have a preemptive right to subscribe for and to purchase at the same price per share (or at market price, in the case of issuance of shares pursuant to stock options) the number of shares necessary to maintain its ownership percentage of Company-issued shares of common stock.

Eontec License Agreement

On March 10, 2016, in connection with the 2016 Purchase Agreement, the Company and DongGuan Eontec Co., Ltd., a Hong Kong corporation ("Eontec"), entered into a Parallel License Agreement (the "License Agreement") pursuant to which the Company and Eontec agreed to cross-license their respective technologies. The Company's Chairman, Professor Li, is also the Chairman of Eontec.

The License Agreement provides for the cross-license of certain patents, technical information, and trademarks between the Company and Eontec. In particular, the Company granted to Eontec a paid-up, royalty-free, perpetual license to the Company's patents and related technical information to make, have made, use, offer to sell, sell, export, and import products in certain geographic areas outside of North America and Europe. In turn, Eontec granted to the Company a paid-up, royalty-free, perpetual license to Eontec's patents and related technical information to make, have made, use, offer to sell, sell, export, and import products in certain geographic areas outside of specified countries in Asia. The license granted by the Company to Eontec is exclusive (including to the exclusion of the Company) in the countries of Brunei, Cambodia, China (P.R.C and R.O.C.), East Timor, Indonesia, Japan, Laos, Malaysia, Myanmar, Philippines, Singapore, South Korea, Thailand, and Vietnam. The license granted by Eontec to the Company is exclusive (including to the exclusion of Eontec) in North America and Europe. The cross-licenses are non-exclusive in geographic areas outside of the foregoing exclusive territories.

Beyond the License Agreement, the Company collaborates with Eontec to accelerate the commercialization of amorphous alloy technology. This includes but is not limited to developing technologies to reduce the cost of amorphous alloys, working on die cast machine technology platforms to pursue broader markets, sharing knowledge to broaden our intellectual property portfolio, and utilizing Eontec's volume production capabilities as a third party contract manufacturer.

Eutectix Business Development Agreement

On January 31, 2020, the Company entered into a Business Development Agreement (the "Agreement") with Eutectix, LLC, a Delaware limited liability company ("Eutectix"), which provides for collaboration, joint development efforts, and the manufacturing of products based on the Company's proprietary amorphous metal alloys. Under the Agreement, the Company licensed to Eutectix specified equipment owned by the Company, including two injection molding machines, two diecasting machines, and other machines and equipment, all of which will be used to make product for Company customers and Eutectix customers. The licensed machines and equipment represented substantially all of the machinery and equipment then held by the Company. The Company has also licensed to Eutectix various patents and technical information related to the Company's proprietary technology. Under the Agreement, Eutectix agreed to pay the Company a royalty of six percent (6%) of the net sales price of licensed products sold by Eutectix, and Eutectix will also manufacture for the Company product ordered by the Company. The Agreement has a term of five years, subject to renewal provisions and the ability of either party to terminate earlier upon specified circumstances.

Apple License Transaction

On August 5, 2010, the Company entered into a license transaction with Apple Inc. ("Apple") pursuant to which (i) the Company contributed substantially all of its intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, called Crucible Intellectual Property, LLC ("CIP"), (ii) CIP granted to Apple a perpetual, worldwide, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, in exchange for a one-time, upfront license fee, and (iii) CIP granted back to the Company a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use.

Under the agreements relating to the license transaction with Apple, the Company was obligated to contribute, to CIP, all intellectual property developed through February 2016. The Company is also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction.

Liquidmetal Golf Sublicense Agreement

Liquidmetal Golf Inc. ("Liquidmetal Golf" or "LMG") is a majority-owned subsidiary which has the exclusive right and license to utilize our Liquidmetal alloy technology for purposes of golf equipment applications. This right and license is set forth in an intercompany license agreement dated January 1, 2002 between Liquidmetal Technologies and Liquidmetal Golf. This license agreement provides that Liquidmetal Golf has a perpetual and exclusive license to use Liquidmetal alloy technology for the purpose of manufacturing, marketing, and selling golf club components and other products used in the sport of golf. The Company owns 79% of the outstanding common stock in Liquidmetal Golf.

On January 13, 2022, Liquidmetal Golf entered into a sublicense agreement ("LMG Sublicense Agreement") with Amorphous Technologies Japan, Inc. ("ATJ"), a newly formed Japanese entity that was established by Twins Corporation, a sporting goods company operating in Japan. Under the agreement, LMG granted to ATJ a nonexclusive worldwide sublicense to the Company's amorphous alloy technology and related trademarks to manufacture and sell golf clubs and golf related products. The LMG Sublicense Agreement has a term of three years and provides for the payment of a running royalty to LMG of 3% of the net sales price of licensed products (See Footnote 21 Subsequent Events).

Swatch Group License

In March 2009, the Company entered into a license agreement with Swatch Group, Ltd. ("Swatch") under which Swatch was granted a non-exclusive license to the Company's technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches as against all third parties (including the Company), but non-exclusive as to Apple. The Company will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.

(in thousands, except share and per share data)

4. Investments in Debt Securities

The following table sets forth amortized cost and fair value of investments in debt securities (short-term and long-term):

		Amortized Cost		Fair Value	
	Longest Maturity Date	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
U.S. government and agency securities	2022	7,327	-	7,323	-
Corporate bonds	2024	11,635	26,222	11,576	26,338
Certificates of deposit	One-year	-	1,150	-	1,150
		18,962	27,372	18,899	27,488

Income from these investments totaled $155 and $268 during the years ended December 31, 2021 and 2020, respectively, and was included as a portion of interest and investment income on the Company's consolidated statements of operations.

Based on the Company's review of its debt securities in an unrealized loss position at December 31, 2021, it determined that the losses were primarily the result of current economic factors, impacting all global debt and equity markets, that are the result of the global COVID-19 pandemic. The impact to the Company's investment portfolio is considered to be temporary, rather than a deterioration of overall credit quality. The Company does not intend to sell and it is not more likely than not that the Company will be required to sell these securities prior to recovering their amortized cost. As such, the Company does not consider these securities to be other-than-temporarily impaired at December 31, 2021.

5. Trade Accounts Receivable

Trade accounts receivable were comprised of the following:

	December 31, 2021	December 31, 2020
Trade accounts receivable	$ 147	$ 505
Less: Allowance for doubtful accounts	-	(234)
Trade accounts receivable	$ 147	$ 271

During the year ended December 31, 2020, the Company recorded an additional allowance for doubtful accounts of $226 for receivables related to products delivered to a customer at the end of 2019. The allowance is a result of financial uncertainties affecting the customer's ability to make payments on outstanding invoices. The allowance was recorded as bad debt expense as a portion of selling, marketing, general and administrative expenses. During the year ended December 31, 2021, there was none.

6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets totaled $505 and $465 as of December 31, 2021 and December 31, 2020, respectively. Included within these totals are the following:

	December 31, 2021	December 31, 2020
Prepaid service invoices	$ 110	$ 76
Prepaid insurance premiums	265	233
Prepaid lease costs and receivables- short term	22	21
Interest and other receivables	108	135
Total	$ 505	$ 465

As of December 31, 2021, prepaid lease costs and receivables- short term are comprised of $19 in prepaid broker commissions that are expected to be amortized within the next twelve months and $2 in receivables for allocated utility costs. As of December 31, 2021 and 2020, interest and other receivables are comprised entirely of interest receivable from investments in debt.

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7. Inventory

Inventory totaled $35 and $43 as of December 31, 2021 and December 31, 2020, respectively. Included within these totals are the following:

	December 31, 2021	December 31, 2020
Work in progress	$ 35	$ -
Finished goods	-	43
Total	35	43

8. Property and Equipment

Property and equipment consist of the following:

	December 31, 2021	December 31, 2020
Land, building, and improvements	$ 9,610	$ 9,610
Machinery and equipment	1,304	1,304
Computer equipment	272	272
Office equipment, furnishings, and improvements	51	51
Total	11,237	11,237
Accumulated depreciation	(2,942)	(2,623)
Total property and equipment, net	$ 8,295	$ 8,614

Depreciation expense for the years ended December 31, 2021 and 2020 was $319 and $321, respectively. For the year ended December 31, 2021, $319 was included in selling, marketing, general and administrative expenses. For the year ended December 31, 2020, $321 was included in selling, marketing, general and administrative expenses.

During the year ended December 31, 2020, the Company disposed of certain equipment that it was not expecting to utilize prospectively, as originally contemplated in the 2019 Restructuring Plan, for gross proceeds of $200. This resulted in a gain on disposal of $35 during the year ended December 31, 2020. There was no such disposal during the year ended December 31, 2021.

9. Patents and Trademarks, net

Patents and trademarks consist of the following:

	December 31, 2021	December 31, 2020
Purchased and licensed patent rights	$ 566	$ 566
Internally developed patents	1,686	1,686
Trademarks	148	148
Total intangible assets	2,400	2,400
Purchased and licensed patent rights	$ (566)	$ (562)
Internally developed patents	(1,588)	(1,540)
Trademarks	(144)	(140)
Total accumulated amortization	(2,298)	(2,242)
Total intangible assets, net	$ 102	$ 158

(in thousands, except share and per share data)

Amortization expense was $56 and $81 for the years ended December 31, 2021 and 2020, respectively, and is included in research and development expense in the consolidated statements of operations and comprehensive loss. The estimated aggregate amortization expense for each of the five succeeding years is as follows:

December 31,		Aggregate Amortization Expense
2022		29
2023		20
2024		17
2025		14
2026		22
	$	102

The weighted average amortization periods for the years ended December 31, 2021 and 2020 are as follows:

	December 31,	
	2021	2020
Purchased and licensed patent rights	17	17
Internally developed patents	17	17
Trademarks	10	10

Purchased patent rights represent the exclusive right to commercialize the bulk amorphous alloy and other amorphous alloy technology acquired from California Institute of Technology ("Caltech"), through a license agreement with Caltech and other institutions. All fees and other amounts payable by the Company for these rights and licenses have been paid or accrued in full, and no further royalties, license fees or other amounts will be payable in the future under the license agreements.

In addition to the purchased and licensed patents, the Company has capitalized legal and registration costs incurred to obtain and maintain the respective patents. The Company currently holds various patents and numerous pending patent applications in the United States, as well as numerous foreign counterparts to these patents outside of the United States.

10. Equipment Held for Sale

The Company previously reclassified $585 in equipment, planned to be disposed of under the 2019 Restructuring Plan, from property and equipment to equipment held for sale on its consolidated balance sheet. The Company has executed a purchase agreement for the equipment, with a negotiated sales price of $600. The sale was finalized during the year ended December 31, 2020, title transfer of the equipment to the buyer and receipt of all amounts due under the purchase agreement for the equipment.

11. Other Assets

Other assets totaled $306 and $251 as of December 31, 2021 and December 31, 2020, respectively. Included within these totals are the following:

	December 31,			
		2021		2020
Utility deposits	$	14	$	14
Prepaid lease costs and receivables- long term		292		237
Total		306		251

As of December 31, 2021, prepaid lease costs and receivables- long term are comprised of $44 in unamortized prepaid broker commissions that are not expected to be amortized within the next twelve months and $248 in straight-line rent accruals.

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12. Accrued Liabilities

Accrued liabilities totaled $246 and $315 as of December 31, 2021 and December 31, 2020, respectively. Included within these totals are the following:

	December 31,	
	2021	2020
Accrued payroll, vacation, and bonuses	$ 111	$ 147
Accrued severance	56	56
Accrued audit fees	79	112
Contract liability	-	-
Total	246	315

In connection with the 2019 Restructuring Plan, the Company recorded severance expenses related to employees whose positions would be eliminated. The elements and impact of the 2019 Restructuring Plan, including details regarding the severance elements that the Company had adopted, were communicated to all impacted employees in July 2019. As of December 31, 2021, payments totaling $217 had been made, resulting in a remaining liability under the 2019 Restructuring Plan of $56 as of December 31, 2021.

13. Other Long-Term Liabilities

Other long-term liabilities were $899 as of December 31, 2021 and $899 as of December 31, 2020, and consisted of $856 of long-term, aged payables to vendors, individuals, and other third parties that have been outstanding for more than 5 years. The Company is in the process of researching and resolving the balances for settlement and/or escheatment in accordance with applicable state law. Also included in the balance as of December 31, 2021 is $43 in tenant deposits under the Facility Lease.

14. Stock Compensation Plan

On June 28, 2012, the Company adopted the 2012 Equity Incentive Plan (“2012 Plan”), with the approval of the shareholders, which provided for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. The 2012 Plan provides for the granting to employees of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and for the granting to employees and consultants of non-statutory stock options. In addition, the Plan permits the granting of stock appreciation rights, or SARs, with or independently of options, as well as stock bonuses and rights to purchase restricted stock. A total of 30,000,000 shares of the Company’s common stock may be granted under the 2012 Equity Incentive Plan, and all options granted under this plan had exercise prices that were equal to the fair market value on the date of grant. On December 16, 2021, the Company granted option grants under the Company’s 2012 Equity Incentive Plan, as approved to by the Board, for employees up to 1,400,000 shares of the Company’s common stock in total. During the year ended December 31, 2021, the Company granted 1,400,000 options to purchase shares of the Company’s common stock. Under this plan, the Company had outstanding grants of options to purchase 7,009,192 and 5,609,192 shares of the Company’s common stock as of December 31, 2021 and December 31, 2020, respectively.

On January 27, 2015, the Company adopted its 2015 Equity Incentive Plan (“2015 Plan”), which provided for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. A total of 40,000,000 shares of the Company’s common stock are available for issuance under the 2015 Plan. All options granted under the 2015 Plan had exercise prices that were equal to the fair market value on the dates of grant. On July 7, 2021, the Company granted Mr. Chung an option grant under the Company’s 2015 Equity Incentive Plan, as approved by the Board, to purchase up to 7,500,000 shares of Company stock. On December 16, 2021, the Company granted option grants under the Company’s 2015 Equity Incentive Plan, as approved to by the Board, for directors up to 600,000 shares of the Company’s common stock in total. During the year ended December 31, 2021, the Company granted 8,100,000 options to purchase shares of the Company’s common stock. Under this plan, the Company had outstanding grants of options to purchase 20,441,667 and 12,341,667 as of December 31, 2021 and December 31, 2020, respectively.

FASB ASC 718, *Compensation – Stock Compensation*, requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. Under ASC 718, the Company is required to measure the cost of employee services received in exchange for stock options and similar awards based on the grant-date fair value of the award and recognize this cost in the income statement over the period during which an employee is required to provide service in exchange for the award. The Company recorded $326 and $351 for the years ended December 31, 2021 and 2020, respectively, of non-cash charges for stock compensation related to amortization of the fair value of restricted stock and unvested stock options. The total compensation costs related to non-vested awards not yet recognized were $149 and $303 for the years ended December 31, 2021 and 2010, respectively.

In connection with the separation of former executives, the Company has modified previously granted equity awards to allow for the acceleration of vesting of equity awards, and the extension of the timing to exercise vested awards, following the respective separation dates. Of the $458 stock compensation expense for the year ended December 31, 2021, the Company incurred incremental stock-based compensation expense for the modifications of the awards of $132 during the year ended December 31,2021.

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Expected volatilities are based on historical volatility expected over the expected life of the options. The Company uses historical data to estimate option exercise and employee termination within the valuation model. The expected term of options granted represents the period of time that options granted are expected to be outstanding. Expected forfeiture rates are determined based on historical forfeitures over a five-year period. The risk-free rate used for the period within the expected life of the options is based on U.S. Treasury rates in effect at the time of grant.

The following table summarizes the Company's stock option transactions for the years ended December 31, 2021 and 2020:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (in thousands)
Options outstanding at December 31, 2019	19,341,112	$ 0.17		
Granted	-	-		
Exercised	-	-		
Forfeited	(1,275,586)	0.21		
Expired	(114,667)	0.20		
Options outstanding at December 31, 2020	17,950,859	$ 0.17	5.5	$ 35
Granted	11,930,000	0.09		
Exercised	-	-		
Forfeited	(2,430,000)	0.14		
Expired	-	-		
Options outstanding at December 31, 2021	27,450,859	$ 0.14	5.8	$ 182
Options exercisable at December 31, 2021	20,450,859	$ 0.16	4.5	$ 95
Options unvested at December 31, 2021	20,450,859	$ 0.16	4.5	$ 95
Options vested or expected to vest at December 31, 2021	25,089,675	$ 0.14	5.5	$ 156

The following table provides supplemental data on stock options for the years ended December 31, 2021 and 2020:

	December 31, 2021	December 31, 2020
Weighted average grant date fair value per option granted	484	$ -
Fair value of options vested	307	340
Cash from participants to exercise stock options	-	-
Intrinsic value of options exercised	-	-

The following table summarizes the Company's stock options outstanding and exercisable by ranges of option prices as of December 31, 2021:

December 31, 2021

	Options Outstanding			Options Exercisable		
Range of Exercise Prices	Numbers of Options Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Options Exercisable	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price
$ 0.00 - 0.10	13,344,192	7.66	$ 0.07	6,344,192	5.48	$ 0.07
0.11 - 0.38	14,106,667	4.08	0.19	14,106,667	4.08	0.19
Total	27,450,859			20,450,859		

(in thousands, except share and per share data)

The Company's non-vested options at the beginning and ending of fiscal year 2021 had weighted-average grant-date fair values of $0.12 and $0.04 per option, respectively.

15. Facility Lease

Amounts collected under the Facility Lease are comprised of base rents and reimbursements for direct facility expenses (property taxes and insurance), common area maintenance, and utilities. Amounts recorded to lease income are comprised of base rents and direct facility expenses, recorded on a straight-line basis over the lease term. Reimbursements for common area maintenance and utility expense are recorded as reductions to like expenses within sales, general, and administrative costs.

The future minimum rents due to the Company under the Facility Lease are as follows:

Year	Base Rents
2022	486
2023	651
2024	699
2025	237
2026	-
	$ 2,073

16. Income Taxes

Significant components of deferred tax assets are as follows:

	Years Ended December 31,	
	2021	2020
Loss carry forwards	$ 44,690	$ 36,813
Allowance for bad debts	-	65
NQSO	2,235	2,148
Tax credits and other	(22)	(16)
Total deferred tax asset	**$ 46,903**	**$ 39,010**
Valuation allowance	(46,903)	(39,010)
Total deferred tax asset, net	**$ -**	**$ -**

The valuation allowance increased $7,893 and $741 in 2021 and 2020, respectively. Changes in the valuation allowance are impacted by the expiration of net operating loss ("NOL") carryforwards, current year net operating losses, and changes to future tax deductions resulting from the terms of stock compensation plans and accrued liabilities.

The following table accounts for the differences between the expected federal tax benefit (based on the statutory 2021 U.S. federal income tax rate of 21%) and the actual tax provision:

	Years Ended December 31,	
	2021	2020
Expected federal tax benefit	-21.0%	-21.0%
Permanent items	0.9%	0.3%
Net operating loss utilized or expired	0.0%	0.0%
Increase in valuation allowance and others	20.1%	20.7%
Effective tax rate	**0%**	**0%**

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As of December 31, 2021, the Company had approximately $150.2 million of NOL carryforwards for U.S. federal income tax purposes expiring in 2022 through 2042. As of December 31, 2021, the Company had approximately $106.5 million of NOL carryforwards for California income tax purposes expiring in 2022 through 2042, respectively. The Company and Liquidmetal Golf, Inc. file on a separate company basis for federal income tax purposes. Accordingly, the federal NOL carryforwards of one legal entity are not available to offset federal taxable income of the other. Liquidmetal Golf, Inc. had approximately $6.1 million in federal NOL carryforwards, expiring in 2022 through 2041.

We recognize excess tax benefits associated with the exercise of stock options directly to shareholders' equity only when realized. Accordingly, deferred tax assets are not recognized for NOL carryforwards resulting from excess tax benefits. As of December 31, 2021, deferred tax assets do not include approximately $437 of these tax effected excess tax benefits from employee stock option exercise that are a component of our NOL carryforwards. Accordingly, additional paid-in capital will increase up to an additional $437 if and when such excess tax benefits are realized.

As of December 31, 2021, the Company had approximately $87 of Research & Development ("R&D") credit carryforwards for U.S. federal income tax purposes expiring in 2022 through 2031. In addition, the Company has California R&D credit carryforwards of approximately $243, which do not expire under current California law. Section 382 of the Internal Revenue Code ("IRC") imposes limitations on the use of NOL's and credits following changes in ownership as defined in the IRC. The limitation could reduce the amount of benefits that would be available to offset future taxable income each year, starting with the year of an ownership change. As a result of the completion of the complex analysis required by the IRC to determine if an ownership change has occurred, the Company has determined that its annual NOL carryforward limitation under Section 382 of the IRC is $764 per year.

The ability to realize the tax benefits associated with deferred tax assets, which includes benefits related to NOL's, is principally dependent upon the Company's ability to generate future taxable income from operations. The Company has provided a full valuation allowance for its net deferred tax assets due to the Company's net operating losses.

The Company adopted the provisions of FASB ASC Topic 470 – Income Taxes. At the adoption date and as of December 31, 2020, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense which were $0 for the years ended December 31, 2021 and 2020.

As of December 31, 2021, the tax years 2015 through 2020, and 2014 through 2020 are subject to examination by the federal and California taxing authorities, respectively.

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17. Accumulated Other Comprehensive Income ("AOCI"):

The following table presents a summary of the changes in each component of AOCI for the years ended December 31, 2021 and 2020:

	Unrealized gains on available-for-sale securities	Total
Accumulated other comprehensive income, net of tax, as of December 31, 2019	2	2
Other comprehensive income before reclassifications	116	116
Amounts reclassified from accumulated other comprehensive income	(2)	(2)
Net increase in other comprehensive income	114	114
Accumulated other comprehensive income, net of tax, as of December 31, 2020	116	116
Other comprehensive loss before reclassifications	(62)	(62)
Amounts reclassified from accumulated other comprehensive income	(116)	(116)
Net increase in other comprehensive income	(178)	(178)
Accumulated other comprehensive loss, net of tax, as of December 31, 2021	(62)	(62)

18. Loss Per Common Share

Basic earnings per share ("EPS") is computed by dividing earnings (loss) attributable to common shareholders by the weighted average number of common shares outstanding for the periods. Diluted EPS reflects the potential dilution of securities that could share in the earnings.

Options to purchase 27,450,859 shares of common stock at prices ranging from $0.07 to $0.38 per share were outstanding at December 31, 2021, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss. Options to purchase 17,950,859 shares of common stock at prices ranging from $0.07 to $0.38 per share were outstanding at December 31, 2020, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss.

Warrants to purchase 10,066,809 shares of common stock, priced at $0.07 per share, outstanding at each of December 31, 2021 and 2020 were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive, given the Company's net loss.

19. Related Party Transactions

On March 10, 2016, the Company entered into the 2016 Purchase Agreement with Liquidmetal Technology Limited, providing for the purchase of 405,000,000 shares of the Company's common stock for an aggregate purchase price of $63,400. Liquidmetal Technology Limited was a newly formed company owned by Professor Li. In connection with the 2016 Purchase Agreement and also on March 10, 2016, the Company and Eontec, entered into a license agreement pursuant to which the Company and Eontec entered into a cross-license of their respective technologies. Eontec is a publicly held Hong Kong corporation of which Professor Li is the Chairman. Eontec is also an affiliate of Yihao. Yihao is currently the Company's primary contract manufacturer. As of December 31, 2021, Professor Li is a greater-than 5% beneficial owner of the Company and serves as the Company's Chairman. Equipment and services procured from Eontec, and their affiliates, were $477 and $478 during the years ended December 31, 2021 and 2020, respectively. As of December 31, 2021 and 2020, the Company has outstanding payables to Eontec, and their affiliates, of $68 and $118, respectively.

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On July 6, 2021, Professor Li resigned as Chief Executive Officer and President of the Company. Professor Li will retain his role as Chairman of the Company's Board of Directors (the "Board").

On July 6, 2021, the Board appointed Tony Chung, a director of the Company, as the Company's Chief Executive Officer, and in that capacity, he will serve as the Company's principal executive officer. Mr. Chung is a current member of the Board and will remain a director following the foregoing appointment.

On August 30, 2021, the Company and Bruce Bromage, the Company's Chief Operating Officer, entered into a Separation Agreement and General Release pursuant to which Dr. Bromage agreed to resign as an officer and employee of the Company and the Company and Dr. Bromage agreed to terminate Dr. Bromage's employment agreement with Dr. Bromage's employment which was to end on September 30, 2021 (the "Bromage Separation Agreement"). The Bromage Separation Agreement provided for the payment of severance compensation to Dr. Bromage in the form of a lump sum equal to $316,285.00 (subject to tax withholdings). In addition, it provided for the accelerated vesting the remaining 2,430,000 unvested stock options held by Dr. Bromage as of the termination date and the extension of the exercise period of his options until the earlier of the second anniversary of the termination date outlined in the Bromage Separation Agreement or the date on which such options would otherwise expire and terminate in accordance with its terms if Dr. Bromage had not resigned. This resulted in a total of 10,329,692 stock options being exercisable by Dr. Bromage as of the termination date. In connection with the Bromage Separation Agreement, Dr. Bromage granted the Company general releases subject to customary exceptions.

On August 30, 2021, the Company and Bryce Van, the Company's Vice President- Finance, entered into a Separation Agreement and General Release pursuant to which Mr. Van agreed to resign as an officer and employee of the Company and the Company and Mr. Van agreed to terminate Mr. Van's employment agreement with Mr. Van's employment which was to end on October 15, 2021 (the "Van Separation Agreement"). The Van Separation Agreement provided for the payment of severance compensation to Mr. Van in the form of a lump sum equal to $252,889.69 (subject to tax withholdings). In addition, it provided for the extension of the exercise period of his options until the earlier of the second anniversary of the termination date outlined in the Van Separation Agreement or the date on which such options would otherwise expire and terminate in accordance with its terms if Mr. Van had not resigned. This resulted in a total of 2,046,500 stock options being exercisable by Mr. Van as of the termination date. Under the Van Separation Agreement, Mr. Van agreed to be available to provide assistance to the Company by telephone with no additional consideration for sixty days following the termination date. In connection with the Van Separation Agreement, Mr. Van granted the Company general releases subject to customary exceptions.

20. Quarterly Financial Information (Unaudited)

	Quarter Ended				
	March 31, 2021	**June 30, 2021**	**September 30, 2021**	**December 31, 2021**	**Total**
Revenue	$ 72	$ 243	$ 406	$ 90	$ 811
Gross profit	17	89	87	(10)	183
Operating loss	(884)	(798)	(1,570)	(809)	(4,061)
Net loss	(691)	(625)	(1,403)	(659)	(3,378)
Basic and diluated net loss per common share	$ (0.00)	$ (0.00)	$ (0.00)	$ (0.00)	$ (0.00)

	Quarter Ended				
	March 31, 2020	**June 30, 2020**	**September 30, 2020**	**December 31, 2020**	**Total**
Revenue	$ 71	$ 33	$ 327	$ 558	$ 989
Gross profit	35	(2)	156	179	368
Operating loss	(961)	(884)	(970)	(690)	(3,505)
Net loss	(746)	(643)	(777)	(477)	(2,643)
Basic and diluated net loss per common share	$ (0.00)	$ (0.00)	$ (0.00)	$ (0.00)	$ (0.00)

21. Subsequent Events

The Company follows the guidance in FASB ASC Topic 855, Subsequent Events ("ASC 855"), which provides guidance to establish general standards of accounting for and disclosures of events that occur after the balance sheet date but before the consolidated financial statements are issued or are available to be issued. ASC 855 sets forth (i) the period after the balance sheet date during which management of a reporting entity evaluates events or transactions that may occur for potential recognition or disclosure in the consolidated financial statements, (ii) the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its consolidated financial statements, and (iii) the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. Accordingly, the Company did not have any subsequent events that require disclosure other than the following:

- On January 12, 2022, the Company entered into a manufacturing agreement ("Manufacturing Agreement") with Dongguan Yihao Metal Materials Technology Co. Ltd. ("Yihao") to become the primary contract manufacturer of the Company's products. Under the Manufacturing Agreement, which has a term of five years, Yihao has agreed to serve as a non-exclusive contract manufacturer for amorphous alloy parts offered and sold by the Company at prices determined on a "cost-plus" basis. Yihao is an affiliate of Dongguan Eontec Co. Ltd. and Professor Lugee Li, our Chairman and largest beneficial owner of the Company's capital stock.

- On January 13, 2022, Liquidmetal Golf entered into a sublicense agreement ("LMG Sublicense Agreement") with Amorphous Technologies Japan, Inc. ("ATJ"), a newly formed Japanese entity that was established by Twins Corporation, a sporting goods company operating in Japan. Under the agreement, LMG granted to ATJ a nonexclusive worldwide sublicense to the Company's amorphous alloy technology and related trademarks to manufacture and sell golf clubs and golf related products. The LMG Sublicense Agreement has a term of three years and provides for the payment of a running royalty to LMG of 3% of the net sales price of licensed products.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation in this Annual report on Form 10-K of our report dated March 29, 2022, relating to the consolidated financial statements of Liquidmetal Technologies, Inc. as of December 31, 2021 and to all references to our firm included in this Annual Report.

B F Borgers CPA PC

Certified Public Accountants
Lakewood, CO
March 29, 2022

Exhibit 31.1

CERTIFICATIONS

I, Tony Chung, certify that:

1. I have reviewed this annual report on Form 10-K of Liquidmetal Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2022

/s/ Tony Chung
Tony Chung
Chief Executive Officer
(Principal Executive and Financial Officer)

Exhibit 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Liquidmetal Technologies, Inc. (the "company") on Form 10-K for the year ending December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Tony Chung, Chief Executive Officer and Principal Financial Officer of the Company, certify, pursuant to and for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: March 29, 2022	By:	/s/ Tony Chung
		Tony Chung
		Chief Executive Officer
		(Principal Executive and Financial Officer)

A signed original of this written statement required by Section 906 has been provided to Liquidmetal Technologies, Inc. and will be retained by Liquidmetal Technologies, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.