MICROMEM TECHNOLOGIES INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTHS ENDED APRIL 30, 2020
PREPARED AS OF JUNE 25, 2020

NOTICE TO READER

The Management's Discussion and Analysis ("MD&A") report for Micromem Technologies Inc. for the three months ending April 30, 2020, as attached, is dated as of June 25, 2020, consistent with the date of the Independent Registered Public Accounting Firm report and with the 52-109F1R CEO and CFO certification filings related thereto.

/s/ Dan Amadori
Dan Amadori, CFO
June 25, 2020

/s/ Joseph Fuda
Joseph Fuda, CEO
June 25, 2020

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INTRODUCTION

The following sets out the Management's Discussion and Analysis ("MD&A") of the financial position and result of operations for the three months ending April 30, 2020 of Micromem Technologies Inc. (the "Company", "Micromem" or "we"). The MD&A should be read in conjunction with the Company's audited consolidated financial statements and accompanying notes for the fiscal years ending October 31, 2019 which are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board. Additional information regarding the Company is available on the SEDAR website at www.sedar.com.

The Company's shares are traded on the OTCQB under the symbol MMTIF and on the Canadian Securities Exchange ("CSE") under the symbol MRM. The Company incorporated Micromem Applied Sensor Technologies Inc. ("MAST") as a wholly – owned subsidiary for the purpose of moving forward with the planned commercialization of its technology.

Certain information provided by the Company in this MD&A and in other documents publicly filed throughout the year that are not recitation of historical facts may constitute forward-looking statements. The words "may", "would", "could", "will", "likely", "estimate", "believe", "expect", "forecast" and similar expressions are intended to identify forward-looking statements.

Readers are cautioned that such statements are only predictions and the actual events or results may differ materially. In evaluating such forward-looking statements, readers should specifically consider the various factors that could cause actual events or results to differ materially from those indicated by such forward-looking statements.

FORWARD LOOKING STATEMENTS

This MD&A contains forward-looking statements and forward-looking information within the meaning of applicable Canadian securities legislation ("forward looking statements"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as "believes", "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", or "intends" or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken or achieved) are not statements of historical fact, but are "forward-looking statements". Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company, or developments in the Company's business or in its industry, to differ materially from the anticipated results, performance, achievements or developments expressed or implied by such forward-looking statements. Forward-looking statements include disclosure regarding possible events, conditions or results of operations that are based on assumptions about future conditions, courses of action and consequences. Forward-looking statements may also include, without limitation, any statement relating to future events, conditions or circumstances. The Company cautions you not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. Forward-looking statements relate to, among other things, the successful commercialization of our technology, comments about potential future revenues, joint development agreements and expectations of signed contracts with customers, etc. A number of inherent risks, uncertainties and factors affect the operations, performance and results of the Company and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks and uncertainties include the risk of not securing required capital in future, the risks of not successfully concluding agreements with potential partners on a timely basis, the risks associated with commercializing and bringing to market our technology. These risks are affected by certain factors that are beyond the Company's control: the existence of present and possible future government regulation, competition that exists in the Company's business, uncertainty of revenues, markets and profitability, the potential impact of health related pandemics on overall market conditions, as well as those other factors discussed in this MD&A report. This list is not exhaustive of the factors that may affect any of the Company’s forward-looking statements and reference should also be made to the Company’s Annual Information Form (prepared and filed in the form of a Form 20-F Annual Report pursuant to The Securities Exchange Act of 1934) for a description of risk factors.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward–looking statements. The Company does not undertake to update any forward-looking statements that are incorporated by reference herein, except in accordance with applicable securities law.

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1. OVERVIEW

Micromem is a company that develops customized, proprietary sensor-based solutions for large multinational corporations. It has a wholly-owned subsidiary, Micromem Applied Sensor Technologies ("MAST"). MAST has traditionally been responsible for the development of market opportunities, maintaining customer relationships and the project management of the independent engineering subcontractors that it engages once a client project has been initiated. Micromem and MAST are referred to interchangeably as "the Company" throughout this report.

Financing:

In summary, the Company secured the following financing during this reporting period:

In Q2 2020 the Company secured $43,593 of financing from private placement subscriptions (2019: $52,968), and $90,000 (2019: $70,521) from the issuance of convertible debentures.

The Company's convertible debt structure is complex with 3 broad categories of such debt: (i) $CDN denominated debt with fixed conversion prices; (ii) $US denominated debt with fixed conversion prices and (iii) $US denominated debt with variable conversion prices. The term of the debt in each instance is typically between 4 months and 12 months. The Company has repaid certain convertible loans at maturity when due as requested by the debenture holder, or converted the debenture into common shares at the request of the debenture holder, or extended the term of the debenture through negotiations with the debenture holder – in this latter case, certain terms of the loan – interest rate and/or conversion price – may be adjusted as part of the extension.

Under IFRS reporting, such loans require quarterly remeasurements. The application of the remeasurement methodology is very specific. This is more fully discussed in Section 2; in summary there are several non-cash related income and expense charges that arise from such remeasurements. We recorded the following non-cash charges in the period ending April 30, 2020 and 2019:

	2020	2019	Changes
Accretion expense	$ 295,490	$ 410,888	$ 115,398
Loss on conversion of debentures	21,417	2,308	(19,109)
Gain on revaluation of derivatives	(1,434,549)	(585,583)	(848,966)
(Gain) loss on extinguishment of debentures	(110,102)	(3,181)	(106,921)
Net expense	$ (1,227,744)	$ (175,568)	$ (859,598)

There is no impact on the Company's cash flow for these non-cash charges.

Business Development:

(a) Chevron:

We have maintained a dialogue with Chevron personnel during Q2; our most recent communication was via phone call in early June. Chevron has completed their test sampling from the live trials which commenced in 2019. Our technology performed as anticipated in the live trials. Chevron continues to pursue certain enhanced oil recovery projects outside of North America. Despite the downturn in the energy sector to date in 2020, we continue to anticipate positive developments with respect to commercial sales of the ARTRA technology to Chevron. Given the disruptions resulting from the COVID 19 pandemic, the timing for such commercialization will be delayed and cannot, at this stage, be reasonably determined.

(b) Romgaz:

We continue our regular dialogue with Romgaz. The COVID 19 pandemic has resulted in delays with respect to the execution of initial purchase orders by Romgaz, as referenced in our MD&A report last issued on March 26, 2020. Our most recent communication with Romgaz was on June 19th. We are organizing our team members who will participate in the go forward Romgaz discussions over the balance of the 2020 fiscal year. We anticipate that initial purchase orders will be received from Romgaz before October 31, 2020 and that the initial interactions and planning with the Romgaz team will take place within that timeframe.

(c) **Repsol S.A.:**

There has been no change in the status of our dealings with Repsol from our MD&A report filed on March 26, 2020 relating to the quarter ending January 31, 2020.

(d) **Other:**

In January – February 2020, we engaged in discussions with two large companies, each engaged in the oil well tracer services business. Each have expressed interest in the ARTRA technology and in the work that we have completed with Chevron and are pursuing with Romgaz. We expect to pursue these discussions further once the Romgaz opportunity is underway.

We continue our discussions with Entanglement Technologies Inc. ("Entanglement") with respect to their participation in our go forward activity with Chevron, Romgaz and other potential opportunities. Entanglement has developed the ARTRA technology to date working with Micromem. A Memorandum of Understanding between Micromem and Entanglement is currently being drafted which addresses our go forward working relationship.

<u>Covid -19:</u>

The impact on the Company of the COVID 19 pandemic during Q2, 2020 is discussed below; we have taken the appropriate steps to maintain our business and to protect our 5 person staff to ensure their wellbeing:

a. We closed the office in mid-March and it remains closed as of the date of this report. Our staff is working remotely from their homes.

b. We have reduced employee's salaries by 35% and the Company is utilizing the Canada Employment Wage Subsidy program from the Federal government.

c. We have utilized the Canadian Federal government small business loan program and secured $40,000 CDN term loan which is as described in our consolidated financial statements.

d. We are in regular phone and electronic contact with our key service providers, subcontractors and customers.

e. All business-related travel has been suspended as of March 10, 2020.

There is substantial uncertainty as to the duration of the pandemic. If the pandemic continues for an extended period of time, there will be repercussions to the Company's ongoing business which could be significant

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2. COMMENTARY ON CONVERTIBLE DEBENTURES:

This section of the report is intended to provide readers with additional information as to the nature of the reporting requirements, procedures and impact of the convertible debt financings that the Company has completed. The objective is to facilitate the reader's understanding of this complex aspect of the Company's financial statements.

(1) Overview: convertible debenture reporting

(a) We are required under IFRS reporting standards to measure the components of our convertible debt including the debt, the derivative liability and the equity component of the face value of the debt, as appropriate, upon execution of the loan agreement with the investor.

a) The measurement methodology that we employ is in accordance with prescribed guidelines under IFRS and International Accounting Guidelines. This methodology is either a Black Scholes pricing model or a binomial distribution measurement model, depending on which model is more suitable in each case. That determination is based on a subjective assessment by the Company.

b) When we secure a convertible debenture from an investor, the terms which are finalized through negotiation with the investor will vary on a case by case basis with respect to the following:

   i) Term (typically 2 months to 12 months).

   ii) Interest rate (typically 1 to 2% per month but, in some cases, between 5% - 10% per annum).

   iii) Conversion price (which may be fixed at initiation date or fixed after 6 months based on a formulaic calculation, denominated in Canadian dollars or U.S. dollars, the latter being the functional currency of the Company and its subsidiaries).

   iv) The option for the Company to prepay the loan during the entire term of the loan or within an initial period of the term of the loan (typically up to 6 months).

c) At maturity date of the debenture, the debenture holder may agree to extend the term of the loan for an additional period of time, either on the same basic terms as already exist or on renegotiated terms.

(2) Accounting measurements and periodic reporting of convertible debentures:

a) To the extent that there is a derivative liability that arises in the initial measurement (1(a) above), we are required to revalue the derivative liability at each quarter end using prescribed Black Scholes or binomial methodology. Then, on a quarterly basis, we are required to report this gain or loss on the revaluation in our quarterly consolidated statement of income.

b) To the extent that the face value of the loan – which is due at the maturity date – is greater than the amount that is assigned to the loan component of the total amount at inception of the loan (1(a) above), then this difference must be accreted over the term of the loan. Typically, the loan term is from 2 months to 12 months. Thus, over the term of the loan, we are required to report this accretion amount as an expense in our quarterly consolidated statements of income.

c) To the extent that a loan is converted into common shares by the debenture holder, we will close out the loan at that point, record remaining accretion expense up to the date of conversion, remeasure the derivative liability to nil and calculate a net gain or loss on conversion of the loan. The net gain or loss is reported in our consolidated statements of income.

(3) Impact on reporting:

The realities and complexities of this prescribed accounting treatment gives rise to complicated disclosures in our financial statements and footnotes:

(a) We report substantial accretion expense in our consolidated financial statements.

(b) Over time, subject to significant volatility in the share price, we generally report a gain on the settlement of the derivative liability.

(c) The calculated *effective interest rate* on debt can be substantial. To illustrate, (for example) if the reported value of the debt is a small fraction of the face value at inception and it must be accreted to face value over the term (for example 2 months) then the effective rate of interest will be (in the Q2 financial statements) as high as 5368% representing the rate that would be required to step up the reported value to the face value over the short period of the term of the loan.

It is essential, when reviewing our audited consolidated statements, to bear in mind the following:

a) Accretion expense is a *non- cash item*.

b) Gain on revaluation of derivatives in a *non -cash item.*

c) Loss or gain on extinguishment of debentures *is a non -cash item*.

d) Loss or gain on conversion of debentures to common shares is a *non -cash item.*

(4) Additional Comments:
The Company notes the following:

i) We have had to resort to convertible debentures financing as a primary means of securing financing over the past several years in order to continue our operations.

ii) The *actual interest expense* on our convertible debentures which is interest paid to the debenture holders, is at a coupon rate ranging between *1% and 2%* per month. The effective rate referenced above is an accounting measurement metric, not a payable obligation.

iii) The use of convertible debentures has served to increase our outstanding number of shares over the past few years. The Company plans to deemphasize or eliminate this complex and expensive source of financing in future as it develops and grows its business and is better able to secure more conventional, lower cost financing.

(5) Activity in the quarter ending April 30, 2020:

The activity in the quarter ended April 30, 2020 with respect to our convertible debt obligations included:

(a) We converted three US denominated loans totaling $120,063 into common shares. In so doing we issued a total of 4,145,688 common shares.

(b) We fully repaid one Canadian denominated loan totaling $30,000 CDN ($21,576 USD), one US denominated loan totaling $80,000 and partially repaid one Canadian loan totaling $10,600 CDN ($7,620 USD).

(c) We renewed six Canadian denominated loans totaling $1,142,443 CDN ($821,302 USD) and four US denominated loans totaling $592,000. The renewal terms were set on a loan by loan basis for a period of 3 to 6 months.

(d) We secured two additional US denominated debentures totaling $112,250 and one Canadian denominated loan for $51,500 CDN ($7,500 USD) with terms of 3 to 12 months.

Of particular note in Q2 is a large (non-cash) gain on revaluation of derivative liabilities in the amount of $1,434,549 (2019: $533,583). The basis for this large non-cash gain is explained as follows:

(a) There is a revaluation of the derivative liability at each quarter end using either Black Scholes or binomial pricing models.

(b) There has been less volatility in the Company's share price in Q2 verses Q1; the daily closing price of the shares has decreased over the quarter. Price volatility directly impacts revaluation.

(c) The Company renewed and extended a number of short-term convertible debentures in Q2 at the maturity date of these loans. In closing out the derivative liability reported for each of these loans, the elimination of the derivative liability is recorded as a gain on revaluation at that time when the derivative liability is reset to nil and then reestablished for the newly renewed loans.

(d) The loss of $1,152,124 on revaluation of derivative liabilities reported in Q1 2020 was a non-cash charge as is the gain on revaluation of derivative liabilities of $1,434,549 reported in Q2.2020. Our experience, over the past 4 years, is that the initial quarterly loss is typically recovered in subsequent quarters as the loan term expires or when the debt is converted or repaid.

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3. PROJECT UPDATES:

Since the resignation of Mr. Van Fleet in August 2018, the Company has worked diligently to establish an improved dialogue with its active strategic partners. Its management has engaged with Chevron and Repsol as well as with its engineering and design subcontractors. It has forged a new business relationship with Romgaz, based in Romania and has engaged with additional engineering manufacturing and marketing resources to provide it with specialized expertise. The Company's CEO and CFO, under the guidance of its active board members, have assumed these responsibilities.

Update of Product Development Activity at April 30, 2020

The current status of our active development projects is as reported below:

(a) Chevron:

We have maintained a dialogue with Chevron personnel during Q2; our most recent communication was via phone call in early June. Chevron has completed their test sampling from the live trials which commenced in 2019. Our technology performed as anticipated in the live trials. Chevron continues to pursue certain enhanced oil recovery projects outside of North America. Despite the downturn in the energy sector to date in 2020, we continue to anticipate positive developments with respect to commercial sales of the ARTRA technology to Chevron. Given the disruptions resulting from the COVID 19 pandemic, the timing for such commercialization will be delayed and cannot, at this stage, be reasonably determined.

(b) Romgaz:

We continue our regular dialogue with Romgaz. The COVID 19 pandemic has resulted in delays with respect to the execution of initial purchase orders by Romgaz, as referenced in our MD&A report last issued on March 26, 2020. Our most recent communication with Romgaz was on June 19th. We are organizing our team members who will participate in the go forward Romgaz discussions over the balance of the 2020 fiscal year. We anticipate that initial purchase orders will be received from Romgaz before October 31, 2020 and that the initial interactions and planning with the Romgaz team will take place within that timeframe.

(c) Repsol S.A.

There has been no change in Q2 with respect to the status of our dealings with Repsol from our MD&A report filed on March 26, 2020 relating to the quarter ending January 31, 2020.

(d) Other:

In January – February 2020, we engaged in discussions with two large companies, each engaged in the oil well tracer services business. Each have expressed interest in the ARTRA technology and in the work that we have completed with Chevron and are pursuing with Romgaz. We expect to pursue these discussions further once the Romgaz opportunity is underway.

We continue our discussions with Entanglement Technologies Inc. ("Entanglement") with respect to their participation in our go forward activity with Chevron, Romgaz and other potential opportunities. Entanglement has developed the ARTRA technology to date working with Micromem. A Memorandum of Understanding between Micromem and Entanglement is currently being drafted which addresses our go forward working relationship.

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4. DISCUSSION OF OPERATING RESULTS:

(a) Financial Position as at April 30, 2020:

	April 30, 2020 ('$000)	October 31, 2019 ('$000)
Assets		
Current		
Cash	36	46
Prepaid expenses and other receivables	27	15
Total current assets	63	61
Property and equipment, net	63	3
Patents, net	16	20
Total assets	142	84
Liabilities		
Current		
Accounts payable and accrued liabilities	887	998
Current lease liability	36	-
Convertible debentures	2,429	2,599
Derivative liability	795	765
Total current liabilities	4,149	4,362
Long-term lease liability	26	-
Long-term loan	28	-
Total liabilities	4,203	4,362
Shareholders' Deficiency		
Share capital	85,022	84,154
Contributed surplus	27,768	27,758
Equity component of convertible debentures	43	50
Accumulated deficit	(116,894)	(116,240)
Total shareholders' deficiency	(4,062)	(4,278)
Total liabilities and shareholders' deficiency	142	84

Commentary:

1. The Company's working capital deficiency is $4,085,673 at April 30, 2020 (at October 31, 2019: deficiency of $4,301,324).

2. At October 31, 2019 the Company decided to suspend its provisional patent filings in jurisdictions outside the United States where it has been issued several patents. It recorded an impairment reserve of $223,143 at October 31, 2019. There were no patent related expenditures in the 3 months ended April 30, 2020; the Company recorded $2,123 of amortization expense in the period ended April 30. 2020.

   The Company believes that its patents are a valuable asset to be exploited in future through the pursuit of licensing agreements with potential strategic partners.

3. The Company continued to secure additional financing in 2020 through convertible bridge loans. Refer to the detailed commentary in Section 2 of this MD&A document.

   The balance reported as bridge loans at April 30, 2020 is $2,429,479 (at October 31, 2019: $2,599,074) and the related derivative liability balance is $795,424 (at October 31, 2019: $765,425). The Company reports accretion expense on these debentures of $295,490 (2019: $410,888), a loss on the conversion of bridge loans to share capital of $21,417 (2019: $2,308), a gain on the revaluation of the underlying derivative liabilities of $1,434,549 (2019: $585,583) and a gain on extinguishment of convertible debentures gain of $110,102 (2019: 3,181). Management primarily employs a Black Scholes valuation model for measurement purposes; for certain of the loan transactions that is has contracted for, it uses a binomial measurement model. Management acknowledges that:

   a. The cost of financing to the Company is significant; interest on the bridge loans is substantial. In Q2 2020 we reported $113,739 of interest expense (2019: $119,727).

   b. The accounting for these transactions creates complexities in our financial reporting.

   c. The judgements utilized are based on specific assumptions which, if changed, would generate different results. The significant point to note is that these charges are non-cash charges with no impact on the Company's cash flow.

4. **Operating Results:** The following table summarizes the Company's operating results for the three months ended April 30, 2020 and 2019:

Discussion of Operating Results

	Quarter ended April 30,	
	2020 ($000)	2019 ($000)
General and administration	32	58
Professional fees and salaries	92	69
Development costs (recovery)	-	(34)
Travel and entertainment	8	11
Amortization of property and equipment	7	1
Amortization of patents	2	39
Foreign exchange gain	(127)	(41)
Accretion expense	295	411
Interest expense	114	120
Financing costs	28	1
Gain on revaluation of derivatives	(1,435)	(586)
Loss on conversion of debentures	21	2
Gain on extinguishment of convertible debentures	(110)	(3)
Net expenses	(1,072)	48
Net comprehensive income (loss)	1,072	(48)
Income (loss per share)	-	-

<u>Commentary:</u>

In addition to the commentary above regarding the impact of the bridge loans on the Company's operating results, we note the following.

(a) General and Administration costs include $9,539 of rent (2019: $15,599), the Company has sublet a portion of its premises; $978 of office insurance (2019: $13,349), the Company canceled its D&O insurance in 2019; $18,405 of investor relations and filing fees (2019: $19,123); and $3,492 of other expenses (2019: $10,104)

(b) Professional fees and salaries totaled $91,782 (2019: $69,130). The components include:

(i) Professional fees relating to legal and audit related services of $28,797 (2019: $22,593).

(ii) Consulting fees of $22,875 (2019: recovery $8,358)

(iii) Salaries and benefits of $40,110 (2019: $54,394). The CEO and CFO currently receive minimal or no compensation for services provided. No compensation is being paid to the Company's directors.

Unaudited Quarterly Financial Information – Summary

Three months ended (unaudited)	Revenues	Expenses	Income (loss) in period	Loss per share
	$	$	$	$
July 31, 2018	-	(22,711)	22,711	-
October 31, 2018	-	331,264	(331,264)	-
January 31, 2019	-	1,110,303	(1,110,303)	-
April 30, 2019	-	48,088	(48,088)	-
July 31, 2019	-	554,533	(554,533)	-
October 31, 2019	-	1,119,940	(1,119,940)	-
January 31, 2020	-	1,726,023	(1,726,023)	-
April 30, 2020	-	(1,071,746)	1,071,746	-

Three months ended (unaudited)	Working capital (deficiency)	Capital assets at NBV	Other Assets	Total Assets	Shareholders' equity (deficit)
	$	$	$	$	$
July 31, 2018	(3,639,419)	7,275	427,179	605,309	(4,088,047)
October 31, 2018	(3,828,503)	9,228	396,105	710,737	(3,423,170)
January 31, 2019	(4,488,643)	8,434	364,296	473,177	(4,115,813)
April 30, 2019	(4,158,247)	7,639	326,358	379,334	(3,824,250)
July 31, 2019	(4,189,540)	6,847	149,177	189,025	(4,033,516)
October 31, 2019	(4,301,324)	2,677	20,000	83,484	(4,278,647)
January 31, 2020	(5,387,954)	70,046	18,000	296,256	(5,331,481)
April 30, 2020	4,085,673	63,120	15,877	141,860	(4,061,572)

The net income reported for the quarter ended April 30, 2020 includes non-cash related expenses with respect to accretion expense of $295,490 (2019: $410,888), a gain on revaluation of derivative liabilities of $1,434,549 (2019: $585,583), a loss on conversion of convertible debentures of $21,417 (2019:$3,181). The non-cash component of the income reported in Q2 totaled $1,227,744.

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5. RISKS AND UNCERTAINTIES

There are a number of risks which may individually or in the aggregate affect the long-term commercial success of the Company, both known and unknown. An investment in the Company should be considered speculative due to the nature of the Company's activities and its current stage of development.

Stage of Development of Technology:

The Company has made strides in advancing its technology and in developing a product portfolio and in engaging customers in joint development projects. There remains the risk that the Company must successfully complete development work on these products to have available commercially viable products which can be licensed or sold.

Customers' Willingness to Purchase:

We have entered into joint development agreements whereby our prototype products are being subjected to rigorous testing by our partners. We expect to be successful in completing remaining development work on our product portfolio. If we are successful in doing so, our partners will then have to decide the extent to which they will adopt our technology for future use for their applications. The future revenue streams for the Company are dependent upon the rate of adoption by our customers and their willingness to do so.

Patent Portfolio:

The Company has spent time and effort and incurred significant costs with respect to the maintenance and development of our intellectual property portfolio. Given the nature of IP development, the Company is subject to continuing risks that our patents could be successfully challenged and that our patent pending files may not ultimately be granted full patent status. The Company does not have extensive in-house resources so as to manage its IP portfolio in this environment and has traditionally relied heavily on its patent attorneys for these services.

Financing:

The Company has successfully raised funding over the past several years to continue to support its development initiatives and fund the Company's corporate structure and overheads. The Company must continue to source financing in order to continue to support its business initiatives.

Competitors:

The Company is subject to competition from other entities that may have greater financial resources and more in-house technical expertise.

Management Structure:

The Company is highly dependent on the services of a small number of senior management team members. If one of these individuals were unavailable, the Company could encounter a difficult transition process.

Outstanding Lawsuit:

The Company is engaged in a lawsuit with Mr. Steven Van Fleet who, until his resignation on August 17, 2018, served as a director of the Company and as the President of the Company's wholly-owned subsidiary, MAST, Inc. This matter is discussed further in Section 7 (c) - Contingencies – in this report. The outcome of this lawsuit has not been determined at this stage.

Foreign Currency Exposure:

The Company expects to sell its products and license technologies in the United States, in Canada and abroad. It has raised financing in both $CDN and $USD. The Company has not hedged its foreign currency exposure. Foreign currency fluctuations present an ongoing risk to the business.

COVID 19 Pandemic:

We reference the Company's current efforts with respect to how it is dealing with the current pandemic to protect its business and its staff as reported in Section 1 of this report. There is substantial uncertainty as to the duration of the pandemic. If the pandemic continues for an extended period of time, there will be repercussions to the Company's ongoing business which could be significant.

6. GOING CONCERN

The consolidated financial statements have been prepared on the "going concern" basis, which presumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future.

There are material uncertainties related to conditions and events that cast significant doubt about the Company's ability to continue as a going concern for a reasonable period of time in future. During the three months ended April 30, 2020 the Company reported a net income and comprehensive income of $1,071,746 (2019 – net loss and comprehensive loss of $48,088) and negative cash flow from operations of $166,230 (2019 - $177,530). The Company's working capital deficiency as at April 30, 2020 is $4,085,673 (October 31, 2019 – $4,301,324).

The Company's future success depends on the profitable commercialization of its proprietary magnetic sensor technology. There is no assurance that the Company will be successful in the profitable commercialization of its technology. Based upon its current operating and financial plans, management of the Company believes that it will have sufficient access to financial resources to fund the Company's planned operations through fiscal 2020 and beyond; however, the ability of the Company to continue as a going concern is dependent on its ability to secure additional financing and/or to profitably commercialize its technology. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from the possible inability of the Company to continue as a going concern.

If the "going concern" assumption were not appropriate for these consolidated financial statements then adjustments would be necessary to the carrying value of assets and liabilities, the reported expenses and the balance sheet classifications used; in such cases, these adjustments would be material.

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7. OTHER MATTERS

(a) Critical Accounting Policies:

The accounting policies the Company believes are critical to the financial reporting process include foreign currency translation, financial instruments, compound and hybrid financial instruments, derivative liabilities, conversion features of bridge loans, patents, impairment of long-term assets, deferred development costs, stock-based compensation and income taxes. These critical accounting policies are set forth in Note 4 to our audited consolidated financial statements as of October 31, 2019 and as updated in Note 4 to our consolidated financial statements as of April 30, 2020.

(b) Commitments:

The Company has extended its lease for premises through July 2022. The lease term is for 5 years and stipulates base monthly rental expenses of $4,005 CDN. Lease commitments are as follows – commitments less than one year of $48,060 CDN, years 2-5: $56,070 CDN.

(c) Contingencies:

The Company has agreed to indemnify its directors and officers and certain of its employees in accordance with the Company's by-laws. The Company maintains insurance policies that may provide coverage against certain claims.

On October 7, 2018, the former President of MAST, Inc. (the Company's wholly-owned subsidiary), Mr. Steven Van Fleet, filed a lawsuit against Micromem and MAST in New York State Supreme Court, Dutchess County. In the action, Mr. Van Fleet is seeking payment of $214,574 plus interest relating to alleged remuneration and expense reimbursements due to him prior to his resignation as an officer and director of Micromem and MAST on August 17, 2018. The Company answered the complaint December 7, 2018 by denying the material allegations in Mr. Van Fleet's claims. In addition, the Company interposed 7 counterclaims against Mr. Van Fleet seeking, among other things: (i) damages of not less than $2.75 million, (ii) specific performance to compel Mr. Van Fleet to comply with his contractual obligations which were required for the period of time that he served as an officer and director through to his resignation date; (iii) repayment of certain salary and expenses paid to Mr. Van Fleet; (iv) a direction for Mr. Van Fleet to turn over all Company property in his possession or control; (v) an accounting to determine all money and property belonging to the Company and/or MAST. On January 24, 2019, the Company amended its original answer and counterclaims to include, among other things, a demand for additional damages based on new information that has come to light. On February 8, 2019 Mr. Van Fleet, through his counsel, replied to and denied the material allegations in Micromem's counterclaims. The Company reports an accrual of $205,788 at April 30, 2020 with respect to alleged remuneration and expense reimbursements claimed by Mr. Van Fleet but, nonetheless, has denied the allegations in Mr. Van Fleet's claims. This matter is currently at the pre-trial stage and remains as a contingency at June 25, 2020.

In addition to the above, the Company may be subject to litigation, claims and governmental and regulatory proceedings arising in the ordinary course of business. In such cases, the Company accrues a loss contingency for these matters when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated.

(d) Off-Balance Sheet Arrangements:

At April 30, 2020, the Company has no off-balance sheet financial commitments and does not anticipate entering into any contracts of such nature.

(e) Share Capital

At April 30, 2020 the Company reports 377,034,665 common shares outstanding (2019: 281,074,704). Additionally, the Company has 5,730,000 stock options outstanding with a weighted average exercise price of $0.25 per share (2019: 5,730,000 options outstanding with a weighted average exercise price of $0.25 per share).

(f) Management and Board of Directors

There have been no changes during the three months ended April 30, 2020 to the acting officers and directors whom are engaged with the Company.

Our management team and directors, along with their year to date remuneration, is presented as below:

		2020 remuneration		
Individual	**Position**	**Cash**	**Options**	**Total**
Joseph Fuda	President, Director	9,124	-	9,124
Oliver Nepomuceno	Director	-	-	-
Alex Dey	Director	-	-	-
Brian Von Herzen	Director	-	-	-
Dan Amadori	CFO	-	-	-

(g) Transactions with Related Parties

The Company reports the following related party transactions:

(i) *Key management compensation*:

Key management personnel are persons responsible for planning, directing and controlling activities of the Company, including officers and directors. Compensation paid or payable to these individuals in the 3 month period ending April 30, 2020, is summarized as:

		2020		2019
Professional, other fees and salaries	$	6,769	$	-
Stock based compensation		-		-
	$	6,769	$	-

(ii) *Trade payables and other liabilities*:

As at April 30, 2020 and October 31,2019 the Company reports in trade payables and other liabilities, a balance owing to the former President of MAST of $193,174 which amount represents alleged outstanding wages payable; refer to Section 7(c) – Contingencies, as above.

As at April 30, 2020 and October 31, 2019 the Company includes $167,000 in trade payables and other liabilities owing to a company whose major shareholder is a director of the Company and who has also served as its Chief Technology Officer. This individual was elected as a director on February 19, 2014. The balance reported relates to alleged services provided in 2015; there have been no invoices submitted by this related party after October 31, 2015.

(iii) Convertible debentures

In May 2019, the CEO of the Company subscribed for a short-term loan of $15,000 CDN ($11,450 USD). At January 31, 2020, the loan principal was fully repaid (outstanding at October 31, 2019 – $10,000CDN; $7,582 USD).

In January 2018, the CEO of the Company provided a convertible debenture of $150,000 CDN ($114,138 USD). At April 30, 2020 $20,001 CDN ($14,379 USD) (October 31, 2019 - $52,319 CDN, 39,756 USD) in loan principal remains outstanding.

(**Liquidity and Capital Resources:**

Liquidity: We currently report negative cash flow from operations. This result will only change once we are generating sufficient revenue from either license fees, royalties or the sale of products utilizing our technology. In 2020, the Company continued to raise additional financing.

We currently have no lines of credit in place. We must continue to obtain financing from investors or from clients in support of our development projects.

We have granted to our directors, officers and employee's options to purchase shares at prices that are at or above market price on the date of grant. At April 30, 2020 there are 5,730,000 options outstanding at an average exercise price of $0.25 per share

Capital Resources: We have no commitments for capital expenditures as of April 30, 2020.

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8. SUBSEQUENT EVENTS

Subsequent to April 30, 2020:

(a) The Company realized net proceeds of $107,820 and issued a total of 6,774,053 common shares on the conversion of convertible debentures.

(b) The Company extended convertible debentures that were within 3 months of maturity date from April 30, 2020. Extension terms ranged from 3 months to 12 months.