# UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

## FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF
THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934
For The Fiscal Year Ended October 31, 2013
Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
Date of event requiring this shell report

Commission File No. 0-26005

# MICROMEM TECHNOLOGIES INC.

(Exact name of Registrant as specified in its charter)

## Ontario, Canada

(Jurisdiction of incorporation or organization)

121 Richmond Street West, Suite 304

Toronto, Ontario M5H 2K1, Canada

Tel: (416) 364-6513 Fax: (416) 360-4034

(Address of principal executive offices)

<u>Joseph Fuda</u>; 416-364-6513, <u>JFuda@micromeminc.com</u>, 121 <u>Richmond Street West</u>, <u>Suite 304 Toronto</u>, <u>On M5H 2K1</u> (Name, Telephone, E-Mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

#### None

Securities registered or to be registered pursuant to Section 12(g) of the Act:

# Common Shares without par value

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

#### Non

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

## 158,491,425 Common Shares

Indicate by check mark if the registrant is a well-known seasoned issuer as defined in Rule 405 of the Securities Act:

Yes \_\_ No\_X

If this report is an annual or transition report, indicate by check mark if the registration is not required to file a report pursuant to section 13 or 15 of the Securities Exchange Act of 1934:

Yes No X

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 X No

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#### INTRODUCTION

#### Abbreviations

Throughout this document, Micromem Technologies Inc. and/or its affiliates are referred to as "Micromem", the "Company", "we", "us" or "our".

## Forward Looking and Cautionary Statements

This Form 20-F contains certain forward-looking statements. These forward-looking statements are based on current expectations, estimates and projections about the business of our company and the industry in which we operate, our management's beliefs, and assumptions made by our management. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks" and "estimates," variations on such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions which are difficult to predict. Our actual results could differ materially from those expressed or forecasted in these forward-looking statements as a result of certain factors, including those set forth under Item 3-Key Information – Risk Factors and elsewhere in this Form 20-F.

# ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS Not Applicable.

# ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE Not Applicable.

#### ITEM 3. KEY INFORMATION

#### A. Selected Financial Data

#### Fiscal Years 2013, 2012 and 2011

The following table sets forth our selected consolidated financial data in United States dollars as of and for each of the fiscal years ended October 31, 2013, October 31, 2012 and October 31, 2011. The selected consolidated financial data has been derived from our audited consolidated financial statements. All information contained in the following table should be read in conjunction with our audited consolidated audited financial statements and the notes thereto in "Item 18-Financial Statements" and "Item 5 - Operating and Financial Review and Prospects" included elsewhere in this Annual Report on Form 20-F.

Our consolidated financial statements for the years ended October 31, 2013, 2012 and 2011 have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. Previously the Company prepared consolidated financial statements in accordance with Canadian generally accepted accounting principles ("Canadian GAAP").

#### **International Financial Reporting Standards**

# Selected balance sheet information

(all amounts in U.S. dollars)

	2013	2012	2011
Working capital (deficiency)	\$425,888	(\$1,793,217)	(\$2,239,178)
Capital Assets	13,998	5,787	10,201
Total Assets	2,166,455	1,180,278	906,346
Capital Stock	57,755,613	54,728,239	51,774,555
Shareholders' equity (deficiency)	1,536,319	(904,030)	(1,409,228)

# Selected statement of operations and deficit information (all amounts in U.S. dollars)

	2013	2012	2011
Interest and other income	-	-	\$963
Research and development expenses	160,920	229,840	(75,896)
General and administrative and other			, , ,
expenses	2,198,466	2,618,792	1,916,981
(Gain) Loss on revaluation of			
embedded derivatives (1)	3,205,752	(1,504,423)	412,563
Stock compensation expense (2)	368,790	430,856	928,497
Loss before income taxes	(5,933,928)	(1,775,065)	(3,181,182)
Provision for income taxes (recovery)	<u>-</u>	-	1,205
Net loss	(5,933,928)	(1,775,065)	3,182,387
Loss per share-basic and diluted	(0.04)	(0.01)	(0.03)
Weighted average number of basic			
and diluted shares	146,814,466	123,375,510	102,301,168
Dividends	-	_	-

- 1) (Gain) loss on revaluation of embedded derivatives as reported above relates principally to the measurement of the derivative warrant liability relating to outstanding Canadian dollar denominated common share purchase warrants. The (gain) loss as reported is a non-cash charge which is calculated in accordance with IFRS.
- 2) Stock compensation expense is a non cash expense calculated in accordance with the Black Scholes option pricing model.

#### Fiscal Years 2010 and 2009

The following table sets forth our selected consolidated financial data in United States dollars as of and for each of the fiscal years ended October 31, 2010 and October 31, 2009. The selected consolidated financial data has been derived from our audited consolidated financial statements. These consolidated financial statements have been prepared in accordance with Canadian GAAP which differ in certain respects from the principles the Company would have followed had it consolidated financial statements been prepared in accordance with U.S. GAAP. The selected consolidated financial information in the IFRS chart above should not be compared to the information in the Canadian GAAP table below as the information was prepared using different financial reporting standards.

## Canadian GAAP

#### Selected balance sheet information

(all amounts in U.S. dollars)

	2010	2009
Working capital (deficiency)	(\$1,459,460)	(\$650,044)
Capital Assets	16,686	24,442
Total Assets	568,336	2,562,479
Capital Stock	50,102,699	48,494,180
Shareholders' equity (deficiency)	(1,019,226)	1,522,839

# Selected statement of operations and deficit information

(all amounts in U.S. dollars)

,	2010	2009
Interest and other income	\$22,886	\$88,047
Research and development expenses	(106,007)	13,880
General and administrative and other		
expenses	4,699,208	2,433,537
Stock compensation expense	95,038	1,951,569
Loss before income taxes	(4,665,353)	(4,310,939)
Provision for income taxes (recovery)	9,508	
Net loss	(4,674,861)	(4,310,939)
Loss per share-basic and diluted	(0.05)	(0.05)
Weighted average number of basic		
and diluted shares	92,225,645	86,400,439
Dividends		

#### Reconciliation between Canadian GAAP and U.S. GAAP:

Canadian GAAP conforms in all material respects with U.S. GAAP except for how the Company has accounted for development expenditures reported in the fiscal years ended October 31, 2010 and 2009.

# **Currency and Exchange Rates**

Our financial statements are all expressed in United States dollars. All other financial data appearing in this Form 20-F are expressed in United States dollars with the exception of certain limited cases when reference is made to instruments denominated in Canadian dollars ("CDN \$").

Transactions that were conducted in Canadian dollars or other foreign currencies have been converted into United States dollars using the 3 month average rate of exchange per quarter which rate approximates the rate of exchange prevailing at the date of such transactions. Assets and liabilities denominated in Canadian dollars or other foreign currencies but expressed in this Form 20-F in United States dollars have been converted into United States dollars at the rate of exchange prevailing on the date of the applicable financial statement.

The following table sets forth, for the periods indicated, the high, low, end of period and average for period noon buying rates as published by the Bank of Canada, as expressed in the amount of U.S. Dollars equal to one Canadian dollar.

	2013	2012	2011	2010	2009
High for period	1.0164	1.0281	1.0583	1.0039	0.9716
Low for period	0.9348	0.9783	0.9430	0.9278	0.7692
End of period	0.9402	0.9872	1.0079	0.9885	0.9334
Average for period	0.9710	1.0046	1.0139	0.9640	0.8587

The following table sets forth, for each period indicated, the high and low exchange rates for United States dollars expressed in Canadian dollars on the last day of each month during such period, based on the Noon Buying Rate.

	February 2013	March 2013	<b>April 2013</b>	May 2013	June 2013	July 2013
High	1.0285	1.0314	1.0270	1.0371	1.0532	1.0576
Low	0.9960	1.0156	1.0072	1.0023	1.0170	1.0261
	August	September	October	November	December	January
	2013	2013	2013	2012	2012	2013
High	1.0553	1.0533	1.0456	0.0028	0.9952	1.0078
Low	1.0297	1.0237	1.0284	0.9927	0.9841	0.9839

On February 17, 2014 the noon buying rate for one Canadian dollar, as quoted by the Bank of Canada, was CDN \$1.098 = U.S. \$1.00.

# B. Capitalization and Indebtedness

Not Applicable.

## C. Reasons for the Offer and Use of Proceeds

Not Applicable.

#### D. Risk Factors

We and our investors face a number of risks, which are described below.

## **Risk Factors Related to Our Business**

## The financial statements of our company have been prepared on a going concern basis.

We have prepared our financial statements on a "going concern" basis which presumes that we will be able to realize our assets and discharge our liabilities in the normal course of business for the foreseeable future.

Our ability to continue as a going concern is dependent upon the successful commercialization of our sensor technology platforms that we currently have under development with our industry partners. Ultimately we must achieve a profitable level of operation through licensing fees, royalties and the commercial sale of our products. We will require additional financing in the interim to fund our activity.

Our consolidated financial statements have been prepared on a going concern basis do not include any adjustments to the amounts and classifications of the assets and liabilities that might be necessary should we be unable to continue in business. If the going concern assumption was not appropriate for our financial statements then adjustments would be necessary in the carrying value of assets and liabilities, the reported expenses and the balance sheet classifications used. Such adjustments could be material.

At October 31, 2013 we had \$821,283 cash on hand and our current monthly cash expenses were approximately \$175,000. Our working capital position is \$425,888 at October 31, 2013. Subsequent to October 31, 2013, through to the date of the filing of this annual report, we have raised an additional \$1,751,924 through the exercise of warrants. Additionally in January 2014 the bridge loan of \$290,014 reported as of October 31, 2013 was converted to common equity.

#### We currently have no operating revenue.

We have not yet reported commercial revenues from licensing fees, royalties or product sales. If we fail to enter into license agreements or if we do not obtain purchase orders from potential customers, we will have no revenues. If we enter into such agreements the amount of the revenues we receive will depend on the terms we are able to secure from each licensee and the ability of licensees to compete in their particular market.

## There are market risks relating to the sale of our sensor technology platforms.

We continued to develop applications of our magnetic sensor technology in 2013 working with our technical advisors, and our strategic development partners. We are pursuing joint development agreements with potential strategic partners with the expectation that we will jointly develop sensor applications for use by these potential strategic partners. We believe that these current initiatives will result in revenues and cash flow to the Company in the future but there can be no assurance when and if such revenues will be achieved.

We may face competition from larger corporations which also sell sensor technology and who have greater financial resources than the Company.

Our success will in part be determined by the following factors which have not yet been fully and completely tested nor measured: the ability of manufacturers to incorporate the technology into existing manufacturing capabilities without significant retooling and material costs, price competitiveness and the differential performance advantages of our technology.

Additionally our ability to compete successfully will depend on elements outside of our control, including the rate at which customers incorporate our technology into their products, the success of such customers in selling those products, our protection of our intellectual property, the number, nature and success of our competitors and their product introductions and general market and economic conditions. Our success will depend on our ability protect our intellectual property, to develop, introduce, and license or sell in a timely manner our technology or products incorporating our technology and to compete effectively on the basis of factors such as speed, density, die size and power consumption.

## We are not actively pursuing further development of our memory technology.

Until 2008 our Company was positioned as a developer of memory technology, specifically our Magnetic Random Access Memory (MRAM), which is a non-volatile memory technology that uses magnetic, thin film elements on a gallium arsenide substrate to store information.

Beginning in 2008 we began to shift our focus to the development of sensor based technology solutions. By 2011, we decided to no longer pursue memory technology. We wrote off all costs associated with our memory technology by 2011. We are currently attempting to sell our interests in our memory related intellectual property. To date we have not been successful in attracting a buyer for this intellectual property and there can be no assurance that we will secure a buyer.

## Failure to secure continued financing will cause our business to suffer.

Since there is no assurance that commercial revenues will be realized in future, we will need additional financing to continue our development and to successfully market our technology to potential licensees and strategic partners.

There can be no assurance that we will be able to continue to raise sufficient financing in the future and the failure to do so would affect our ability to further develop our technology platforms and to market our products to existing and new potential customers.

# Because much of our success and value depends on our ownership and use of intellectual property, our failure to protect our property could adversely affect our future growth and success.

Our success will depend on our ability to protect our intellectual property. We rely primarily on patent, copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods to protect our proprietary technology and processes. Despite our efforts to do so, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology, develop similar technology independently or design around our patents. Policing unauthorized use of our products is expensive and difficult, and we cannot be certain that all required steps we have taken will prevent misappropriation or infringement of our intellectual property.

## Intellectual property claims against us, no matter how groundless, could cause our business to suffer.

Our future success and competitive position depend in part on our ability to retain rights to our technology, including any improvements that may be made on that technology from time to time by us or on our behalf. Our technology is patented or is subject to pending patent applications in the United States and abroad and we know of no challenge that has been made either against our technology or our rights to it. We have no reason to believe that any such challenge might be made or that the grounds for any such challenge exist. If any intellectual property litigation were to be commenced against us, no matter how groundless, the result could be a significant expense to us, adversely affecting further development, licensing and sales, diverting the efforts of our technical and management personnel and, in the event of an adverse outcome, damages and possible restrictions on the further development, licensing and use of our technology. There can be no assurance that any of our pending patent applications will be issued as patents or that any issued patent will not be determined to be invalid at a later date.

# We have a history of losses, and we may continue to generate losses in future.

To date, we have operated as a product development company and have not been profitable. Unless and until we are able to successfully commercialize our technology applications, we may not be able to generate sufficient revenues in future periods and we may not be able to attain profitability.

The further development of our sensor technology may require significant additional capital which we may have to fund directly if we are unable to secure financing from development partners. Therefore, we may incur expenses without receiving equal and offsetting revenues at least until we are able to license our technology to third parties. This may result in net operating losses until we can generate an acceptable level of revenues. Further, even if we achieve operating revenues, there can be no assurance that such revenues will be sufficient to fund continuing operations.

The likelihood of the success of our business plan must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with developing and expanding early stage businesses and the competitive environment in which we operate.

# We will be dependent upon the success of a limited range of products.

The range of products we intend to commercialize is currently limited to applications of our sensor technology. If we are not successful in commercializing our technology platforms, or if there is not adequate demand for such technology or the market for such technology develops less rapidly than we anticipate, we may not have the capability to shift our resources to the development of alternative products, on a timely basis. This could limit future revenues and profitability.

# We may not realize income from the licensing of our technologies if our licensees fail to commercialize the products that incorporate these technologies.

In order to generate revenues from our sensor technology platforms, we will need to enter into licensing arrangements with third parties who can integrate our technology into products that will gain acceptance in the market. We have not yet entered into any licensing agreements, and there is no assurance that we will be able to do so on acceptable terms in future. To the extent we are successful in licensing our technology; in general we will seek upfront payments plus ongoing royalties based on anticipated commercial sales of the products into which our technology is incorporated. Our ability to realize royalties will thus depend upon the successful manufacture and commercialization of such products, which will be primarily within the control of the licensee. There is no assurance that such licensees will be successful in marketing and selling such products. In addition, licensees could decide to delay or discontinue the commercialization of products for financial or other business reasons. Even if our licensees succeed in developing products that incorporate our technology, in all likelihood a significant amount of development and testing will be required before such products can be introduced to market. Therefore we may not receive royalty income for a substantial period following the commencement of any licensing arrangements. If our licensees are unable to commercialize products on a timely basis, they may lose market share to competing or alternative technologies. Any failure by the companies to which we license our technologies to successfully develop marketable products would have an adverse effect on our future royalty payments and financial condition.

# In order to commercialize our future products, we will need to establish a sales and marketing capability.

At present, we have limited sales and marketing capability and our financial resources have been limited. We will need to add marketing and sales expertise and must also develop the necessary supporting distribution channels. Although we believe we can build the required infrastructure either in-house or through strategic relationships, we may not be successful in doing so. Failure to establish a sales force and distribution network would have an adverse effect on our ability to grow our business.

### We depend on key personnel.

Our senior managers and employees are Joseph Fuda, who serves as our Chief Executive Officer; Steven Van Fleet, who has primary responsibility for business development and who serves as President of our wholly-owned subsidiary, Micromem Applied Sensor Technology Inc (MAST) and Dan Amadori, who serves as our Chief Financial Officer. We have engaged the services of several engineering/technical consulting firms to assist in converting our development efforts to commercialization. Our success depends on our ability to retain certain of our senior management and key technical personnel and our ability to attract and retain additional highly skilled personnel in the future.

## We may be materially affected by global economic and political conditions.

Our ability to generate revenue may be adversely affected by uncertainty in the global economy and could also be affected by unstable global political conditions. Terrorist attacks or acts of war could significantly disrupt our operations and the operations of our future customers, suppliers, distributors, or resellers. We cannot predict the potential impact on our financial condition or our results of operations should such events occur.

# We may be materially affected by rapid technological change and evolving industry standards.

Short product life cycles are inherent in high-technology companies due to rapid technological change and evolving industry standards. Our future financial condition and results of operations depend on our ability to respond effectively to these changes. There can be no assurance that we will be able to successfully do so or adapt our current products to new technologies or new industry standards. In addition, our customers may be reluctant to adopt new technologies and standards or they may prefer competing technologies and standards. Because the technology market changes so rapidly, it is difficult for us to predict the rate of adoption of our technology.

## We may be materially affected by risks associated with new product development.

Our new product development is complex and requires us to investigate and evaluate multiple alternatives, as well as plan the design and manufacture of those alternatives selected for further development. Our development efforts could be adversely affected by hardware and software design flaws, product development delays, changes in operating systems and changes in industry standards. The manufacturing of new products involves integrating complex designs and processes, coordinating with suppliers for parts and components and managing manufacturing capacities to accommodate forecasted demand. If we are not successful in meeting these requirements, this could adversely affect our ability to introduce new products on a timely basis.

# Our operations may be materially affected by the risks associated with the continued developments and protection of our intellectual property.

There can be no assurance that we will be able to continue to develop new intellectual property or that we will continue to have it developed for us. We rely on a combination of U.S. patent, copyright, trademark, and trade secret laws to protect our intellectual property rights. We have decided to file patent and trademark registration applications with certain foreign governments but we may not have appropriate coverage in all jurisdictions where we may sell or license our product in future.

We enter into confidentiality and non-disclosure agreements relating to our intellectual property with our employees and consultants. Despite our efforts to protect our intellectual property rights, unauthorized parties may attempt to copy or otherwise obtain or use our intellectual property. Monitoring the unauthorized use of our intellectual property is difficult and we cannot be certain that we will be able to adequately protect our intellectual property in the future.

## There are foreign exchange risks associated with our Company.

Because we have historically raised funds in both U.S. and Canadian markets and a portion of our costs are denominated in Canadian dollars, our funding is subject to foreign exchange risks. A decrease in the value of the U.S. dollar relative to the Canadian dollar could affect our costs and potential future profitability. We do not currently hold forward exchange contracts or other hedging instruments to exchange foreign currencies for U.S. dollars so as to offset potential currency rate fluctuations.

## **Risk Factors Related to Our Common Shares**

# Our stock is subject to the penny stock regulations, which may discourage brokers from effecting transactions in the stock and adversely affect the stock's market price and liquidity

Our common shares constitute "penny stock" under applicable regulations of the Securities and Exchange Commission. The penny stock regulations impose significant restrictions on brokers who sell penny stock to persons other than established customers and institutional accredited investors. Broker-dealers participating in sales of our stock will be subject to the so called "penny stock" regulations covered by Rule 15g-9 under the Exchange Act. Under the rule, broker-dealers must furnish to all investors in penny stocks a risk disclosure document required by the rule, make a special suitability determination of the purchaser and have received the purchaser's written agreement to the transaction prior to the sale. The penny stock regulations may discourage brokers from effecting transactions in the common shares. This would decrease market liquidity, adversely affect market price and make it difficult for you to use the common shares as collateral.

# The rights of our shareholders may differ from the rights typically afforded to shareholders of a U.S. corporation.

We are incorporated under the Business Corporations Act (Ontario), also referred to herein as the OBCA. The rights of holders of our common shares are governed by the laws of the Province of Ontario, including the OBCA, by the applicable laws of Canada, and by our Articles of Incorporation and all amendments thereto, also referred to herein as the Articles, and our By-laws. These rights differ in certain respects from the rights of shareholders in typical U.S. corporations. The principal differences include without limitation the following:

Under the OBCA, we have a lien on any common share registered in the name of a shareholder or the shareholder's legal representative for any debt owed by the shareholder to us. Under U.S. state law, corporations generally are not entitled to any such statutory liens in respect of debts owed by shareholders.

With regard to certain matters, we must obtain approval of our shareholders by way of at least 66%% of the votes cast at a meeting of shareholders duly called for such purpose being cast in favor of the proposed matter. Such matters include without limitation: (a) the sale, lease or exchange of all or substantially all of our assets out of the ordinary course of our business; and (b) any amendments to our Articles including, but not limited to, amendments affecting our capital structure such as the creation of new classes of shares, changing any rights, privileges, restrictions or conditions in respect of our shares, or changing the number of issued or authorized shares, as well as amendments changing the minimum or maximum number of directors set forth in the Articles. Under U.S. state law, the sale, lease, exchange or other disposition of all or substantially all of the assets of a corporation generally requires approval by a majority of the outstanding shares, although in some cases approval by a higher percentage of the outstanding shares may be required. In addition, under U.S. state law the vote of a majority of the shares is generally sufficient to amend a company's certificate of incorporation, including amendments affecting capital structure or the number of directors. Under certain circumstances the board of directors may also have the ability to change the number of directors under U.S. state law.

Pursuant to our By-laws, two persons present in person or represented by proxy and each entitled to vote thereat shall constitute a quorum for the transaction of business at any meeting of shareholders. Under U.S. state law, a quorum generally requires the presence in person or by proxy of a specified percentage of the shares entitled to vote at a meeting, and such percentage is generally not less than one-third of the number of shares entitled to vote.

Under rules of the Ontario Securities Commission, a meeting of shareholders must be called for consideration and approval of certain transactions between a corporation and any "related party" (as defined in such rules). A "related party" is defined to include, among other parties, directors and senior officers of a corporation, holders of more than 10% of the voting securities of a

corporation, persons owning a block of securities that is otherwise sufficient to affect materially the control of the corporation, and other persons that manage or direct, to a substantial degree, the affairs or operations of the corporation. At such shareholders' meeting, votes cast by any related party who holds common shares and has an interest in the transaction may not be counted for the purposes of determining whether the minimum number of required votes have been cast in favor of the transaction. Under U.S. state law, a transaction between a corporation and one or more of its officers or directors can generally be approved either by the shareholders or a by majority of the directors who do not have an interest in the transaction. Corporations that are listed on a U.S. securities exchange or are quoted on Nasdaq may also be required to have transactions with officers and directors and other related party transactions reviewed by an audit committee comprised of independent directors.

There is no limitation imposed by our Articles or other charter documents on the right of a non-resident to hold or vote our common shares. However, the Investment Canada Act, also referred to herein as the Investment Act, as amended by the World Trade Organization Agreement Implementation Act, also referred to herein as the WTOA Act, generally prohibits implementation of a reviewable investment by an individual, government or agency thereof, corporation, partnership, trust or joint venture that is not a "Canadian," as defined in the Investment Act, unless, after review, the minister responsible for the Investment Act is satisfied that the investment is likely to be a net benefit to Canada. An investment in our common shares by a non-Canadian would be reviewable under the Investment Act if it were an investment to acquire direct control of Micromem, and the value of our assets were CDN \$5.0 million or more. However, an investment in our shares by a national of a country (other than Canada) that is a member of the World Trade Organization or has a right of permanent residence in such a country (or by a corporation or other entity that is a "WTO Investor-controlled entity" pursuant to detailed rules set out in the Investment Act) would be reviewable at a higher threshold of CDN \$344 million in assets, except for certain economic sectors with respect to which the lower threshold would apply. A non-Canadian, whether a national of a WTO member or otherwise, would acquire control of Micromem for purposes of the Investment Act if he or she acquired a majority of our common shares. The acquisition of less than a majority, but at least one-third of our common shares, would also be presumed to be an acquisition of control of Micromem. unless it could be established that Micromem was not controlled in fact by the acquirer through the ownership of voting shares. The United States is a WTO Member for purposes of the Investment Act. Certain transactions involving our common shares would be exempt from the Investment Act, including:

- an acquisition of our common shares if the acquisition were made in connection with the person's business as a trader or dealer in securities;
- an acquisition of control of Micromem in connection with the realization of a security interest granted for a loan or other financial assistance and not for any purpose related to the provisions of the Investment Act; and
- an acquisition of control of Micromem by reason of an amalgamation, merger, consolidation or corporate reorganization, following which the ultimate direct or indirect control of Micromem, through the ownership of voting interests, remains unchanged. Under U.S. law, except in limited circumstances, restrictions generally are not imposed on the ability of non-residents to hold a controlling interest in a U.S. corporation.

## U.S. shareholders may not be able to enforce civil liabilities against us.

Micromem is incorporated under the laws of the Province of Ontario. Additionally, a number of our directors and executive officers are non-residents of the U.S., and all or a substantial portion of the assets of such persons are located outside the U.S. As a result, should any investor commence an action in the U.S. against Micromem or its directors or executive officers, Micromem or its directors or officers, as the case may be, may be able to insist that any action against them take place in the jurisdiction of the Province of Ontario. In addition, if an investor were to obtain a U.S. judgment against Micromem or its directors or executive officers, there is doubt as to the enforceability of such U.S. judgment in Canada.

# We do not anticipate paying dividends.

We have never paid a dividend on our securities and we do not anticipate paying dividends in the foreseeable future.

# We may need to issue additional securities which may cause our shareholders to experience dilution.

Our Board of Directors has the authority to issue additional common shares, without par value, or other of our securities without the prior consent or vote of our shareholders. The issuance of additional common shares would dilute the proportionate equity interest and voting power of our shareholders.

# The price of our common shares and volume of our common shares may be volatile.

Our shareholders may be unable to sell a significant number of our common shares on the OTC Bulletin Board without a significant reduction in the market price of the shares.

Furthermore, there can be no assurance that we will be able to meet the listing requirements of, or achieve listing on, any other stock exchange. The market price of the common shares may be affected significantly by factors such as fluctuations in our operating results, announcements of technological innovations or new products by us or our competitors, action by governmental agencies against us or the industry in general, developments with respect to patents or proprietary rights, public concern as to the safety of products developed by us or others, the interest of investors, traders and others in public companies such as ours and general market conditions. In recent years, the securities markets in the United States and Canada have experienced a high level of price and volume volatility, and the market price of securities of many companies, particularly small capitalization companies, have experienced fluctuations which have not necessarily been related to the operating performance, underlying asset values or business prospects of such companies.

#### ITEM 4. INFORMATION ON THE COMPANY

## A. History and Development of Our Company

Micromem is a corporation formed under the laws of the Province of Ontario, Canada, with principal executive offices at 121 Richmond Street West, Suite 304, Toronto, Ontario M5H 2K1 (416.364.6513). Micromem was incorporated on October 21, 1985 as Mine Lake Minerals Inc. We subsequently changed our name to Avanti Capital Corp. on June 23, 1988, to Avanti Corp International Inc. on April 30, 1992 and to Micromem Technologies Inc. on January 11, 1999 in connection with our acquisition of Pageant Technologies Incorporated, also referred to herein as Pageant International. Our website address is <a href="https://www.micromeminc.com">www.micromeminc.com</a>. The information on our website is not part of this annual report on Form 20-F. We have included our website address in this document as an inactive textual reference only.

### The Evolution of Micromem from Memory to Sensor Based Client Solutions

Micromem Applied Sensors Technologies, Inc., our wholly-owned subsidiary ("MAST") was incorporated in 2008 in the State of Delaware. MAST was formed in connection with a contract with BAE Systems in Nashua, New Hampshire. BAE Systems is a Department of Defense trusted facility, which can only do business with U.S. entities (ITAR regulations). BAE Systems' interest was in the potential to utilize our MRAM technology in a radiation-hardened environment for military applications. At the time of contract, Micromem had not taken the MRAM from the university research environment into a foundry, so the initial contract with BAE Systems was to use the patented MRAM design and manufacture and deliver a memory cell from a GaAs foundry. During this work it was determined that the Hall sensor, which was integral to the MRAM design, had several performance characteristics that by itself, as a product, would potentially create value for MAST.

Frost & Sullivan was contracted by MAST in 2009 to assess the market opportunities for a late entry into the Hall sensor market. The Hall sensor market in 2009 was robust at an estimated \$1.9 billion USD. The market barriers were: mature market, declining margins and heavy competition. A decision was taken to not enter the Hall sensor component market for the above reasons. A decision was taken to explore the market opportunities associated with creating unique sensor based solutions that revolved around our patented Hall sensor technology. The MRAM go forward strategy remained with Micromem.

An outside marketing firm was hired to promote the Company. It was quickly learned that the uniqueness of our products made a traditional marketing firm relationship ineffective and that relationship was terminated. Promotion of the Company reverted back to the development of a MAST website and word of mouth marketing at regional technical conferences. Through these endeavors, a decision was taken to internally develop, at our own cost, proof of concepts for products that we had gleaned through our marketing to have potential market value. These included a magnetic gold sensor for drilling plug analysis, an oil condition sensor for automotive use and an oil/gas aerial exploration platform. Provisional patents were created on this work.

A potential revenue-generating opportunity emerged in August 2010 when Lux Research contacted us on behalf of their client, a world leader in oil production. They were looking for companies that could create extremely small foot print magnetic sensor solutions for down hole use in production oil fields. MAST was subsequently engaged by this client to develop a sensor platform for detecting four nanometer magnetic particles in a flowing oil stream at a concentration less than 1 ppb. Another revenue

generating opportunity came in 2011 from GSI Westwind, a supplier for high speed air bearing motors. MAST replaced the incumbent Hall sensor supplier and delivered a unique circuit board form factor that incorporated the smallest Hall sensor in the world.

It became clear at this point in the genesis of the Company that MAST had to find an effective means to disseminate its message to a larger market audience. It was now evident that a significant market space existed for companies that could leverage MEMS/Nano fabrication methodologies to create unique combinations of sensors to provide new solutions to business problems. In 2011 MAST became aware of the NineSigma Open Innovation model. Nine sigma's core services connect innovation-seeking companies to the best solutions, capabilities and partners around the world. MAST's relationship with NineSigma has provided us common ground access to the Global Fortune 1000 companies and has resulted in a robust future sales proposal pipeline and the first time in the Company's history an ability to forecast revenue.

In 2011 a decision was taken to stop research and development effort in the MRAM market space. This decision was taken in part due to the high capital demand for staying current in the rapidly changing technology and equally important, the MRAM market has not grown at the anticipated growth rates. Micromem has amassed multiple memory patents and in 2013 has begun efforts to value the patent portfolio and arrange for a sale of these assets. Integral to the MRAM design is our patented Hall sensor. MAST is carrying this valuable device forward in many of our sensor platforms.

To date, Micromem has funded virtually all of our research and development. Our main priority is to provide customers with sensor based platform solutions that address their difficult business problems. A recent study by NineSigma states that less than 3% of the Fortune 1000 global companies admit that they have sufficient in house talent and knowledge to be able to take advantage of technologies that can help them improve their business. Our sensor platform solutions address three primary areas of creating value for our clients.

- Using a MEMS and/or Nano scale pallet, we are able to combine disparate sensor modalities into a common, integrated
  solution that brings the exact tools in play in solving the target issue. Competitive solutions tend to force fit less than
  optimum sensor combinations in an effort to sell their standard offerings.
- Although our solutions are custom designed for each client, our processes leading to the solution are automated and the end result is a cost effective solution with a differentially higher return on investment for our clients.
- Our Open Innovation approach to solving client problems allows us to bring together already proven sensor technologies in different market spaces allowing us to apply them in new applications in new markets. This significantly reduces the time to revenue generation by both MAST and our client and it reduces risk of project failure.

We intend to pursue specific, definable, market segments with a multi-tiered, multi-channel approach. We intend to leverage our technologies with a licensing agreement in certain key areas and a direct sales and distribution strategy in other areas using established distributors. Our sales and revenue plan includes looking to foreign markets through established distributors or strategic partners.

## **B.** Business Overview

Prior to 2008 we were engaged in the development of memory technology. We deemphasized these continued efforts at that time and ceased all such activity by 2011. We have been actively developing our sensor technology platforms for multiple commercial applications since 2008.

Our technology combines the use of semi-conducting ferromagnetic metals with a sensor. When the magnetization of the magnetic material changes direction, the sensor senses the change in direction and records a "0" or "1". In this fashion, a bit is created that is non-volatile, based on magnetic properties.

## C. Profile at October 31, 2013

During 2013, the Company focused on moving its existing development projects forward, converting projects in its pipeline into development contracts with customers and establishing its product portfolio in its current major market verticals.

In 2013 we were successful in having certain of our development project costs partially funded by companies with whom we have negotiated product development contracts. We were also successful in securing approximately \$3.7 million of new financing consisting of the issuance of unit private placement and the exercise of warrants. Since October 31, 2013 through to the date of this Annual Report, we have secured additional financing of \$1,751,924 through the exercise of warrants.

## **Product Development Cycle:**

The product development cycle for each development project that the Company undertakes can be broken down into distinct phases:

- **Phase 1:** Initial assessment completion of initial project plan, cost and volume estimates, product specifications and tolerances, establishing working principles.
- Phase 2: Preliminary design work, specification of manufacturing processes, evaluation of manufacturing options.
- Phase 3: Sensor electronics manufacturing test methods, completion of initial prototypes for beta testing by client.
- **Phase 4:** Pilot production stage where product is certified, test protocols are established and quality processes are optimized.
- Phase 5: Commercial production.

#### **Product Portfolio:**

The core portfolio of products that the Company continues to develop, in conjunction with strategic development partners, who are paying for a portion of the development costs, includes:

- 1. Nano particle concentration sensor platforms: The initial application is to detect break through water in producing oil wells. This platform is at Phase 3 of development and is expected to move to Phase 4 in 2014, with commercial production expected by the 2014 fiscal year end. The Company has been working on this product with a major international oil company since 2010. The Company has billed and collected \$175,000 of project costs incurred to date under these working arrangements.
- 2. Enhanced secondary oil recovery platform using MAST nano particles: The initial application is to accurately measure well pressure in oil fields and the degradation of these fields. This platform is at Phase 3 of development. The Company initiated the work on Product 2 in 2012. In mid-2013 it executed a \$25.4 million development contract with an international oil company for this product. The contract stipulates successive milestones to be achieved in order to realize the full contract value. In its initial stages, we have invoiced \$87,290 of project costs incurred. The Company projects receiving payments against achieving milestones during 2014.
- 3. Power transformer oil degradation sensor: Designed to measure partial electrical discharges and advise on preventive actions in real time. This platform is at Phase 1 stage. The Company expects that it will advance to Phase 4 during 2014.
  - The Company entered into an initial development contract with Northeast Utilities in December 2013 for \$5.4 million for this product. The contract stipulates successive milestones to be achieved in order to realize the full contract value.
- 4. Integrated Analytical Lab on a Chip in Automotive Oil Pan Plug: This platform is at a crossing point between Phase 3 and Phase 4. The Company expects to advance to commercial production in 2015 pending finalization of contractual terms with a major automotive company with whom it has been negotiating during 2013.

- 5. Cement integrity sensor platform: The application is to have embedded sensor technology to permit direct assessment of the condition of cement casings in offshore oil and gas drilling. This platform is at Phase 1 stage. Over the next 18 months the Company expects to advance it to Phase 4.
- 6. Fracking sensor platform: Nanotechnology sensors capable of measuring in three dimensions the coordinates of hydraulic fractures created in the fracking process. This platform is at Phase 1 stage. Over the next 18 months, the Company expects to advance it to Phase 4.
  - The Company began pursuing discussions on Products 5 and 6 in 2013 in conjunction with a major international oil company. Development contracts are anticipated to develop within 12 18 months.
- 7. Corrosion under insulation sensor: Intended to measure pervasive corrosion of piping under insulation. This platform is at Phase 1 stage. The Company expects to advance it to Phase 4 during 2014.
- 8. Sensors to analyze wear materials in lubricating fluids: Initial application is directed at vehicle microelectromechanical systems. This platform is at Phase 1 stage. The Company expects to advance to Phase 4 during 2014.

In addition to the above listed suite of products, the Company has advanced two other product offerings:

- (a) The Company has developed a prototype production control board intended for GSI Westwind. This product was developed over a period of 24 months. In final testing during 2013, it met and exceeded all of the tolerance specifications stipulated by GSI. In October 2013 we were advised that GSI had decided to cease operations of their high speed DC motor development due to competitive technology pressures. Accordingly, the Company did not proceed with commercial production orders from GSI. As a result, we have decided to assess the broader marketplace for this product and have engaged one of our independent directors to conduct a detailed market study and an appropriate marketing campaign to engage other potential customers for this technology.
- (b) The Company has committed development time and funding over the past three years to a sensor based breast cancer detection device. The work completed by the Company to date has put this product category at a Phase 2 level of development. In 2012 and in early 2013 the Company pursued discussions with a Croatian-based group of investors. It was intended that this group would fund ongoing development work in 2013 but those negotiations eventually stalled. Accordingly, at this juncture this product is not staged for further development work until the original investor group returns or other investors are identified.

#### **Intellectual Property:**

The Company has been active in building its intellectual property portfolio during 2013. Our new business model of developing unique sensor platforms for our clients allow for the Company to choose opportunities that end up with both robust revenue projections and a strong intellectual property position. We have engaged a Washington, D.C. based law firm to assist us in these efforts.

# **Development Costs:**

Under IFRS, the Company capitalizes product development costs incurred on those development projects which it anticipates realizing future commercial revenues. It reports these development costs on its consolidated balance sheet. If the Company determines that the realization value is less than the carrying value reported in the consolidated balance sheet, the Company will write-down the carrying value accordingly.

The Company reported \$928,077 as deferred development costs in its consolidated balance sheet as of October 31, 2013. These are costs that it has incurred with respect to these development projects and contracts that it continues to pursue in the immediate term and for which it expects to generate future revenue streams. These costs relate primarily to the following active projects:

- a) The nanoparticle concentration sensor platform (Product 1);
- b) The enhanced secondary oil recovery platform (Product 2);
- c) The integrated analytical lab on a chip in the automotive oil pan plug platform (Product 3);

d) The power transformer oil degradation sensor (Product 4).

The changes in deferred development costs in 2013 are summarized as below:

Balance reported at October 31, 2012	\$718,163
Additional project costs incurred in fiscal 2013	677,445
Recovery of deferred development costs	(233,290)
Writedown of project costs	(234,241)
Balance reported at October 31, 2013	<u>\$928,077</u>

The costs recovered in 2013 from customers consist primarily of a \$100,000 recovery on Product 1 and an \$87,000 recovery on Product 2.

At October 31, 2013, the Company has written down to nominal value the development costs previously incurred with respect to the GSI Westwind project which was terminated in October 2013 as it continues to explore alternative markets for this product. It has also written down the development costs incurred with respect to the breast cancer detection sensor platform product which it had been developing for initial use in Eastern Europe and other costs relating to an aerial survey sensor platform – the Company has decided to no longer pursue these projects.

## **Derivative Warrant Liability:**

In October 2013 the Company decided to convert all outstanding Canadian denominated warrants to US dollars and, in every case, the warrant holder accepted this conversion. The Company took this step because of the confusion that our shareholders expressed in interpreting the required treatment and reporting of our derivative warrant liability obligations (these are non-cash liabilities) under IFRS reporting. With this change and the decision to only issue warrants in the future which are denominated in US dollars, the derivative warrant liability is eliminated from our consolidated statement of financial position at October 31, 2013.

# **Changes to Our Board of Directors and Management:**

Our 2012 Annual Meeting of shareholders was held on Friday, November 29, 2013. Salvatore Fuda, Andrew Brandt, Joseph Fuda, David Sharpless, Steven Van Fleet, Oliver Nepomuceno, Larry Blue and Alex Dey were reelected to serve on our Board of Directors. Messrs. Salvatore Fuda, Joseph Fuda, Dan Amadori and Steven Van Fleet continue to serve as officers of the Company. On December 1, 2013 Craig Carlson was appointed to serve on our Board of Directors.

# **Equity Financing Transactions:**

In 2013 the Company completed a series of private placement financings with investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. The Company received gross proceeds of \$2,910,532 and issued a total of 16,106,957 common shares. Additionally 16,106,957 common share purchase warrants with an average price of \$0.24 were attached to the private placements completed during 2013. All warrants issued in 2013 have a 12 month term from issue date.

The Company extended the expiration date on a total of 11,829,029 common share purchase warrants which would have otherwise expired in 2013. These warrants were extended for a period of 12 months in each case. The Company changed the strike price on 3,673,032 warrants extended from \$0.17 to \$0.21 and other strike prices remained unchanged.

In 2013, the Company repaid one bridge loan of \$141,253. At October 31, 2013, it reports one outstanding bridge loan in the amount of \$290,014. Subsequent to October 31, 2013 this bridge loan was converted into common shares and common share purchase warrants.

In the 2012 fiscal year, the Company completed a series of private placement financings with arms' length investors. The Company received gross proceeds of \$1,040,899 and issued a total of 6,344,899 common shares. In addition, a total of 6,344,899 common share purchase warrants with an average price of \$0.17 were attached to the private placements completed during 2012. All warrants issued in 2012 have a 12 month term from issue date.

The Company extended the expiration date on a total of 15,267,087 common share purchase warrants which would have otherwise expired in 2012. The expiration dates were extended for a period of 6 to 12 months in each case from the original

expiration date. The Company changed the strike price of 429,686 warrants from \$1.20 to \$0.80 and changed the strike price of 1,666,667 warrants from \$0.15 to \$0.19. Other strike prices remained unchanged.

In 2012 the Company secured four additional bride loans totaling \$714,359; two of these loans were converted into common shares prior to October 31, 2012 through the issuance of 1,860,080 common shares valued at \$226,900. At October 31, 2012, the balance outstanding on the two remaining term loans was \$442,934.

## **Intangible Assets and Patents:**

Intangible assets comprise the costs which the Company has capitalized relating to the technical expertise and know-how that the Company has developed with respect to the commercialization efforts relating to its sensor technology. In 2012, the Company determined that it had sufficiently advanced its expertise and product knowledge relating to the general commercialization efforts for its sensor technology in multiple industry vertical applications. We anticipate that we will realize commercial economic benefits from the exploitation of these intangible assets in future. Accordingly, we reported \$96,761 (2012 = \$116,113) of intangible assets at October 31, 2013, representing direct costs incurred with respect to such assets less amortization expense.

We believe that protection of our intellectual property is important to our ability to generate revenues from our technology in the future. We hold issued patents and pending patent applications have also entered into confidentiality and other agreements with third parties and our employees to protect our intellectual property and trade secrets. We intend to continue to actively pursue the protection of our intellectual property. Our management will determine from time to time the jurisdictions where protection is appropriate. This determination will be based on a number of factors including the state of development of our technology, the importance of a particular market for our technology, the costs of pursuing patent protection in a jurisdiction and our financial position at the time.

In 2013, we continued our activity with respect to advancing certain provisional patents relating to projects that are underway with current assignments and projects with our development partners as described above. We capitalized \$44,825 of legal fees associated with this work.

With respect to our memory related patents for which we have no immediate plans to further develop, we began in 2013 to attempt to monetize these through the potential sale of such patents.

## **Environmental Matters:**

We are subject to various environmental protection regulations imposed by the government in the jurisdiction where we conduct our development work. We are not aware of any current or pending environmental protection laws or regulations that would have a material impact on our capital expenditure requirements or competitive position.

# D. Organizational Structure

In November, 2007, the Company incorporated Micromem Applied Sensors Technology, Inc. ("MAST") as a Delaware-based wholly-owned subsidiary. MAST has an office in New York City and is being managed by Steven Van Fleet, its President and a director of Micromem. MAST is pursuing a number of potential strategic joint development agreements with industry partners.

In October, 2008, the Company incorporated 7070179 Canada Inc. as a wholly-owned subsidiary. On October 31, 2008, the Company assigned its rights, title and interest in certain of its intellectual property which it previously held directly to 707179 Canada Inc. in exchange for common shares of this wholly-owned subsidiary.

We have a wholly-owned subsidiary, Pageant International, which was incorporated under the laws of the Turks & Caicos Islands and continued to Barbados on May 25, 2001. Pageant International has a wholly-owned subsidiary, Pageant Technologies (USA) Inc., a corporation incorporated in the State of Utah. Pageant Technologies USA has been inactive since 2002.

We have a wholly-owned subsidiary, Memtech International Inc., incorporated under the laws of the Bahamas, which in turn has a wholly-owned subsidiary, Memtech International (USA) Inc., a corporation incorporated in the State of Delaware. We also have a wholly-owned subsidiary Micromem Holdings (Barbados) Inc. These subsidiaries have been inactive since inception.

## E. Property, Plant and Equipment

We maintain our corporate headquarters in Toronto, Ontario, Canada. We occupy 2,500 square feet of commercial office space pursuant to a lease that we executed in 2012 and which extends for five years through 2017.

The Company made \$13,200 capital expenditures in 2013; no capital expenditures were made in 2012 or 2011.

## ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

#### ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

This section of the Form 20-F has been prepared to provide a more substantive discussion of our business and to assist the reader in analyzing the audited consolidated financial statements for the years ended October 31, 2013, October 31, 2012 and October 31, 2011. This discussion and analysis of financial condition and results of operations should be read in conjunction with the consolidated financial statements and related notes in this Annual Report, which are prepared in accordance with IFRS and are stated in United States dollars.

## A. Operating Results

The following table sets forth certain selected financial information of our Company:

# Selected statement of operations and deficit information

	2013	2012	2011
Interest and other income		-	-
Administration	378,497	694,617	462,827
Professional and other fees and salaries	1,572,515	1,507,891	1,064,655
Travel and entertainment	210,852	150,924	91,885
Other expenses	197,522	495,200	221,960
Stock compensation expense	368,790	430,856	928,497
(Gain) Loss on derivatives	3,205,752	(1,504,423)	412,563
Loss for the year	5,933,928	1,775,065	3,182,387
Loss per share - basic and diluted	0.04	0.01	0.03

#### Selected balance sheet information

	2013	2012	2011
Working capital (deficiency)	\$425,888	(1,793,217)	(2,239,178)
Other Assets	1,110,431	889,187	829,950
Total Assets	2,166,455	1,180,278	906,346
Shareholders' equity (deficiency)	1,536,319	(904,030)	(1,409,228)

## Fiscal 2013 Compared to Fiscal 2012

The Company reported a loss of \$5,933,928 in 2013 versus a loss of \$1,775,065 in 2012. The increased loss was primarily the result of a non-cash loss on derivatives of \$3,205,752 (2012: a non cash gain on derivatives of \$1,504,423).

The Company's working capital position improved significantly in 2013 in comparison to the prior year. This is the result of the Company's success in raising additional financing in 2013, in reducing its expenses and also the result of eliminating the derivative warrant liability from its consolidated balance sheet in 2013.

The Company capitalized \$677,445 of development costs relating to several development projects in 2013 (2012: \$71,557) and recovered \$233,290 of costs incurred from customers. At October 31, 2013 the Company reported \$928,077 of deferred development costs on its balance sheet (2012: \$718,163).

In the fiscal year ended October 31, 2013, the Company reported net additions of \$44,825 to its patents (2012: \$26,650). The Company reported \$71,595 of patents on its consolidated balance sheet at October 31, 2013 (2012: \$49,124).

The Company reported no expenditures on intangible assets in 2013 (2012: Nil). At October 31, 2013, the Company reported \$96,761 of intangible assets on its consolidated balance sheet (2012: \$116,113).

The Company reported no interest income in 2013 (2012: nil). It recorded, but fully reserved a total of \$20,105 (2012: \$20,300) of interest income on a secured promissory note outstanding.

Administration costs include office rent, communication costs, insurance, filing fees and costs associated with the Annual General Meeting. These costs were comparable in 2013 and 2012. In 2013, the Company also reported \$19,381 of accretion expense relating to its convertible debentures versus \$187,671 in 2012 - the Company began phasing out of its convertible debentures in 2013. Finally, the Company incurred \$72,756 in 2012 with respect to preliminary costs associated with upgrading its listing status in Canada; it incurred no such costs in 2013.

Professional and other fees and salaries totaled \$1,572,515 in 2013 (2012: \$1,507,891). These costs include: audit related fees of \$149,478 (2012: \$118,475), legal expenses of \$154,340 (2012: \$48,951), management fees of \$637,011 paid to the Chairman, the CEO and the CFO (2012: \$514,262), staff salaries and benefits of \$443,078 (2012: \$407,450), other expenses of \$7,512 (2012: \$15,594) and consulting fees of \$181,096 (2012: \$403,158). Consulting fees have several significant components: the Company paid fees of \$140,790 to third party advisors who assisted the Company in investor relations in 2013 (2012: \$104,003); it paid the President of MAST a total of \$230,896 in 2013, of which approximately \$27,000 has been expensed in 2013; the balance of the total expenditure has been capitalized in several projects and these costs are included in deferred development costs (in 2012, \$183,000 of costs were expensed); and assistance in IFRS reporting of \$23,238 (\$35,565 in 2012).

Stock compensation expense, calculated in accordance with the Black Scholes option pricing model was \$368,790 in 2013 relating to the issuance of 2,170,000 stock options awarded to directors, officers and staff (2012: expense of \$430,856 relating to the issuance of 2,000,000 stock options).

In 2013 other expenses included amortization costs relating to property, equipment, patents and intangible assets of \$24,341 (2012: \$23,766) foreign exchange expense of \$12,261 (2012: \$7,537) and the Company expensed \$160,920 of project development costs incurred (2012: \$229,840). In 2012 the Company recovered a total of \$72,004 of costs previously expensed relating to patents and to the promissory note receivable; in 2013 no such recoveries were reported.

Under IFRS the Company accounts for the outstanding Canadian denominated warrants and the conversion feature on its bridge loans as embedded derivative liabilities, measuring these liabilities using the Black Scholes option pricing model. These liabilities are revalued at each quarter end. In 2013, the Company reported a net (non-cash) expense of \$3,205,752 (2012 a net (non-cash) gain of \$1,504,423) on these embedded derivatives.

# Fiscal 2012 Compared to Fiscal 2011

The Company remained in pre revenue mode at October 31, 2012. The Company reported no interest income in 2012 (2011: \$963). It recorded, but fully reserved a total of \$20,300 (2011: \$20,220) of interest income on a secured promissory note outstanding.

The Company capitalized \$71,557 of development costs relating to several development projects in 2012 (2011: \$554,685) and recovered \$nil costs previously reported (2011: \$129,600) for a net increase in capitalized development costs of \$71,557 (2011: \$425,085). At October 31, 2012 the Company reported \$718,163 of deferred development costs on its balance sheet (2011: \$646,606).

In the fiscal year ended October 31, 2012, the Company reported \$26,650 of additions to its patents (2011: \$8,017); in 2011 the Company wrote down the value of its patents by \$129,033 which related to technology that the Company had no further plans to develop. The Company reported \$49,124 of patents on its balance sheet at October 31, 2012 (2011: \$37,678).

The Company reported no expenditures on intangible assets in 2012 (2011: an additional \$135,465 relating to costs incurred with respect to technical expertise for its sensor technology). At October 31, 2012, the Company reported \$116,113 of intangible assets on its balance sheet (2011: \$135,465).

In 2012, the Company reported \$694,617 of general and administrative costs compared to \$462,827 in 2011. These costs include office rent, communication costs, insurance, filing fees, costs associated with the annual general meeting. These specific costs were comparable between years. In 2012, the Company also incurred \$72,756 of sponsorship costs (2011: nil) as it began to explore upgrading its existing status on the Canadian stock exchanges and reported approximately \$188,000 (2011: \$12,000) of non - cash accretion expense relating to the convertible debentures.

Professional and other fees and salaries totaled \$1,507,891 in 2012 (2011: \$1,064,655). The Company reported the following costs: audit related fees of \$118,475 (2011: \$88,937), legal expenses of \$48,951 (2011: \$64,919), management fees of \$514,262 paid to the Chairman, the CEO and the CFO (2011: \$467,132), staff salaries and benefits of \$407,450 (2011: \$424,306), other expenses of \$15,594 (2011: \$19,114) and consulting fees of \$403,158 (2011: \$571). The increase in consulting fees has several components: the Company paid fees of \$104,003 to third party advisors who assisted the Company in investor relations in 2012 (2011: none); the Company paid the President of MAST a total of \$261,134 in 2012 (in 2011 \$180,000 which was capitalized in intangible assets and deferred development costs, thus no expense reported in 2011); and incurred costs for assistance in conversion to IFRS reporting of \$35,565 in 2012 (nil in 2011); and other of \$2,456 (2011: \$571).

Stock compensation expense, calculated in accordance with the Black Scholes option pricing model was \$430,856 in 2011 relating to the issuance of 2 million stock options awarded to directors, officers and staff (2011: expense of \$928,497 relating to the issuance of 7,475,000 stock options).

In 2012 the Company expensed \$229,840 of research and development related costs whereas the Company recovered \$75,896 of such costs in 2011 relating to the settlement of supplier invoices at a discount. It recovered \$42,004 of patent costs previously expensed relating to the settlement of legal expenses settled at a discount (2011: nil).

Travel and entertainment costs increased to \$150,924 in 2012 from \$91,885 in 2011. The Company incurred higher costs associated with its dealings with an increasing number of shareholders in 2012.

In 2012 the Company recovered \$30,000 of the Unotron promissory note that it had previously fully reserved (2011: recovery of \$110,000). The remaining balance outstanding on the promissory note at October 31, 2012 is \$101,853 (2011: \$111,553) which balance is fully reserved.

In 2011 the Company reported a write down of its patents of \$129,033 and a charge of \$185,564 relating to the modification of the conversion features on several bridge loans that it had previously secured. It reported no similar expenses in 2012.

Foreign exchange/transaction losses in 2012 were \$7,537 (2011: \$43,215). The exchange rate between the U.S. and the Canadian dollar fluctuated less in 2012 than in 2011.

Under IFRS, the Company accounts for the outstanding Canadian dollar denominated warrants as a derivative warrant liability and measures them using the Black Scholes option pricing model. This liability is revalued at each quarter end. The Company reported a recovery on revaluation of derivative warrant liability of \$1,327,524 in 2012 (2011: expense of \$412,563).

## Unaudited quarterly financial information

(all amounts in United States dollars)

Quarter ended	Total	Net Income (Loss)	Loss Per share
	Revenues		Basic and diluted
October 31, 2013	-	(\$5,239,307)	(0.03)
July 31, 2013	-	(261,031)	-
April 30, 2013	-	(17,012)	-
January 31, 2013		(416,078)	
October 31, 2012	-	\$1,606,175	.01
July 31, 2012	-	(507,079)	•
April 30, 2012	-	(2,849,835)	(0.02)
January 31, 2012	-	(24,327)	<u> </u>
October 31, 2011	-	(\$1,854,751)	(0.02)
July 31, 2011	585	(237,795)	*
April 30, 2011	39	(507,225)	(0.01)
January 31, 2011	339	(582,616)	(0.01)

The net income (loss) has varied significantly between quarters in 2012 and in 2013, the result of the required re-measurement of derivative warrant liability at each quarter end under IFRS reporting, which re-measurement is a non-cash item.

In October 2013 the derivative warrant liability was eliminated. The Company recorded a non-cash charge of \$5,225,000 relating to the elimination of this derivative warrant liability in the quarter ended October 31, 2013.

## B. Liquidity and Capital Resources:

### Liquidity

We have not yet realized commercial revenues from the exploitation of our technology platforms. We currently have no cash flow from operations and will have none until we license or directly produce and sell products utilizing our technology platforms.

We currently have no lines of credit and must obtain equity financing from investors and from persons who hold outstanding options and warrants in order to meet our cash flow needs until we can generate revenues. At October 31, 2013 we had \$821,283 cash on hand (2012: \$245,029) and our monthly cash expenses approximated \$175,000. Our working capital position at October 31, 2013 was \$425,888 (2012: working capital deficiency of (\$1,793,217)). Since October 31, 2013, we have raised an additional \$1,751,924 through the exercise of common share purchase warrants. Additionally the outstanding bridge loan of \$290,014 at October 31, 2013 was converted to common equity in January 2014.

We have granted to our directors, officers and other employees a number of options to purchase shares at prices that are at or above market price on the date of grant. None of the optionees has any obligation to exercise their options and there can be no guarantee that we will realize any funds from these options.

We have issued common share purchase warrants as part of the Unit private placement financings. None of the warrant holders have any obligation to exercise their warrants which, in general, expire 12 months after issuance if unexercised. There can be no guarantee that we will realize any funds from these outstanding warrants.

## **Capital Resources**

We made \$13,200 of capital expenditures in 2013 and made no expenditures on capital equipment during the 2012 and 2011 fiscal years.

## C. Research and Development:

Under IFRS, research costs are expensed in the period incurred. Development expenses are expensed as incurred unless they meet the criteria for deferral and amortization under IFRS, which criteria is the translation of research findings or other knowledge into a plan for the technology prior to commercial production or use.

#### D. Trend Information:

The market applications for "smart" sensors is expanding; there are potential applications that could be utilized in virtually every industry vertical.

Our prospects for commercial revenues are dependent upon the successful completion of all milestones in the development contracts that we have renewed to date, obtaining additional development contracts with new customers and upon the customers deciding to proceed with commercial orders once these development contracts are successfully completed.

## E. Off-Balance Sheet Arrangements:

We are not party to any off-balance sheet arrangements except for operating lease commitments. In addition, we have no unconsolidated special purpose financing or partnership entities.

## F. Tabular Disclosure of Contractual Obligations:

A summary of our financial commitments as of October 31, 2013 is as below:

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Convertible debt obligations	290,014	290,014	-	-	_
Operating lease obligations	204,086	43,733	120,253	-	-
Purchase obligations	150,000	150,000	-	-	-
Total:	644,100	483,747	120,253	-	-

In addition to these financial commitments, the Company has management agreements with its senior executives which are operative on a month to month basis. At October 31, 2013 these agreements stipulate the following monthly obligations for the Company's senior management team:

Chairman	\$12,500
President	13,333
President, MAST	18,000
CFO	12,500

## G. Critical Accounting Policies:

Our significant accounting policies are set forth in our consolidated financial statements, which should be read in conjunction with management's discussion of our critical accounting policies and estimates set forth below.

Our consolidated financial statements for the period have been prepared in accordance with IFRS which, in our case conforms in all material respects with U.S. GAAP except for the accounting for development expenditures reported, for intangible assets, warrant modification and modification of the conversion feature of bridge loans reported in the fiscal years ended October 31, 2013, 2012 and 2011.

We have not yet realized commercial revenues from the exploitation of our technology. Under IFRS, research costs are expensed in the period incurred. Development expenses are expensed as incurred unless they meet the criteria for deferral and amortization under IFRS which is the translation of research findings or other knowledge into a plan for the technology prior to commercial production or use. Under U.S. GAAP all development expenditures are expensed as incurred. As at October 31, 2013, the Company capitalized \$928,077 (2012: \$718,163) of development costs and capitalized \$96,761 (2012: \$116,113) as intangible assets under IFRS.

In the year ended October 31, 2011, the Company modified the expiration date of warrants which would have otherwise expired in 2011. Under U.S. GAAP, this amount has been recorded as an increase in paid in capital and a corresponding offset to retained earnings. Under IFRS, a charge of \$293,020 is included below net loss in the determination of shareholders' equity.

In the year ended October 31, 2011, the Company modified the conversion feature of two bridge loans. Under IFRS, the first loan was considered an extinguishment and issuance of new debt but no gain or loss was recognized as the carrying value of the extinguished debt was not materially different from the modified debt instrument. The second loan did not meet the criteria for extinguishment and as such was treated as a renegotiation. Under U.S. GAAP, the Company evaluated whether the change in conversion feature represented an embedded derivative that required separation. Under U.S. GAAP, no beneficial conversion feature exists and under IFRS a \$185,564 charge was recorded to retained earnings with an offsetting charge to contributed surplus to reflect the value of the more favorable conversion feature.

Management is required to make estimates and assumptions which can affect the reported balances. In determining estimates of net recoverable amounts and net realizable values, or whether there has been a permanent impairment in value, we rely on assumptions regarding applicable industry performance and prospects, as well as general business and economic conditions that prevail and are expected to prevail. Assumptions underlying asset valuations are limited by the availability of reliable comparable data and the uncertainty of predictions concerning future events.

Accounts recorded in foreign currency have been converted to United States dollars as follows: current assets and current liabilities at the prevailing exchange rates at the end of the year; other assets at historical rates; revenues and expenses are translated at the three month average monthly exchange rate per quarter which rate approximates the rate of exchange prevailing at the transaction dates; and gains and losses resulting from the fluctuation of foreign exchange rates are included in the determination of income.

#### H. Commitments:

Summary of commitments:	Date executed:
A. Research collaboration agreements Revised Licensed Agreement, University of	
Toronto	June 2005
B. Operating Leases	June 2012
C. Consulting and Employment Contracts	
(1) Chairman of the Board of Directors (a)	January 2011
(2) President (a)	May 2009
(3) President, MAST INC. (a)	May 2010
(4) CFO(a)	May 2009
D. Other Commitments	None

(a) Month-to-month commitments at October 31, 2013.

## **Research Collaboration Agreements:**

The Company executed a revised license agreement with the University of Toronto in 2005 relating to research work completed on its (MRAM) memory technology. The license agreement stipulated royalty payments capped at \$1 million in the event that the Company was successful in generating commercial revenues from the sale of the licensing of its memory technology to third parties. To date the Company has not generated any commercial revenues from the exploitation of its memory technology. It decided in 2011 to suspend any further pursuit or development of its memory technology.

Currently, the Company is attempting to sell its intellectual property relating to its memory technology; to date, the Company has been unsuccessful in doing so. If the Company does realize proceeds on the sale of this asset it may have an obligation payable to the University of Toronto under the terms of its 2005 license agreement.

### **Operating leases:**

We have operating lease commitments which expire in June 2017 for the real property lease of our corporate headquarters.

### Other commitments:

None.

# I. Contingencies:

- A. We have agreed to indemnify our directors and officers and certain of our employees in accordance with our By-laws. We maintain insurance policies that may provide coverage against certain claims.
- B. As described above, the Company could have obligations to the University of Toronto under the Revised License Agreement which it executed in 2005.
- C. In 2013 the Company recovered \$181,780 of accounts payable balances, recorded in previous years, relating to third party vendors whose accounts the Company has disputed. The Company has concluded that these amounts are not payable. In the event it is determined that these amounts are payable the Company would incur these costs.

## J. Translation of Foreign Currencies:

Our functional and reporting currency is the United States dollar. Accounts recorded in foreign currency have been converted to United States dollars as follows: Monetary assets and liabilities are translated at exchange rates at the consolidated balance sheet dates; non-monetary assets are translated using the historical rate of exchange in effect at the translation dates; revenues and expenses are translated using the three month average rate of exchange per quarter, which rate approximates the rate of exchange prevailing at the transaction dates; and gains and losses resulting from the translation are included in the determination of net loss for the period.

# ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

#### A. Directors and Executive Officers

The Directors and Executive Officers of Micromem as at February 18, 2014 are set forth below:

Name	<u>Age</u>	Position
Salvatore Fuda	79	Chairman of the Board of Directors
Joseph Fuda	52	President, Chief Executive Officer and Director
Dan Amadori	62	Chief Financial Officer
Steven Van Fleet	59	Director and President of MAST, Inc.
Andrew Brandt	75	Director
David Sharpless	63	Director
Larry Blue	57	Director
Oliver Nepomuceno	44	Director
Alex Dey	70	Director
Craig Carlson	58	Director

Salvatore Fuda has served as Chairman of the Board of Directors of Micromem since January 11, 1999 and a Director of Micromem since 1992. He served as President and Chief Executive Officer from June 2000 through to February 13, 2002. From 1992 to January 11, 1999 he also served as Secretary of Micromem. He served as President and Chief Executive Officer of Ontex Resources Limited (TSE) from 1986 to December 1998 and as Chairman of the Board of Ontex Resources Limited until 2008. He has served as Chairman of the Board of Directors and as a director of Echo Energy Canada Inc. from 2002 - 2009. He also served as Chairman of the Board of Leader Capital Corp. He is the father of Joseph Fuda.

Joseph Fuda has been President, Chief Executive Officer and Director since February 13, 2002. Previously he served as Manager of Strategic Alliances for Micromem since February 2001. Prior thereto, he served as a consultant to Micromem since November 2000. Prior thereto he served as a Vice-President and a Director of IPO Capital Corp since April 1999. He was a director of Leader Capital Corp. until June 2007 and currently also serves as a director of Echo Energy Canada Inc. until June 2009 and of Echo Power Generational Inc.

Dan Amadori has served as Chief Financial Officer of Micromem since June 2004. He has also served as Chief Financial Officer of Leader Capital from June 2004 – March 2009. He served as a Director and Chair of the Audit Committee of Ontex Resources between September 2003 and March 2005. He served as CFO of Echo Power Generation Inc. from June 2004 - March 2008. He served as a director of Hydrive Technologies Inc. from 2004-2008 and as Chair of the Audit Committee of Hydrive from 2006-2008. He served as a Director and CFO of XGEN Ventures Inc. between November 2005 and September 2009. He was appointed as Chairman of Kingsway Arms Retirement Residences in August 2011. He is President of Lamerac Financial Corp., a financial advisory firm and has held that position since October 1988. Mr. Amadori is a Chartered Accountant and holds an MBA from the Ivey School of Business.

Steven Van Fleet has served as a technology consultant to a number of companies. He was the principal of the R&V Group LLC, an RFID business consulting and technology development company until 1996. Between 1999 and 2003 he served as Program Director for the Silent Commerce/Smart Packaging Initiative at International Paper Company. From January 1999 to November 1999, he was Program Director for Process and Product Uniformity and from March 1996 to December 1998 he was the Director for Control Systems Development at International Paper in Cincinnati, Ohio. He is also presently on the Board of Overseers for the Massachusetts Institute of Technology Auto ID Center. Mr. Van Fleet has been a director of Micromem since 2002 and has served as President of MAST since 2008.

Andrew Brandt was Chairman of the Board of Directors and Chief Executive Officer of the Liquor Control Board of Ontario from February 1991 to January 2006. Prior to his appointment to the Liquor Control Board of Ontario, Mr. Brandt served as Leader of the Ontario Progressive Conservative Party from 1987 to 1990. He has previously served as the Minister of Industry and Trade, Minister of Environment and Mayor of Sarnia, Ontario. Mr. Brandt has served as a director of Micromem since June 2000.

David Sharpless is the Chairman and CEO of Maverick Inc., a private consulting and investment firm and the Chairman and CEO of New Carbon Economy Venture Management Inc., a private company which manages a number of investments in "green"

technology companies. He was the Chairman and CEO of TrustMark Auto Group Inc. a CNSX listed company and the Chairman of Hunter Keilty Muntz and Beatty Limited, a firm of international insurance brokers based in Toronto and the Vice Chairman of its successor, HKMB Hub International Ltd. Prior to joining Hunter Keilty Muntz and Beatty Limited in 2000, his career spanned more than 25 years as a business lawyer with Blake, Cassels & Graydon and as a senior leader in international finance. He has served as a director of Micromem since 2001.

Larry Blue is an independent consultant on emerging technologies. Previously he was the President of New Vision Display, Inc., responsible for Global Sales and Marketing. NVD was spun out of Multek Technologies Inc., a subsidiary of Flextronics, where he was a Vice President and General Manager of their Printed Electronics business. Previously he was President of Hi-G-Tek Inc. a privately-held technology company based in Maryland. Previously he was the Vice President and General Manager of Symbol Technologies Inc. Previously Mr. Blue had senior management roles with Hughes Network Systems and with IBM in Research Triangle Park. He has served as a Director of the Company since 2005.

Oliver Nepomuceno has served as a director of Micromem since June 26, 2006. He is a resident of Switzerland and continues to serve as a Financial Advisor with a private wealth management company located in Switzerland.

Alex Dey is a retired business man and was elected as a director on September 24, 2010. He was the sole proprietor of Alex Dey, Chartered Accountants until July 31, 2004.

Craig Carlson is the Managing Director of the Carlson Group LLC, an advisory group based in Boston Massachusetts serving the global automotive industry. Previously he was the CEO and Managing Director of S.I.Automotive LLC between 2003 - 2006. He was a senior vice president with Arthur D Little, a Global Management and Technology Consulting organization, between 1989-2003. Previously he was a district/zone manager with General Motors Corporation between 1977-1989. He joined the Micromem Board of Directors on December 1, 2013.

There are no arrangements or understandings between any director and any other person pursuant to which the director was selected as a director or executive officer. Each director holds office until the next annual meeting of shareholders or until his or her successor is elected or appointed, unless his or her office is earlier vacated according to the provisions of our By-laws or the *Business Corporations Act* (Ontario).

Other than a father/son relationship between Salvatore Fuda (father) and Joseph Fuda (son), there is no family relationship between any director or executive officer and any other director or executive officer.

# B. Compensation

	Annual Compensation		Long-Term Compensation		
				Awards	
Name and Principal Position	Fiscal Year	Salary (US\$)	Bonus (US\$)	Other Annual Compensation (US\$)	Securities Under Options Granted (#)
Joseph Fuda Chief Executive Officer	2011 2012 2013	160,000 190,000 318,000	- -	- - -	2,000,000 <sup>3</sup> 30,000 <sup>1</sup>
Salvatore Fuda, Chairman of the Board of Directors	2011 2012 2013	150,000 150,000 147,000	-	- - -	1,000,000 <sup>3</sup> 110,000 <sup>1</sup> 140,000 <sup>2</sup>
Andrew Brandt Director	2011 2012 2013		- - -	- - -	350,000 <sup>3</sup> 125,000 <sup>1</sup> 140,000 <sup>2</sup>
David Sharpless Director	2011 2012 2013	-	- - -	-	450,000 <sup>3</sup> 190,000 <sup>1</sup> 140,000 <sup>2</sup>
Steven Van Fleet Director and President of MAST, Inc.	2011 2012 2013	180,000 261,000 231,000	-	-	1,000,000 <sup>3</sup> 500,000 <sup>1</sup> 140,000 <sup>2</sup>
Dan Amadori Chief Financial Officer	2011 2012 2013	150,000 175,000 180,000	-	-	$1,000,000^3$ $190,000^1$ $140,000^2$
Larry Blue Director	2011 2012 2013	-	-	- -	$500,000^{3}$ $190,000^{1}$ $140,000^{2}$
Oliver Nepomuceno Director	2011 2012 2013	- - -	-	- - -	$350,000^{3}$ $190,000^{1}$ $140,000^{2}$
Alex Dey Director	2011 2012 2013	- - -	-	- - -	$225,000^{3}$ $-$ $140,000^{2}$
Craig Carlson Director	2011 2012 2013	-	-	-	- 300,000 <sup>4</sup>

## **Notes:**

- 1. Each option entitles the holder to purchase one common shares at a price of \$0.35 per share prior to expiration in April 2017.
- 2. Each option entitles the holder to purchase one common share at a price of \$0.30-\$0.27 CDN per share prior to expiration between January and September 2018.
- 3. Each option entitles the holder to purchase one common share at a price of \$0.20 per share prior to expiration in October 2016.
- 4. Each option entitles the holder to purchase one common share at a price of \$0.35 per share prior to expiration in October 2018.

Options are offered to directors, executive officers and employees to purchase our common shares at an exercise price equal to or above the market price for the common shares at the date that the options are granted. These options are approved by the Compensation Committee. None of the directors have agreements that provide for benefits upon termination of service.

In 2013, a total of 610,000 options were forfeited cancelled. In 2013 options were granted to directors, officers and employees as follows: in January 2013 a total of 1,090,000 options were granted at a price of \$0.30; in September 2013, a total of 780,000 options were granted at a price of \$0.27 per option; in October 2013, a total of 300,000 options were granted to a consultant at a rate of \$0.35 per option.

In March 2012, 2,720,000 options were cancelled. In April 2012 a total of 2,000,000 options were granted to directors, officers and employees at an exercise price of \$0.35 per option.

## C. Board Practices:

All matters pertaining to our financing, contractual arrangements and Management and Director compensation are approved by the Board of Directors. The members of the Board of Directors are appointed to a one-year term at our Annual General Meeting.

Our Board of Directors meets on an as required basis during the fiscal year. In 2013 our Board of Directors met formally in February 2013. The Board was also convened informally as of each quarter end.

Our Audit Committee met on a quarterly basis during fiscal 2013 for the purpose of approving and recommending to the Board the quarterly financial statements and our yearend financial statements. In addition, our Audit Committee receives regular periodic reports from management.

Our Compensation Committee met informally as required in 2013 and met formally in October 2013. Our Compensation Committee approves Management and Director compensation and all stock option grants for recommendation to the Board of Directors.

Our Disclosure Committee met as required in 2013 to review our various press release disclosures and to monitor our general practices relating to our disclosure requirements.

## **Audit Committee**

The Board of Directors has appointed an Audit Committee consisting of three independent directors. The members of the Audit Committee are Andrew Brandt, Oliver Nepomuceno and David Sharpless (Chairman), each of whom serves in such capacity until the Board of Directors' next annual meeting. The Audit Committee is responsible for the integrity of our internal accounting and control systems. The committee receives and reviews our financial statements and makes recommendations thereon to the Board of Directors prior to its approval by the full Board of Directors. The Audit Committee communicates directly with our external auditors in order to discuss audit and related matters whenever appropriate. In 2013 the Audit Committee met formally on January 23, 2012, February 24, 2013 and October 1, 2013 and informally in June, 2013.

## **Compensation Committee**

The Board of Directors has appointed a Compensation Committee which meets on executive compensation matters as and when required. Our Compensation Committee includes Andrew Brandt, an outside director as Chairman, Oliver Nepomuceno and Alex Dey, as outside directors.

#### Disclosure Committee

The Board of Directors has appointed a Disclosure Committee whose primary responsibility is to ensure timely and accurate disclosure of all relevant information in accordance with the various securities regulations. Our Disclosure Committee includes Salvatore Fuda, the Company's Chairman, and Alex Dey, an outside director.

## D. Employees

We have six employees, three of which serve in a management capacity and three of which serve in an administrative capacity. This includes the Chief Executive Officer and President, the Chief Financial Officer and the President of MAST and three support staff, all (except for the President of MAST) of whom work from our executive offices in Toronto, Canada. All research and development is outsourced to third parties. We consider our relations with our employees to be satisfactory.

#### E. **Share Ownership**

NAME	SHARES OWNED	OPTIONS HELD	OPTION EXERCISE PRICE	EXPIRATION DATE	% OF TOTAL
Joseph Fuda	231,947	2,000,000	\$0.20	10/31/2016	1.43%
Chief Executive		30,000	\$0.35	04/10/2017	(2,261,947)
Officer and					
Director					
Salvatore Fuda	5,198,501 <sup>2</sup>	1,000,000	\$0.20	10/31/2016	4.10%
Chairman of the		110,000	\$0.35	04/10/2017	(6,448,501)
Board of Directors		75,000	\$0.30	01/22/2.18	
and Director		65,000	\$0.27	09/16/2018	
Andrew Brandt	16,500	350,000	\$0.20	10/31/2016	0.40%
Director		125,000	\$0.35	04/10/2017	(631,500)
		75,000	\$0.30	01/22/2.18	
		65,000	\$0.27	09/16/2018	
David Sharpless	100,000	450,000	\$0.20	10/31/2016	0.56 %
Director		190,000	\$0.35	04/10/2017	(880,000)
		75,000	\$0.30	01/22/2018	
		65,000	\$0.27	09/16/2018	
Steven Van Fleet	-	1,000,000	\$0.20	10/31/2016	1.00 %
Director and		500,000	\$0.35	4/15/2012	(1,640,000)
President of		75,000	0.30	01/22/2.18	
MAST, Inc.		65,000	\$0.27	09/16/2018	
Dan Amadori	612,517 <sup>3</sup>	1,000,000	\$0.20	10/31/2016	1.20 %
Chief Financial		190,000	\$0.35	04/10/2017	(1,942,517)
Officer		75,000	\$0.30	01/22/2018	
		65,000	\$0.27	09/16/2018	
Larry Blue	193,600	500,000	\$0.20	10/31/2016	0.65%
Director	•	190,000	\$0.35	04/10/2017	(1,023,600)
		75,000	\$0.30	01/22/2018	
		65,000	\$0.27	09/16/2018	
Oliver	953,572	350,000	\$0.20	10/31/2016	1.00%
Nepomuceno		190,000	\$0.35	04/10/2017	(1,633,572)
Director		75,000	\$0.30	01/22/2018	
		65,000	\$0.27	09/16/2018	
Alex Dey	693,425 <sup>4</sup>	125,000	\$0.35	04/5/2016	0.67%
Director		100,000	\$0.20	10/31/2016	(1,058,425)
	-	75,000	\$0.30	01/22/2018	
		65,000	\$0.27	09/16/2018	
Craig Carlson	_	300,000	\$0.35	10/25/2018	0.02% (300,000)

Calculated based on shares owned plus options held as a percentage total of shares outstanding as of October 31, 2013, plus options held.

5,103,611 shares are held by a corporation wholly owned by a trust established for the benefit of members of Salvatore Fuda's family.

Amadori.

<sup>&</sup>lt;sup>4</sup> 254,863 shares are held by a corporation wholly owned by Mr. Dey.

#### ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

## A. Major Shareholders:

No shareholder holds greater than 5% of the common shares outstanding. As of the date of this Annual Report approximately 58% (94,832,406) of the issued and outstanding common shares are held by Canadian investors; approximately 21% (34,335,872) of the issued and outstanding shares are held by U.S. investors; and approximately 21% (34,335,871) are held by investors outside of Canada and the U.S.

### **B.** Other Related Party Transactions:

The Company reports the following related party transactions:

(a) Chairman: The Chairman receives cash compensation on a month to month basis calculated at an annual rate of \$150,000 CDN.

In 2013 the Chairman was awarded a total of 140,000 stock options at an average price of 0.29 CDN per share (2012 - 100,000 stock options at an average price of 0.35 per share; 2011 - 1,000,000 stock options at an average price of 0.20 per share).

The total compensation paid to the Chairman during the year ended October 31 was \$146,599 of cash compensation and \$21,163 of stock based compensation (2012 - \$149,565 of cash compensation and \$23,697 of stock based compensation; 2011 - \$152,326 of cash compensation and \$118,038 of stock based compensation).

In August 2011 the Chairman converted \$112,500 of compensation received to a unit private placement consisting of one common share and one common share purchase warrant. A total of 703,125 units were issued under this private placement.

## (b) Management and consulting fees:

Included in professional fees, other fees and salaries as reported are management and consulting fees paid or payable to individuals (or companies controlled by such individuals) who served as officers and directors of the Company. The total compensation paid to such parties during the year ended October 31, 2013 was \$729,369 (of which \$202,820 was capitalized to deferred development costs) of cash compensation and \$148,141 of stock based compensation (2012 - \$625,831 of cash compensation and \$352,225 of stock based compensation; 2011 - \$494,806 (of which \$90,000 was capitalized to intangible assets) of cash compensation and \$678,721 of stock based compensation.

In 2013 these parties were awarded a total of 980,000 options at an average price of \$0.29 CDN per share (2012 - 1,525,000 options at an average price of \$0.35 per share; 2011 - 5,750,000 options at an average price of \$0.20 per share)

In 2011 the Company assigned the promissory note receivable to an officer of the Company in conjunction with outstanding and unpaid fees due to that officer. During 2012, a total of \$30,000 received from the borrower was paid directly to that officer under the assignment agreement. The balance owing to the officer of the Company at October 31, 2012 was \$56,500, which was paid in fiscal 2013.

In February 2012 an officer subscribed for \$50,000 as a Unit private placement consisting of one common share (at a price of \$0.35 per share) and one common share purchase warrant (at a price of \$0.44 per share). A total of 142,858 Units were subscribed for.

## ITEM 8. FINANCIAL INFORMATION

#### A. Consolidated Statements and Other Financial Information

Our consolidated financial statements for the years ended October 31, 2013, 2012 and 2011 have been prepared in accordance with IFRS. Prior to 2011, the Company prepared consolidated financial statements in accordance with Canadian GAAP.

We have never paid a dividend on our securities. We do not anticipate paying dividends in the foreseeable future.

As of October 31, 2013 and as of February 19, 2014 there were no legal proceedings.

# B. Significant Changes

Since October 31, 2013 the Company has raised an additional \$1,751,924 through Unit private placement financings and through the exercise of warrants. There has been no other significant change in our financial position since October 31, 2013. Additionally the bridge loan outstanding at October 31, 2013 was converted to common equity in January 2014.

#### ITEM 9. THE OFFER AND LISTING

The table below sets forth the high and low sales prices for common shares in U.S. Dollars as reported for the periods specified. Our fiscal year ends October 31. Our common shares are traded in Canada on the CNSX under the symbol MRM.

Our common shares are traded in the United States and are quoted on the OTC Bulletin Board. The common shares are quoted under the symbol MMTIF.OTCBB.

Period	High	Low
Last six months:		
February 2014	1.06	0.67
January 2014	1.45	0.75
December 2013	1.33	0.46
November 2013	0.52	0.44
October 2013	0.582	0.22
September 2013	0.22	0.18
Last eight quarters:		
Q1 2014	1.45	0.44
Q4 2013	0.582	0.18
Q3 2013	0.22	0.16
Q2 2013	0.25	0.16
Q1 2013	0.20	0.14
Q4 2012	0.24	0.14
Q3 2012	0.33	0.14
Q2 2012	0.32	0.13
Last five years:		
2013	1.33	0.16
2012	0.49	0.10
2011	0.34	0.07
2010	0.65	0.13
2009	1.75	0.13
2008	2.60	0.31

On February 14, 2014, the last reported sale price for our common shares on the OTC Bulletin Board was \$0.85.

ITEM 10. ADDITIONAL INFORMATION

## A. Share Capital

Our authorized capital consists of an unlimited number of common shares, of which 158,491,425 shares were issued and outstanding as of October 31, 2013, and 2,000,000 special, redeemable, voting preference shares, referred to herein as special shares, none of which were outstanding, as of October 31, 2013.

Additionally the Company has 11,475,000 stock options outstanding with a weighted average exercise price of \$0.24 (2012: 9,915,000 options outstanding with a weighted average exercise price of \$0.24) and a total of 29,761,012 outstanding warrants to acquire common shares with a weighted average exercise price of \$0.28 (2012: 19,692,968 outstanding warrants with a weighted average exercise price of \$0.27).

# B. Memorandum and Articles of Incorporation

# Articles of Incorporation Incorporation Details and Objects of Micromem Technologies Inc.

Micromem Technologies Inc. was incorporated under the laws of the Province of Ontario, Canada, on October 21, 1985 as Mine Lake Minerals Inc. We subsequently changed our name to Avanti Capital Corp. by filing Articles of Incorporation of Amendment on June 23, 1988 and to AvantiCorp International Inc. on April 30, 1992 before becoming Micromem Technologies Inc. on January 14, 1999. The Articles of Incorporation of Incorporation place no restrictions on the nature of the business to be carried on by Micromem.

# **Summary of Directors Powers and Authorities**

The rights, duties, powers and authorities of our Board of Directors are set out in the Articles of Incorporation and By-laws and the statutory provisions of the *Business Corporations Act* (Ontario). The following is a selected summary of the Articles of Incorporation, By-laws and applicable provisions of the Business Corporations Act (Ontario) as they relate to selected rights, duties, powers and authorities of our Board of Directors.

The Articles of Incorporation provide for a minimum of three and a maximum of 12 directors. The Business Corporations Act (Ontario) prescribes that an offering corporation must have a minimum of three directors, at least twenty five percent (25%), or if they are less than 4, at least one of whom are Canadian residents and at least one third of whom are not officers or employees of us or our affiliates. The Board of Directors may, between annual shareholders meetings, appoint one or more additional directors to serve until the next annual shareholders meeting provided that the number of directors so added may not exceed by one-third (1/3) the number of directors required to have been elected at the last annual meeting of shareholders.

The Chairman of the Board of Directors or any one director may call a meeting upon the provision of forty-eight hours notice to each director in the manner prescribed in our By-laws. Any such notice shall include the items of business to be considered at the meeting. A majority of the directors constitute a quorum provided that half of those directors present are Canadian residents. Business cannot be transacted without a quorum. A quorum of directors may vote on any matter of business properly brought before the meeting provided that where a director is a party to a material contract or proposed material contract or has a material interest in the matter to be considered, such director must disclose his or her interest at the earliest possible date, request the conflict be noted in the minutes of the meeting, and with a few limited exceptions enumerated in the By-laws, refrain from voting on the matter in which the director has a material interest. There is no limitation on the Board of Directors to vote on matters of their remuneration provided such remuneration is disclosed in the financial statements and annual shareholder proxy materials.

The Board of Directors has broad borrowing powers and may, without authorization from the shareholders:

- borrow money on the credit of Micromem;
- issue, re-issue, sell or pledge debt obligations of Micromem;
- subject to restrictions respecting financial assistance prescribed in the Business Corporations Act (Ontario), give a guarantee on behalf of Micromem to secure the performance of an obligation of any person; and

• mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of Micromem, owned or subsequently acquired, to secure any obligation of Micromem.

A person is qualified to be or stand for election as a director provided such person is at least 18 years of age, is not a bankrupt and is not found to be of unsound mind by a court in Canada or elsewhere. There is no requirement for a director to hold common shares.

#### **Securities of Micromem**

Holders of our common shares will be entitled to receive notice of, attend and vote at all meetings of the shareholders of Micromem. Each common share carries one vote at such meetings. In the event of the voluntary or involuntary liquidation, dissolution or winding-up of Micromem, after payment of all outstanding debts, the remaining assets of Micromem available for distribution will be distributed to the holders of our common shares. Dividends may be declared and paid on our common shares in such amounts and at such times as the directors shall determine in their discretion in accordance with the Business Corporations Act (Ontario). There are no pre-emptive rights, conversion rights, redemption provisions or sinking fund provisions attaching to the common shares. Common shares are not liable to further calls or to assessment by Micromem; provided, however, that pursuant to the provisions of the Business Corporations Act (Ontario), Micromem has a lien on any common share registered in the name of a shareholder or the shareholder's legal representative for a debt owed by the shareholder to Micromem.

Holders of special shares are entitled to receive notice of, attend and vote at all meetings of the shareholders of Micromem. Each special share carries one vote at such meetings. In the event of the voluntary or involuntary liquidation, dissolution or winding-up of Micromem, after payment of all outstanding debts, the holders of the special shares shall be entitled to receive, before any distribution of any part of the assets of Micromem among the holders of any other shares, the amount paid up on the special shares. The special shares are redeemable at the option of Micromem for the amount paid up on the shares. Dividends may not be declared or paid on the special shares and transfer of the Special Shares is restricted without the approval of the Directors of Micromem and the prior written consent of the Ontario Securities Commission. The number of special shares that may be issued and outstanding at any time is limited to 500,000. There are no pre-emptive rights, conversion rights or sinking fund provisions attaching to the special shares. Special shares are not liable to further calls or to assessment by Micromem; provided, however, that pursuant to the provisions of the Business Corporations Act (Ontario), Micromem has a lien on any special shares registered in the name of a shareholder or the shareholder's legal representative for a debt owed by the shareholder.

# Rights and Privileges of Shareholders

Only the registered holders of our common shares and special preference shares on the record date are entitled to receive notice of and vote at annual and special meetings of shareholders. Where the items of business affect the rights of shareholders other than the holders of common shares, a special majority of two-thirds of the votes cast by the affected shareholders at the meeting called for such purpose is required to approve the item of business. Beneficial holders of common shares and special shares are also entitled to receive proxy materials in respect of meetings of shareholders in accordance with Canadian Securities Administrators National Instrument 54-101, provided that such proxies are limited in scope to instructing the registered shareholder (usually a brokerage house) on how to vote on behalf of the beneficial shareholder. There are no restrictions on the number of shares that may be held by non-residents other than restrictions set out in the *Investment Canada Act* (Canada). See "Additional Information - D. Exchange Controls".

There are no provisions in the By-laws regarding public disclosure of individual shareholdings. Notwithstanding this, applicable Canadian securities legislation requires certain public disclosure of persons owning or acquiring common shares in excess of 10% of a corporation's issued and outstanding share capital.

#### C. Material Contracts

The Company originally negotiated employment contracts with its Chairman in 2005 and its senior management team in 2008.

In 2010 the Company entered into a month to month contract with its President and CFO at the expiration of the contract signed in 2008. These month to month arrangements continue at October 31, 2013.

In 2011 the Company entered into a month to month contract with the President of MAST at the expiration of the contract signed in 2008. This month to month arrangement continues at October 31, 2013.

In 2011 the Company entered into a month to month contract with its Chairman at the expiration of the contract signed in 2005. This month to month arrangement continues at October 31, 2013.

The total monthly commitment under these month to month arrangements is \$56,333 at October 31, 2013.

# D. Exchange Controls

As of the date hereof, we are not aware of any governmental laws, decrees or regulations in Canada that restrict the export or import of capital, including, but not limited to, foreign exchange controls, or that affect the remittance of dividends or other payments to nonresident holders of our common shares.

We are not aware of any limitations under the laws of Canada or the Province of Ontario, or in the Articles of Incorporation or any other of our constituent documents on the right of nonresidents of Canada or persons who are not Canadian citizens to hold and/or vote common shares.

#### E. Taxation

## **Certain Canadian Income Tax Consequences**

This discussion under this heading summarizes the principal Canadian federal income tax consequences of acquiring, holding and disposing of common shares for a shareholder who is not a resident of Canada but is a resident of the United States and who will acquire and hold a common share as capital property for the purposes of the Income Tax Canada, also referred to as the Canadian Tax Act. This summary does not apply to a shareholder who carries on business in Canada through a permanent establishment situated in Canada or performs independent personal services in Canada through a fixed base in Canada if the shareholder is effectively connected with such permanent establishment or fixed base. This summary is based on the provisions of the Canadian Tax Act and the regulations there under and on an understanding of the administrative practices of Canada Customs & Revenue Agency, and takes into account all specific proposals to amend the Canadian Tax Act or regulations made by the Minister of Finance of Canada as of the date hereof. It has been assumed that there will be no other relevant amendments of any governing law although no assurance can be given in this respect. This discussion is general only and is not a substitute for independent advice from a shareholder's own Canadian and US tax advisors.

The provisions of the Canadian Tax Act are subject to income tax treaties to which Canada is a party, including the Canada-United States Income Tax Convention (1980), as amended.

#### Dividends on common shares and Other Income

Under the Canadian Tax Act, a non-resident of Canada is generally subject to Canadian withholding tax at the rate of 25 percent on dividends paid or deemed to have been paid to him or her by a corporation resident in Canada. We are responsible for the withholding of tax at the source. The Canada-United States Income Tax Convention (1980) limits the rate to 15 percent if the shareholder is a resident of the United States and the dividends are beneficially owned by and paid to such shareholder, and to 5 percent if the shareholder is also a corporation that beneficially owns at least 10 percent of the voting stock of the payor corporation.

The amount of a stock dividend (for tax purposes) would generally be equal to the amount of our paid up or stated capital and increased by reason of the payment of such dividend. We will furnish additional tax information to shareholders in the event of

such a dividend. Interest paid or deemed to be paid on our debt securities held by non-Canadian residents may also be subject to Canadian withholding tax, depending upon the terms and provisions of such securities and any applicable tax treaty.

The Canada-United States Income Tax Convention (1980) generally exempts from Canadian income tax dividends paid to a religious, scientific, literary, educational or charitable organization or to an organization constituted and operated exclusively to administer a pension, retirement or employee benefit fund or plan, if the organization is a resident of the United States and is exempt from income tax under the laws of the United States.

# Dispositions of Common Shares

Under the Canadian Tax Act, a non-resident of Canada is subject to Canadian tax on taxable capital gains, and may deduct allowable capital losses, realized on a disposition of "taxable Canadian property". common shares will constitute taxable Canadian property of a shareholder at a particular time if the shareholder used the shares in carrying on business in Canada, or if at any time in the five years immediately preceding the disposition 25 percent or more of the issued shares of any class or series in the capital stock of Micromem belonged to one or more persons in a group comprising the shareholder and persons with whom the shareholder did not deal at "arm's length" and in certain other circumstances.

The Canada-United States Income Tax Convention (1980) relieves United States residents from liability for Canadian tax on capital gains derived on a disposition of shares unless:

the value of the shares is derived principally from "real property" in Canada, including the right to explore for or exploit natural resources and rights to amounts computed by reference to production, the shareholder was resident in Canada for 120 months during any period of 20 consecutive years preceding, and at any time during the 10 years immediately preceding, the disposition and the shares were owned by them when they ceased to be resident in Canada, or the shares formed part of the business property of a "permanent establishment" that the holder has or had in Canada within the 12 months preceding the disposition.

## **Certain United States Federal Income Tax Consequences**

The following is a general summary of certain United States federal income tax consequences, under current law, generally applicable to a US Holder (as defined below). This summary does not address all potentially relevant United States federal income tax matters and it does not address consequences peculiar to persons subject to special provisions of United States federal income tax law, such as those described below as excluded from the definition of a US Holder. United States alternative minimum tax considerations are not addressed in this summary. In addition, this summary does not cover any state, local or foreign tax consequences, nor any U.S. federal gift, estate or generation-skipping transfer tax consequences. (Certain, but not all, foreign tax consequences are described above under "Taxation - Certain Canadian Income Tax Consequences.")

The following summary is based upon the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations, published Internal Revenue Service ("IRS") rulings, published administrative positions of the IRS, and court decisions that are currently applicable, any of which could be materially and adversely changed, possibly on a retroactive basis, at any time. This summary does not consider the potential effects, both adverse and beneficial, of any recently proposed legislation which, if enacted, could be applied (possibly on a retroactive basis) at any time (including, without limitation, changes in applicable tax rates).

This summary is for general information only and it is not intended to be, nor should it be construed to be, legal or tax advice to any holder or prospective holder of common shares, and no opinion or representation with respect to the United States federal income tax consequences to any such holder or prospective holder is made. Accordingly, holders and prospective holders of common shares should consult their own tax advisors about the federal, state, local, and foreign tax consequences of purchasing, owning and disposing of common shares of the Company.

#### **CIRCULAR 230 DISCLOSURE**

ANY TAX STATEMENT MADE HEREIN REGARDING ANY U.S. FEDERAL TAX IS NOT INTENDED OR WRITTEN TO BE USED, AND CANNOT BE USED, BY ANY TAXPAYER FOR PURPOSES OF AVOIDING ANY PENALTIES. ANY SUCH STATEMENT HEREIN IS WRITTEN IN CONNECTION WITH THE MARKETING OR PROMOTION OF THE TRANSACTION TO WHICH THE STATEMENT RELATES. EACH TAXPAYER SHOULD SEEK ADVICE BASED ON THE TAXPAYER'S PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR.

#### **US Holders**

As used herein, a "US Holder" means an owner of common shares who is a citizen or individual resident (as defined under United States tax laws) of the United States; a corporation or other entity taxable as a corporation created or organized in or under the laws of the United States or of any political subdivision thereof; an estate the income of which is taxable in the United States irrespective of source; or a trust if (a) a court within the United States is able to exercise primary supervision over the trust's administration and one or more United States persons have the authority to control all of the substantial decisions of the trust or (b) the trust was in existence on August 20, 1996 and has properly elected to continue to be treated as a United States person. This summary does not address the tax consequences to, and "US Holder" does not include, tax-exempt persons or organizations; qualified retirement plans, individual retirement accounts and other tax-deferred accounts; financial institutions; insurance companies; real estate investment trusts; regulated investment companies; entities subject to the U.S. corporate conversion rules; broker-dealers; U.S. tax expatriates; non-resident alien individuals or entities; persons or entities that have a "functional currency" other than the US dollar; persons who hold common shares as part of a straddle, hedging or conversion transaction; and persons who acquire their common shares as compensation for services. This summary is limited to US Holders who own common shares as capital assets and who hold the common shares directly (e.g., not through an intermediary entity such as a corporation, partnership, LLC or trust). This summary does not address the consequences to a person or entity of the ownership, exercise or disposition of any options, warrants or other rights to acquire common shares.

### Distributions to US Holders Who Own Common Shares

Subject to the discussion below concerning the potential status of the Company (or any of its subsidiaries that are classified as corporations for United States federal income tax purposes ("Related Entities")) as a "passive foreign investment company" ("PFIC"), the gross amount of any distribution by the Company (including any Canadian taxes withheld therefrom) with respect to common shares generally should be included in the gross income of a US Holder as foreign source dividend income to the extent such distribution is paid out of current or accumulated earnings and profits of the Company, as determined under United States federal income tax principles. To the extent that the amount of any distribution exceeds the Company's current and accumulated earnings and profits in that taxable year, the distribution is treated as a tax-free return of capital to the extent of the US Holder's adjusted tax basis in the common shares. Thereafter, to the extent that such distribution exceeds the US Holder's adjusted tax basis in the common shares, it is taxed as a capital gain.

Dividends received by non-corporate US Holders may be subject to United States federal income tax at lower rates (generally 15%) than other types of ordinary income in taxable years beginning on or before December 31, 2013, if certain conditions are met. These conditions include neither the Company nor a Related Entity being classified as a PFIC (discussed below), the Company being a "qualified foreign corporation", the US Holder's satisfaction of a holding period requirement, and the US Holder not treating the distribution as "investment income" for purposes of the investment interest deduction rules.

In the case of US Holders that are corporations, distributions from the Company generally are not eligible for the dividends received deduction.

### Dispositions of Common Shares of the Company

Subject to the discussion below regarding PFICs, gain or loss, if any, realized by a US Holder on the sale or other disposition of common shares generally is subject to United States federal income taxation as capital gain or loss in an amount equal to the difference between the US Holder's adjusted tax basis in the common shares and the amount realized on the disposition. Net capital gain (i.e., capital gain in excess of capital loss) recognized by a non-corporate US Holder upon a sale or other disposition of common shares that have been held for more than one year is generally subject to a maximum United States federal income tax rate of 15% in taxable years beginning on or before December 31, 2013. Deductions for capital losses are subject to limitations.

### US Anti-Deferral Regimes

There are two regimes applicable to foreign corporations under United States federal income tax law that potentially may apply to the Company - the "controlled foreign corporation" ("CFC") regime and the PFIC regime.

Generally, a foreign corporation is not a CFC unless more than fifty percent (by vote or value) of its stock is owned by "U.S. Shareholders" (generally, United States persons who have ten percent or more of the votes of the foreign corporation). This classification generally results in the inclusion of certain income of the CFC in the U.S. Shareholders' income as a deemed dividend. If the Company were a CFC, the United States federal tax consequences summarized herein could be materially and adversely different.

PFIC status is not conditioned on a certain level of ownership of the foreign corporation by United States persons, however. The Company or any Related Entity would be considered a PFIC if during any taxable year, 75% or more of its gross income consists of certain types of "passive" income, or if the average value during a taxable year of its "passive assets" (generally, assets that generate passive income) is 50% or more of the average value of all assets held by it. Passive income generally includes items such as dividends, interest, rents and royalties, although there are various "look through" rules that treat dividends from related persons, for example, as non-passive under certain conditions.

If the Company is classified as a PFIC, a US Holder is subject to increased United States federal income tax liability in respect of gain recognized on the disposition of his, her or its common shares or upon the receipt of certain distributions, unless such person makes a "qualified electing fund" election to be taxed currently on his, or her or its *pro rata* portion of the Company's income and gain (whether or not such income or gain is distributed in the form of dividends or otherwise), and the Company provides certain annual statements which include the information necessary to determine inclusions and assure compliance with the PFIC rules. As an alternative to the foregoing rules, a US Holder may make a "mark-to-market" election to include in income each year as ordinary income an amount equal to the increase in value of his, her or its common shares for that year or to claim a deduction for any decrease in value (but only to the extent of previous mark-to-market gains).

The CFC and PFIC rules are very complex. The Company offers no opinion or representations as to its status as a CFC or PFIC for the current or any prior or future tax years. US Holders should consult their own U.S. tax advisors with respect to the CFC and PFIC issues and their applicability to such Holder's particular situation.

### Foreign Tax Credit

A US Holder who pays (or has withheld from distributions) Canadian income tax with respect to the ownership or disposition of the common shares may be entitled, at the option of the US Holder, to either a deduction or a tax credit for such foreign tax paid or withheld. Generally, it will be more advantageous to claim a credit because a credit reduces United States Federal income taxes on a dollar-for-dollar basis, while a deduction merely reduces the taxpayer's income subject to tax. This election is made on a year-by-year basis and applies to all foreign taxes paid by (or withheld from) the US Holder during that year.

There are significant and complex limitations that apply to the credit, among which is the general limitation that the credit cannot exceed the proportionate share of the US Holder's United States Federal income tax liability that the US Holder's foreign source income bears to his or its worldwide taxable income. In the determination of the application of this limitation, the various items of income and deduction must be classified into foreign and domestic sources. Complex rules govern this classification process. In addition, this limitation is calculated separately with respect to specific "baskets" of income. Foreign taxes assigned to a particular basket generally cannot offset United States tax on income assigned to another basket. Unused foreign tax credits can generally be carried back one year and carried forward ten years. The availability of the foreign tax credit and the application of the limitations on the credit are fact specific and US Holders should consult their own U.S. tax advisors regarding their ability to utilize foreign tax credits in light of their individual circumstances.

### **Currency Fluctuations**

For United States federal income tax purposes, the amount received by a US Holder as payment with respect to a distribution on, or disposition of common shares, if paid in Canadian dollars, is the US dollar value at the date of the payment, regardless of whether the payment is later converted into US dollars. In such case, the US Holder may recognize additional ordinary income or loss as a result of currency fluctuations between the date on which the payment is made and the date the payment is converted into US dollars.

### F. Dividends and Paying Agents

Not applicable.

# G. Statement by Experts

Not Applicable.

# H. Documents on Display

We have filed the documents referred to herein and other information with the SEC, the Ontario Securities Commission and the Alberta Securities Commission. You may inspect and copy such material at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of such material from the SEC at prescribed rates by writing to the Public Reference Section of the SEC, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms.

The SEC maintains an Internet website at <a href="www.sec.gov">www.sec.gov</a> that contains reports, proxy statements, information statements and other material that are filed through the SEC's Electronic Data Gathering, Analysis and Retrieval ("EDGAR") system. Documents filed with the Ontario Securities Commission and the Alberta Securities Commission can be accessed through an Internet website at <a href="www.sedar.com">www.sedar.com</a> that contains reports, proxy statements, information statements and other material that are filed through the System for Electronic Document Analysis and Retrieval ("SEDAR").

Additional information is also available on our website at <u>www.micromeminc.com</u>. Such information on our website is not part of this Form 20-F.

### I. Subsidiary Information

Not Applicable.

### ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not Applicable.

### ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not Applicable.

**PART II** 

### ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not Applicable.

# ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

None.

#### ITEM 15. CONTROLS AND PROCEDURES

## <u>Disclosure Controls and Procedures</u>

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, referred to herein as the "Exchange Act") as of October 31, 2013. Based on management's evaluation in 2013, our Chief Executive Officer and Chief Financial Officer concluded that, as of October 31, 2013, our disclosure controls and procedures were effective in that they were designed to ensure that information required to be disclosed by us in our reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in our reports that we file or submit under the Exchange Act are recorded, processed, summarized and reported within

the time periods specified in the SEC rules and forms. Exchange Act Rule 13a-15(e) also states that disclosure controls and procedures are designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or person performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

### Management's Annual Report on Internal Control over Financial Reporting

Micromem's Board of Directors and executive management are responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of its published consolidated financial statements.

All internal control systems no matter how well designed have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our Chief Executive Officer and Chief Financial Officer assessed the effectiveness of Micromem's internal control over financial reporting as of October 31, 2013. In making this assessment, they used the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment the Chief Executive Officer and Chief Financial Officer have concluded that, as of October 31, 2013, our internal control over financial reporting were effective.

### Changes in Internal Control Over Financial Reporting

No changes in our internal controls over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, occurred during the fiscal year ended October 31, 2013 that has materially affected or is reasonable likely to materially affect, our internal controls over financial reporting.

#### ITEM 15T. Controls and Procedures

Not applicable

### ITEM 16. (Reserved)

Not Applicable.

### ITEM 16A. Audit Committee Financial Expert

Our Board of Directors has determined that a member of the Board of Directors, David Sharpless, is an audit committee financial expert and that he is independent, as defined in the Marketplace Rules of the Nasdaq Stock Market.

### ITEM 16B. Code of Ethics

We have adopted a Code of Ethics to impose certain policies relating to ethical conduct on all of our Directors and employees, including our Chief Executive Officer, Chief Financial Officer, principal accounting officer and persons performing similar functions. We undertake to provide a copy of our Code of Ethics to any holder of our securities upon request, without charge.

### ITEM 16C. Principal Accountant Fees and Services

The following table presents fees for professional audit services rendered by our auditors for the audit of our consolidated financial statements for the years ended October 31, 2013 and 2012, and fees billed for other services rendered by our auditors including our offerings of securities and tax services.

	<u>Fiscal 2013</u>	<b>Fiscal 2012</b>
Audit Fees	\$100,000	\$121,000
Audit Related Fees	-	-
Tax Fees	5,000	5,000
All Other Fees	· -	28,000

### **Audit Fees**

In 2012, we paid a total of \$121,000 to Collins Barrow Toronto LLP for audit services; in 2013 we paid a total of \$100,000 to Collins Barrow Toronto LLP for audit services.

### **Audit Related Fees**

None

### Tax Fees

We paid \$5,000 of tax-related fees for services in 2013 and \$5,000 of tax-related fees in 2012 to Chiampou Travis Besaw & Kershner LLP.

### All other fees

We paid \$28,000 in 2012 to Collins Barrow Toronto LLP for services relating to our quarterly filings (2013: nil).

### Pre-approval policies

The Audit Committee assesses and pre-approves all audit and non-audit services.

### ITEM 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

### ITEM 16E. Purchases of Equity by the Issuer and Affiliated Purchasers.

Not applicable.

### ITEM 16F. Change in Registrants Certifying Accountant.

Not applicable.

## ITEM 16G. Corporate Governance

Not applicable

### ITEM 16H. Mine Safety Disclosure

Not applicable

### ITEM 17. Financial Statements

We have elected to provide financial statements pursuant to Item 18.

### **ITEM 18. Financial Statements**

# ITEM 19. Exhibits

Exhibit No. 4.8

The following exhibits are filed as part of this Annual Report:

Exhibit No. 1.1	Articles of Incorporation of Micromem Technologies Inc. and amendments thereto in effect as of January 11, 2000, (Incorporated herein by reference to the Company's Form 20-F filed with the Commission on January 11, 2000).
Exhibit No. 1.2	Articles of Incorporation of Amendment of Micromem Technologies Inc. dated as of October 17, 2001 amending the Articles of Incorporation of Micromem Technologies Inc. to increase the number of directors to a minimum of three and a maximum of ten (Incorporated herein by reference to the Company's Form 20-F filed with the Commission on March 26, 2003).
Exhibit No. 1.3	Articles of Incorporation of Amendment of Micromem Technologies Inc. dated as of June 24, 2002 amending the Articles of Incorporation of Micromem Technologies Inc. to increase the number of directors to a minimum of 3 and a maximum of 12 (Incorporated herein by reference to the Company's Form 20-F filed with the Commission on March 26, 2003).
Exhibit No. 1.5	By-Laws of Micromem Technologies Inc. in effect as of January 11, 2002, (Incorporated herein by reference to the Company's Form 20-F filed with the Commission on January 11, 2000).
Exhibit No. 1.6	Amendment to the By-Laws of Micromem Technologies Inc. approved by shareholders on June 29, 2000, deleting the requirement from the By-Laws that the President shall be appointed from amongst the directors (Incorporated herein by reference to the Company's Form 20-F filed with the Commission on March 26, 2003).
Exhibit No. 4.1	Employment Agreement by and between Micromem Technologies, Inc. and Salvatore Fuda dated May 29, 2005. (Incorporated herein by reference to the Company's Form 20-F filed with the Commission on February 28, 2006).
Exhibit No. 4.2	Employment Agreement by and between Micromem Technologies and Joseph Fuda dated May 28, 2008 (Incorporated by reference to the Company's Form 20-F filed with the Commission on February 24, 2009).
Exhibit No. 4.3	Employment Agreement by and between Micromem Technologies and Dan Amadori dated May 28, 2008 (Incorporated by reference to the Company's Form 20-F filed with the Commission on February 24, 2009).
Exhibit No. 4.4	Employment Agreement by and between Micromem Technologies and Steven Van Fleet dated May 28, 2008 (Incorporated by reference to the Company's Form 20-F filed with the Commission on February 24, 2009).
Exhibit No. 4.5	Agreement with Investor Relations Group dated September 1, 2008 (Incorporated by reference to the Company's Form 20-F filed with the Commission on February 24, 2009).
Exhibit No. 4.6	Agreement with Dreifus Associates Limited (DAL) dated June 1, 2008 (Incorporated by reference to the Company's Form 20-F filed with the Commission on February 24, 2009).
Exhibit No. 4.7	Unotron Promissory Note dated August 1, 2009 (Incorporated by reference to the Company's Annual Report on Form 20-F filed with the Commission on March 1, 2010)
•	

Agreement with Life Med Technologies Inc. (Incorporated by reference to the Company's Annual Report on Form 20-F filed with the Commission on March 1, 2010)

Exhibit No. 4.9	Manufacturing Supply Agreement with Unotron. (Incorporated by reference to the Company's Annual Report on Form 20-F/A filed with the Commission on February 25, 2011)
Exhibit No. 8.1	List of Subsidiaries (Incorporated by reference to the Company's Annual Report on Form 20-F filed with the Commission on March 1, 2010)
Exhibit No. 12.1	Officer's Certification pursuant to Section 302 of the Sarbanes Oxley Act, 2002 (filed herewith).
Exhibit No. 12.2	Officer's Certification pursuant to Section 302 of the Sarbanes Oxley Act, 2002 (filed herewith).
Exhibit No. 13.1	Officer's Certification pursuant to Section 906 of the Sarbanes Oxley Act, 2002 (filed herewith).
Exhibit No. 13.2	Officer's Certification pursuant to Section 906 of the Sarbanes Oxley Act, 2002 (filed herewith).

### **SIGNATURES**

The Registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on Form 20-F on its behalf.

### **MICROMEM TECHNOLOGIES INC.**

By: /s/ Joseph Fuda

Name: Joseph Fuda

Title: Chief Executive Officer

By: /s/ Dan Amadori

Name: Dan Amadori

Title: Chief Financial Officer

Dated: February 19, 2014

# Consolidated Financial Statements of

# MICROMEM TECHNOLOGIES INC.

For the years ended October 31, 2013 and 2012 (Expressed in United States Dollars)



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#### INDEPENDENT AUDITORS' REPORT

#### To the Shareholders of Micromem Technologies Inc.:

We have audited the accompanying consolidated financial statements of Micromem Technologies Inc. and its subsidiaries, which comprise the consolidated statements of financial position as at October 31, 2013 and October 31, 2012 and the consolidated statements of loss and comprehensive loss, changes in shareholders' equity and cash flows for the years ended October 31, 2013, October 31, 2012 and October 31, 2011 and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Micromem Technologies Inc. and its subsidiaries as at October 31, 2013 and October 31, 2012, and its financial performance and its cash flows for the years ended October 31, 2013, October 31, 2012 and October 31, 2011 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Emphasis of Matter

Without qualifying our opinion, we draw attention to Note 2 in the consolidated financial statements which describes the material uncertainties that cast significant doubt about Micromem Technologies Inc.'s ability to continue as a going concern.

Chartered Accountants Licensed Public Accountants Toronto, Ontario February 19, 2014



Colling Barrow Toronto LLP

# MICROMEM TECHNOLOGIES INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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# MICROMEM TECHNOLOGIES INC. CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

(Expressed in United States dollars)

	October : 20	11, 13	October 31, 2012
Assets			
Current assets:			
Cash	\$ 821,2	33 .	\$ 245,029
Deposits and other receivables	234,7	1	46,062
Promissory note receivable (Note 8)			
	1,056,0	4	291,091
Property and equipment, net (Note 9)	13,9	8	5,787
Deferred development costs (Note 10)	928,0	'7	718,163
Intangible assets, net (Note 11)	96,7	<b>i</b> 1	116,113
Patents, net (Note 11)	71,59	5	49,124
	\$ 2,166,4	5 \$	1,180,278
Liabilities and Shareholders' Equity (Deficiency) Current liabilities:			
Bridge loans (Note 14)	\$ 290,0	4 \$	442,934
Accounts payable and accrued liabilities	340,1	22	579,830
Derivative warrant liability (Note 13)	<u>.</u>		1,061,544
	\$ 630,1	6 s	2,084,308
Shareholders' Equity (Deficiency)			
Share capital: (Note 12)			
Authorized:			
2,000,000 special preference shares, redeemable, voting			
Unlimited common shares without par value			
Issued and outstanding:			
158,491,425 common shares (2012 - 136,430,555) (Note 12)	\$ 57,755,63	.3 \$	54,728,239
Equity component of bridge loans (Note 14)	1,59	7	1,557
Contributed surplus (Note 15)	32,822,32	.7	26,634,177
Deficit	(89,043,17	8)	(82,268,003)
	1,536,3	9	(904,030)
	\$ 2,166,4	5 \$	1,180,278

Going Concern (Note 2) Related Party Transactions (Note 18) Commitments (Note 19) Contingencies (Note 20) Subsequent Events (Note 23)

<u>"Joseph Fuda" (Signed)</u> Joseph Fuda, Director

"David Sharpless" (Signed)
David Sharpless, Director

See accompanying notes.

# MICROMEM TECHNOLOGIES INC. STATEMENTS OF CONSOLIDATED LOSS AND COMPREHENSIVE LOSS

(Expressed in United States dollars)

### For the years ended October 31,

		2013		2012		2011
Costs and expenses (income):						
Administration (Note 17)	\$	378,497	\$	694,617	\$	462,827
Professional, other fees and salaries (Note 17)	•	1,572,515	4	1,507,891	1	1,064,655
Stock based compensation (Note 12)		368,790		430,856		928,497
Research and development (recovery) (Note 17)		160,920		229,840		(75,896)
Forgiveness of debt		-		(42,004)		. , ,
Travel and entertainment		210,852		150,924		91,885
Amortization of property and equipment (Note 9)		4,989		4,414		6,469
Amortization of intangible assets and patents (Note 11)		19,352		19,352		43,333
Foreign exchange loss		12,261		7,537		43,215
Write-down of patents (Note 11)		-		-		129,033
Recovery of promissory note receivable (Note 8)		-		(30,000)		(110,000)
Interest and other income		<u> </u>		-		(963)
Loss from operations		2,728,176		2,973,427		2,583,055
Other Expenses						
Adjustment for modification of conversion feature of bridge loans (Note 14)		-		-		185,564
(Gain) loss on revaluation of embedded derivatives (Note 14)		(40,750)		(176,899)		1,979
Warrants issued on debt settlement (Note 14)		-		306,061		-
Loss (Gain) on revaluations of derivative warrant liability (Note 13)		3,246,502		(1,327,524)		410,584
Net loss before income taxes		(5,933,928)		(1,775,065)		(3,181,182)
Income taxes (Note 16)				-		1,205
Net loss and comprehensive loss	\$	(5,933,928)	\$	(1,775,065)	\$	(3,182,387)
Loss per share - basic and diluted (Note 12)	\$	(0.04)	\$	(0.01)	\$	(0.03)
Weighted average number of shares (Note 12)		146,814,466		123,375,510		102,301,168

See accompanying notes.

# MICROMEM TECHNOLOGIES INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

(Expressed in United States dollars)

# For the years ended October 31,

		2013	2012	2011
Cash flows from operating activities:				
Net loss	\$	(5,933,928) \$	(1,775,065) \$	(3,182,387)
Adjustments to reconcile loss for	•	(-,,, +	(-70,000) \$	(5/102/507)
the period to net cash used in operating activities:				
Amortization of intangible assets and patents		19,352	19,352	43,333
Amortization of property and equipment		4,989	4,414	6,469
Research and development		52,461	206,780	-
Accretion expense		19,381	187,671	12,447
Stock based compensation		368,790	430,856	928,497
Forgiveness of debt		-	(42,004)	-
(Decrease) increase in deposits and other receivables		(188,679)	(13,728)	69,729
Decrease in accounts payable and accrued liabilities		(63,433)	(393,896)	(58,756)
Loss (gain) on revaluation of derivative warrant liability		3,246,502	(1,327,524)	410,584
Adjustment for modification of conversion feature of bridge loans		· · · -	-	185,564
(Gain) loss on revaluation of embedded derivatives		(40,750)	(176,899)	1,979
Warrants issued on debt settlement		-	306,061	-
Write-down of patents		-	, -	129,033
Net cash used in operating activities		(2,515,315)	(2,573,982)	(1,453,508)
Cash flows from investing activities:				
Purchase of property and equipment		(13,200)	_	_
Patents		(44,825)	(26,650)	(8,017)
Deferred development costs		(655,093)	(263,133)	(425,085)
Intangible assets		-	-	(135,465)
Recovery of deferred development costs		233,290	_	-
Net cash used in investing activities		(479,828)	(289,783)	(568,567)
Cash flows from financing activities:				
Issuance of common shares		3,697,441	2,524,155	2,446,432
Bridge loans advances		5,057,111	714,359	496,813
Bridge loan repayments		(126,044)	(173,782)	(903,147)
Net cash provided by financing activities		3,571,397	3,064,732	2,040,098
			-7	2/010/050
Increase in cash		576,254	200,967	18,023
Cash, beginning of year		245,029	44,062	26,039
Cash, end of year	\$	821,283 \$	245,029 \$	44,062
Supplemental cash flow information: Interest paid (classified in operating activities) Income taxes paid		83,493 -	75,142 -	211,264 10,713

See accompanying notes.

### MICROMEM TECHNOLOGIES INC. Consolidated Statements of Changes in Shareholders' Equity (Expressed in United States dollars)

	Number of shares	Share capital	Contr	ibuted surplus	Equity com of bridge lo		Deficit	Total
Balance as at November 01, 2010	95,324,511	\$ 50,102,699	\$	24,498,736	\$	5,784	\$(75,694,652)	(1,087,433)
Private placement of units for cash	20,825,207	2,478,681		-				2,478,681
Financing costs		(32,247)		-				(32,247)
Stock based compensation (Note 12)	-			928,497		-	-	928,497
Warrants issued on private placements	-	(774,578)		254,311		-	-	(520,267)
Warrants extended (Note 13)	-			113,384		-	(293,020)	(179,636)
Modification of bridge loans				185,564			\ <b>/</b>	185,564
Equity portion of bridge loan	-	-		5,784		5,784)	-	,
Net loss and comprehensive loss	- 1	-		- 1			(3,182,387)	(3,182,387)
Balance as at October 31, 2011	116,149,718	51,774,555		25,986,276	·-	-	(79,170,059)	(1,409,228)
Private placement of units for cash (Note 13)	6,344,899	1,040,899						1,040,899
Financing costs	. ,	(16,457)						(16,457)
Stock based compensation (Note 12)	-	-		430,856		_	_	430,856
Warrants issued on private placements (Note 13)	-	(356,364)		66,997		-	_	(289,367)
Warrants extended (Note 13)		-		358,983		-	(1,322,879)	(963,896)
Warrants exercised (Note 13)	12.075.858	1,499,713		-		-	-	1,499,713
Fair value of warrants exercised		558,993		(208,935)		-	_	350,058
Equity portion of bridge loan (Note 14)	-	-				1,557	-	1,557
Shares issued on conversion of bridge loans (Note 14)	1,860,080	226,900		_		-	_	226,900
Net loss and comprehensive loss	1						(1,775,065)	(1,775,065)
Balance at October 31, 2012	136,430,555	54,728,239		26,634,177	1	,557	(82,268,003)	(904,030)
Private placement of units for cash (Note 13)	16,106,957	2,910,532		_		-	-	2,910,532
Financing costs	-	(35,482)		-		-		(35,482)
Stock based compensation (Note 12)	-			368,790		-	-	368,790
Warrants issued on private placements (Note 13)	-	(863,863)		377,234		-	-	(486,629)
Warrants extended (Note 13)	-			264,938		-	(841,247)	(576,309)
Warrants exercised (Note 13)	5,953,913	822,391		-		-	` '- '	822,391
Fair value of warrants exercised	-	193,796		(47,675)		-	-	146,121
Warrants modified (Note 13)	-			5,224,863		-	-	5,224,863
Net loss and comprehensive loss						-	(5,933,928)	(5,933,928)
Balance at October 31, 2013	158,491,425	\$ 57,755,613	\$	32,822,327	\$	1,557	\$(89,043,178)	1,536,319

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 1. REPORTING ENTITY AND NATURE OF BUSINESS

Micromem Technologies Inc. ("Micromem" or the "Company") is a incorporated under the laws of the Province of Ontario, Canada. The principal business address of the Company is 121 Richmond Street West, Suite 304, Toronto, Ontario, Canada.

The Company develops, based upon proprietary technology, customized magnetic sensor applications for companies operating internationally in a variety industries. The Company has not generated commercial revenues through October 31, 2013 and is devoting substantially all its efforts securing commercial revenue opportunities.

These consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries:

- (i) Micromem Applied Sensors Technology, Inc. ("MAST") incorporated in November 2007 and domiciled in Delaware, United States. MAST has the primary responsibility for the exploitation of the Company's technologies in conjunction with various strategic partners and customers.
- (ii) 7070179 Canada Inc., incorporated in October 2008 under the Canada Business Corporations Act in Ontario, Canada. The Company has assigned to this entity its rights, title and interests in certain patents which it previously held, directly in exchange for common shares of this entity.
- (iii) Memtech International Inc., Bahamas; Memtech International (USA) Inc., Delaware, United States; Pageant Technologies (USA) Inc., United States; Pageant Technologies Inc., Barbados; and Micromem Holdings (Barbados) Inc., Barbados. All of these entities are inactive.

These consolidated financial statements were authorized for issuance and release by the Company's Board of Directors on February 19, 2014.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 2. GOING CONCERN

These consolidated financial statements have been prepared on the "going concern" basis in accordance with International Financial Reporting Standards ("IFRS"), 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 uncertainties related to conditions and events that cast doubt about the Company's ability to continue as a going concern for a reasonable period of time in future. During the year ended October 31, 2013, the Company reported a loss from operations of \$5,933,928 (2012 - \$1,775,065; 2011 - \$3,182,387) of which \$3,670,725 (2012 - \$391,293; 2011 - \$1,717,906) of this loss are non-cash losses (2012 - gains; 2011 - losses) and negative cash flows from operations of \$2,515,315 (2012 - \$2,573,982; 2011 - \$1,453,508). The Company's working capital position as at October 31, 2013 is \$425,888 (2012 - working capital deficiency of \$1,793,217).

The Company's 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 2014; however, if the Company is not able to complete its financial plans and/or is not able to profitably commercialize its technology then there is doubt the Company can continue as a going concern. Accordingly, 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 could be material.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 3. BASIS OF PRESENTATION

## a) Statement of compliance:

These consolidated financial statements have been prepared in accordance with IFRS and its interpretations adopted by International Accounting Standards Board ("IASB").

### b) Basis of measurement:

The consolidated financial statements have been prepared on the historical cost basis, except for financial instruments designated at fair value through profit and loss, which are stated at their fair value.

### c) Functional and presentation currency:

These consolidated financial statements are presented in United States dollars ("U.S. dollars"), which is also the Company's functional currency.

# d) Use of estimates and judgments:

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment are as follows:

i) The Company makes estimates and utilizes assumptions in determining the fair value for stock based compensation expense, warrants, the (gain) loss on the revaluation of the derivative warrant liability, the (gain) loss on the revaluation of the embedded derivatives relating to bridge loans and the bifurcation of convertible debt.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 3. BASIS OF PRESENTATION (Cont'd)

- d) Use of estimates and judgments: (Cont'd)
  - ii) The Company makes estimates related to the recovery of deferred development costs based on the expectation and assumption of realizing revenues from future commercial agreements that it anticipates will develop with the companies for whom these projects have been undertaken. Changes in these expectations and assumptions could result in a change in the recoverable amount calculated.
  - iii) The Company makes estimates related to the useful lives of property and equipment, patents and intangible assets and the related amortization. The Company also periodically assesses the recoverability of long-lived assets. The recoverability analysis requires the Company to make assumptions about future operations. Changes to one or more assumptions would result in a change in the recoverable amount calculated and/or amortization expensed.
  - iv) Deferred income tax assets are recognized for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences and carry-forward of unused tax assets and unused tax losses can be utilized. At October 31, 2013, the Company has assessed that it may not be probable that sufficient taxable profit will be available to use deferred income tax assets based on operating losses in prior years, therefore, there are no balances carried in the consolidated statements of financial position for such assets.
  - v) The Company applies judgment in assessing whether material uncertainties exist that would cause doubt as to the whether the Company could continue as a going concern.
  - vi) The Company applies judgment in assessing the functional currency of each entity consolidated in these financial statements.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### a) Basis of consolidation:

Subsidiaries are legal entities controlled by the Company. Control exists when the Company has the power, directly or indirectly to govern the financial and operating policies of an entity so as to obtain benefits from its activities. The financial statements of the subsidiaries are included in the consolidated financial statements from the date that control commences until the date control ceases.

These consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant inter-company transactions and balances have been eliminated. The accounting policies have been consistently applied by the Company's subsidiaries.

## b) Foreign currency translation:

IFRS requires that the functional currency of each entity in the consolidated entity be determined separately in accordance with specific indicators and should be measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). As a result of an assessment of the primary indicators, management assessed the functional currency of the Company and its subsidiaries to be U.S. dollar ("USD"). The consolidated financial statements of the Company are prepared and presented using the USD.

Foreign currency transactions denominated in other than U.S. dollars are translated into the functional currency on the following basis:

- i) Monetary assets and liabilities are translated at the rates of exchange prevailing at the statement of financial position date.
- ii) Non-monetary assets and liabilities that are measured at historical cost are translated using the exchange rate at the date of the transaction.
- iii) Income and expenses for each income statement line item presented are translated at average exchange rates during the quarter in which they are recognized.

Exchange differences resulting from the settlement of foreign currency transactions are recognized directly in the consolidated statement of loss and comprehensive loss in the period in which incurred.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

c) Financial Instruments: Recognition, Measurement, Disclosure and Presentation:

The Company initially recognizes loans and receivables and deposits on the date that they are originated. All other financial assets including assets designated at fair value through profit or loss (FVTPL) are recognized initially on the trade date at which the Company becomes a party to the contractual provisions of the instrument.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset expire.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position only when the Company has the legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Company has the following financial assets: cash, deposits and other receivables and promissory note receivable.

All financial assets and financial liabilities, including derivatives, are initially measured in the statement of financial position at fair value, except for loans and receivables, investments held-to maturity and other financial liabilities, which are measured at amortized cost. Measurement in subsequent periods depends on whether the financial instrument had been classified as FVTPL, available-for-sale, held-to-maturity, loans and receivables, or other liabilities.

FVTPL financial assets are measured at fair value and all gains and losses are included in the statement of loss and comprehensive loss in the period in which they arise. Availablefor-sale financial assets are measured at fair value with revaluation gains and losses included in other comprehensive income until the assets are removed from the statement of financial position.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

c) Financial Instruments: Recognition, Measurement, Disclosure and Presentation: (Cont'd)

The Company classifies cash as FVTPL. Deposits and other receivables and promissory note receivable are classified as loans and receivables, and are initially measured at fair value and subsequently at amortized cost using the effective interest rate method. Accounts payable and accrued liabilities and bridge loans are classified as other liabilities, and initially measured at fair value and subsequently at amortized cost using the effective interest rate method. The derivative warrant liability and embedded derivatives in bridge loans are classified at FVTPL and are measured at fair value with unrealized gains or losses reported in the consolidated statement of loss and comprehensive loss.

### d) Compound Financial Instruments

Compound financial instruments issued by the Company comprise convertible notes that can be converted to share capital at the option of the holder and the number of shares to be issued does not vary with changes in their fair value.

The liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an equity conversion option.

The equity component, if the conversion feature of the convertible note is in US dollars, is recognized initially as the difference between the fair value of the compound financial instrument as a whole and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest rate method. The equity component of a compound financial instrument is not remeasured subsequent to initial recognition.

Interest, dividends, losses and gains relating to the financial liability are recognized in profit or loss except for borrowing costs on qualifying assets which are added to asset cost. Distributions to the equity holders are recognized in equity, net of any tax effect.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

## e) Hybrid Financial Instruments:

Financial instruments with embedded derivative liabilities are accounted for as hybrid financial instruments. The Company has hybrid financial instruments when the embedded derivative conversion option right of the convertible notes gives the right to the holder to convert into common shares in Canadian dollars ("CDN").

An embedded derivative is a feature within a contract, such that the cash flows associated with that feature behave in a similar fashion to a stand-alone derivative. An embedded derivative is separated from its host contract and accounted for as a derivative only when three criteria are satisfied:

- When the economic risks and characteristics of the embedded derivatives are not closely related to those of the host contract;
- A separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- The entire instrument is not measured at fair value with changes in fair value recognized in the income statement.

Subsequent to initial recognition, the embedded derivative component is re-measured each reporting period using the Black Scholes option-pricing model with the change in fair value recognized in statement of loss and comprehensive loss.

### f) Derivative Liability

The Company's derivative financial instruments consist of derivative liabilities in relation to its share purchase warrants.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

- f) Derivative Liability (Cont'd)
  - i) Derivative Warrant Liability:

The Company has issued share purchase warrants in conjunction with private placements for the purchase of common shares of the Company. Until October 2013 (Note 14(b)), a number of these share purchase warrants were issued with an exercise price in CDN, rather than USD (the reporting and functional currency of the Company). Such share purchase warrants are considered to be derivative instruments and the Company is required to re-measure the fair value of these at each reporting date. The fair value of these CDN share purchase warrants are re-measured at each financial position date using the Black Scholes option-pricing model using the exchange rates at the financial position date and measured over their remaining life. Adjustments to the fair value of the derivative warrant liability as at the financial position date are recorded in the statement of loss and comprehensive loss as (gain) loss on revaluation of derivative warrant liability. Share purchase warrants that have expired or have been forfeited are adjusted to the statement of loss and comprehensive loss as (gain) loss on revaluation of derivative warrant liability.

Consideration received upon the exercise of warrants is credited to share capital and the related amount is transferred from contributed surplus (USD warrants) or derivative warrant liability (CDN warrants) to share capital.

### ii) Conversion Feature of Bridge Loans

The conversion feature on the bridge loans allows the holder of the option to convert the outstanding principal and interest from time to time to common equity. The Company, using the Black Scholes option-pricing model, accounts for bridge loans as follows:

- (ii.1) At date of origination the bifurcation of the total balance of the loan as debt and equity is calculated. If the conversion feature of the bridge loan is in CDN there is no equity component, resulting in an embedded derivative. Accretion expense is recorded over the term of the loan.
- (ii.2) The total loan proceeds are allocated between the bridge loans and the related embedded derivative based on their relative fair value. The embedded derivative conversion feature is included under the bridge loans in the statement of financial position.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

## 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

- f) Derivative Liability (Cont'd)
  - (ii.3) The conversion feature is revalued at the end of the reporting period and any adjustment is reflected in the statement of loss and comprehensive loss if the conversion feature is in CDN.

### g) Loan Impairment:

Impaired loans are accounted for at their face amount net of the allowance for loan impairment. When a loan is deemed to be impaired, its carrying amount is reduced to its estimated realizable amount which is measured by discounting the expected future cash flows at the effective interest rate inherent in the loan. The amount initially recognized as an impairment loan, together with any subsequent change, is charged to the allowance as an adjustment. A write-off of the loan will occur when the loan is believed to have no reasonable expectation of collectability.

### h) Intangible Assets

Costs for the general development of the Company's sensor technology are expensed unless they meet the criteria for deferral. Expenditures are capitalized if the Company can demonstrate each of the following criteria: (i) the technical feasibility of completing the intangible asset so that it will be available for use or sale, (ii) its intention to complete the intangible asset and use or sell it, (iii) its ability to use or sell the intangible asset, (iv) how the intangible asset will generate probable future economic benefits, (v) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset, and (vi) its ability to measure reliably the expenditure attributable to the intangible asset during its development; otherwise, they are expensed as incurred. Commencing in 2011, the Company determined that these costs met the criteria and, accordingly, these costs have been capitalized and are tested in each reporting period for impairment. Amortization is provided on a 7 year straight-line basis.

### i) Property and Equipment:

Property and equipment are recorded at cost and are amortized over their estimated useful lives at the following annual rates and methods:

Computers 30% declining balance basis
Office equipment 30% declining balance basis

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

## 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

### j) Impairment of Long-lived Assets:

Long-lived assets consist of property and equipment, patents, intangible assets, and deferred development costs.

The carrying amounts of property and equipment, patents, intangible assets and deferred development costs, are reviewed for impairment when events or changes in circumstances indicate that the carrying amounts may not be recoverable. When the carrying amount exceeds the estimated recoverable amount, the assets are written down to their recoverable amount.

The recoverable amount of long-lived assets is the greater of fair value less costs to sell and value in use. In assessing value in use, estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Impairment losses are recognized in the consolidated statements of loss and comprehensive loss.

An assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the recoverable amount is estimated. A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If that is the case, the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined, net of amortization, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the consolidated statements of loss and comprehensive loss. Following the recognition or reversal of an impairment loss, the amortization charge applicable to the asset is adjusted prospectively in order to systematically allocate the revised carrying amount, net of any residual value, over the estimated useful life.

Gains or losses on the disposal of property and equipment, patents and intangible assets represent the difference between the net proceeds and the carrying value at the date of sale.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

## 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

### k) Research and Development Costs:

Research costs are expensed in the period incurred. Development costs are expensed as incurred unless they meet the criteria for deferral. Expenditures during the development phase are capitalized if the Company can demonstrate each of the following criteria: (i) the technical feasibility of completing the asset so that it will be available for use or sale, (ii) its intention to complete the asset and use or sell it, (iii) its ability to use or sell the asset, (iv) how the asset will generate probable future economic benefits, (v) the availability of adequate technical, financial and other resources to complete the development and to use or sell the asset, and (vi) its ability to measure reliably the expenditure attributable to the asset during its development; otherwise, these costs are expensed as incurred. Commencing in 2009, the Company determined that its continuing activities related to the application of its sensor technology to projects met the deferral criteria and, accordingly, these costs have been capitalized and are tested in each reporting period for recoverability. Development costs will be amortized on an appropriate basis at the time the Company enters commercial production.

Payments received from development partners on projects are recorded to deferred development costs as a recovery of cost incurred.

### 1) Patents:

Patents are recorded at cost and are amortized on a straight line basis over their estimated useful lives of 5 years. Patents are recorded net of accumulated amortization with amortization expense capitalized as deferred development costs since the patents are directly related to development.

### m) Unit Private Placements:

The Company uses the relative fair value approach in accounting for the value assigned to the common shares and the common share purchase warrants which it had made available in the unit private placement financings that it secured, calculated in accordance with the Black Scholes option-pricing model.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

### n) Stock based Compensation and Other Stock based Payments:

The Company applies the fair value based method of accounting for all stock based payments to employees and non-employees and all direct awards of stock. For non-employees, stock based payments are measured at the fair value of the services received or the fair value of the equity instruments issued or liabilities incurred, whichever is more reliably measurable. Stock based compensation is charged to operations over the vesting period and the offset is credited to contributed surplus.

Consideration received upon the exercise of stock options is credited to share capital and the related amount is transferred from contributed surplus.

The fair value of stock options and warrants is determined by the Black Scholes option-pricing model with assumptions for risk free interest rates, dividend yields, volatility factors of the expected market price of the Company's common shares and an expected life of the option or warrant issued. A forfeiture rate is estimated on the grant date and is adjusted to reflect the actual number of options that vest. In the event that vested stock options expire, previously recognized stock based compensation is not reversed. In the event that stock options are forfeited, previously recognized stock based compensation associated with the unvested portion of the stock options forfeited is reversed. The fair value of direct awards of stock is determined by the quoted market price of the Company's stock.

### o) Income Taxes:

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date and any adjustment to tax payable in respect of previous years.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

### o) Income Taxes: (Cont'd)

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable income or loss and differences relating to investments in subsidiaries and jointly controlled entities to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred tax is not recognized for taxable temporary differences arising on the initial recognition of goodwill.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the rates that have been enacted or substantively enacted by the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

### p) Earnings or Loss Per Share:

Basic earnings (loss) per share is computed by dividing net earnings (loss) by the weighted average number of common shares outstanding for the period. Diluted earnings (loss) per share is computed by adjusting the weighted average number of number of common shares outstanding for the effects of all dilutive potential common shares, which are comprised of outstanding warrants, conversion options and vested stock options. Diluted earnings (loss) per common share assumes that any proceeds received for in-the-money warrants and options would be used to buy common shares at the average market price for the period.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 5. NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET ADOPTED

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the IASB or International Financial Reporting Interpretations Committee ("IFRIC") that are mandatory for future accounting periods. The standard impacted that is applicable to the Company are as follows:

- a) IFRS 9 Financial Instruments, was issued in November 2009 and contained requirements for financial assets. This standard addresses classification and measurement of financial assets and replaces the multiple category and measurement models in IAS 39, Financial Instruments Recognition and Measurement, for debt instruments with a new mixed measurement model having only two categories:
  - Amortized cost and
  - Fair value through profit and loss

IFRS 9 also replaces the models for measuring equity instruments, and such instruments are either recognized at fair value through earnings or at fair value through other comprehensive income. Where such equity instruments are measured at fair value through other comprehensive income, dividends, to the extent not clearly representing a return of investment, are recognized in earnings; however, other gains and losses (including impairments) associated with such instruments remain in accumulated other comprehensive income indefinitely.

Requirements for financial liabilities were added in October 2010 and largely carried forward existing requirements in IAS 39, Financial Instruments – Recognition and Measurement, except that fair value changes due to credit risk for liabilities designated at fair value through profit or loss would generally be recorded in other comprehensive income.

The effective date of IFRS 9 is yet to be determined.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 5. NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET ADOPTED (Cont'd)

b) IFRS 10 – Consolidated Financial Statements, requires an entity to consolidate an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Under existing IFRS, consolidation is required when an entity has the power to govern the financial and operating policies of an entity so as to obtain live entertainment from its activities. IFRS 10 replaces SIC-12, Consolidation – Special Purpose Entities and parts of IAS 27, Consolidated and Separate Financial Statements.

This standard is required to be applied for accounting periods beginning on or after January 1, 2013.

c) IFRS 11 – Joint Arrangements, requires a venturer to classify its interest in a joint arrangement as a joint venture or joint operation. Joint ventures will be accounted for using the equity method of accounting whereas for a joint operation the venturer will recognize its share of the assets, liabilities, revenue and expenses of the joint operation. Under existing IFRS, entities have the choice to proportionately consolidate or equity account for interests in joint ventures. IFRS 11 supersedes IAS 31, Interests in Joint Ventures and SIC-13, Jointly Controlled Entities—Nonmonetary Contributions by Venturers.

This standard is required to be applied for accounting periods beginning on or after January 1, 2013.

d) IFRS 12 – Disclosure of Interests in Other Entities, such as joint arrangements, associates, special purpose vehicles and off balance sheet vehicles. The standard carries forward existing disclosures and also introduces significant additional disclosure requirements that address the nature of, and risks associated with, an entity's interests in other entities.

This standard is required to be applied for accounting periods beginning on or after January 1, 2013.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 5. NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET ADOPTED (Cont'd)

e) IFRS 13 – Fair Value Measurement, is a comprehensive standard for fair value measurement and disclosure requirements for use across all IFRS standards. The new standard clarifies that fair value is the price that would be received to sell an asset, or paid to transfer a liability in an orderly transaction between market participants, at the measurement date. It also establishes disclosures about fair value measurement. Under existing IFRS, guidance on measuring and disclosing fair value is dispersed among the specific standards requiring fair value measurements and in many cases does not reflect a clear measurement basis or consistent disclosures.

This standard is required to be applied for accounting periods beginning on or after January 1, 2013.

f) In addition, there have been amendments to existing standards including IAS 27, Separate Financial Statements, and IAS 28, Investments in Associates and Joint Ventures. IAS 27 addresses accounting for subsidiaries, jointly controlled entities and associates in non-consolidated financial statements. IAS 28 has been amended to include joint ventures in its scope and to address the changes in IFRS 10 to IFRS 12.

This standard is required to be applied for accounting periods beginning on or after January 1, 2013, provided that IFRS 10, IFRS 11 and IFRS 12 are adopted at the same time.

The Company is currently assessing the impact of the above standards.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 6. FAIR VALUE DISCLOSURES

The following summarizes the methods and assumptions used in estimating the fair value of the Company's financial instruments where measurement is required. The fair value of financial instruments consisting of cash, deposits and other receivables, promissory note receivable, accounts payable and accrued liabilities and bridge loans approximate their carrying amounts due to the relatively short period to maturity. Fair value amounts represent point-in-time estimates and may not reflect fair value in the future. The measurements are subjective in nature, involve uncertainties and are a matter of significant judgment. The methods and assumptions used to develop fair value measurements, for those financial instruments where fair value is recognized in the statement of financial position, have been prioritized into three levels of the fair value hierarchy as follows:

Level 1: Values based on unadjusted quoted prices in active markets that are accessible at the measurement date for identical assets or liabilities.

Level 2: Values based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly for substantially the full term of the asset or liability.

Level 3: Values based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement.

The Company's financial instruments measured at fair value on the statement of financial position date consist of cash, derivative warrant liability and the conversion feature on bridge loans. Cash is measured at Level 1 of the fair value hierarchy. Derivative warrant liability and the conversion feature on bridge loans are measured at Level 2 of the fair value hierarchy.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 7. CAPITAL RISK MANAGEMENT

The Company's objective when managing capital is to maintain its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders. The Company includes equity, comprised of issued share capital, equity component of bridge loans, contributed surplus and deficit, in the definition of capital. The Company's primary objective with respect to its capital management is to ensure that it has sufficient cash resources to further develop and market its technologies and to maintain its ongoing operations. To secure the additional capital necessary to pursue these plans, the Company may attempt to raise additional funds through the issuance of equity and warrants or by securing strategic partners. The Company is not subject to externally imposed capital requirements and there has been no change with respect to the overall capital risk management strategy during the year ended October 31, 2013.

### 8. PROMISSORY NOTE RECEIVABLE

In April 2009, the Company advanced \$200,000 to a private company incorporated in New Jersey, which, at that time, was also a strategic development partner of the Company. The Company and the private Company executed a promissory note with respect to the \$200,000 advance stipulating the following terms and conditions:

- a) Maturity date of September 30, 2010.
- b) Interest payable on a quarterly basis in arrears calculated from August 1, 2009 at a rate of 10%. In July 2011, the interest rate on the promissory note increased to 18%.
- c) Secured by a first priority security interest over all of the assets of the private company.

In 2012 the Company received payments totaling \$30,000 against the amounts previously reserved.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 8. PROMISSORY NOTE RECEIVABLE (Cont'd)

At October 31, 2013 the gross balance outstanding was \$121,958 including outstanding principal plus accrued interest and this amount has been fully reserved. The Company served notice to the private company that it was demanding payments under the terms of the promissory note and the security agreement and has received judgment in its favor during the year ended October 31, 2012. The Company continues to pursue collection of this fully reserved note.

	Gross	Net
Balance outstanding at November 01, 2010	\$ 206,333 \$	5,000
Interest accrued	20,220	20,220
Reserved	-	(20,220)
Repayment	(115,000)	(115,000)
Recovery of reserved amount		110,000
Balance outstanding at October 31, 2011	\$ 111,553 \$	-
Interest accrued	20,300	20,300
Reserved	-	(20,300)
Repayment	 (30,000)	
Balance outstanding at October 31, 2012	101,853	-
Interest accrued	20,105	20,105
Reserved	-	(20,105)
Repayment	 	-
Balance outstanding at October 31, 2013	\$ 121,958 \$	_

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 9. PROPERTY AND EQUIPMENT

TROTERTT AND EQUITMENT						
	Co	mputers		niture and uipment		Total
Cost						
At November 1, 2010 Additions	\$	40,734 -	\$	25,989 -	\$	66,723 -
Year ended October 31, 2011	\$	40,734	\$	25,989	\$	66,723
At November 1, 2011 Additions	\$	40,734 -	\$	25,989 -	\$	66,723 -
Year ended October 31, 2012	\$	40,734	\$	25,989	\$	66,723
At November 1, 2012 Additions Disposals	\$	40,734 14,839 (6,360)		25,989 - -	\$ \$ \$	66,723 14,839 (6,360)
Year ended October 31, 2013	\$	49,213	\$	25,989	\$	75,202
Accumulated amortization	Co	mputers		niture and uipment		Total
Accumulated amortization  At November 1, 2010  Amortization for the year  Impact of foreign exchange	<b>Co</b> \$	24,048 6,469 16		niture and uipment 25,989 - -	\$	50,037 6,469 16
At November 1, 2010 Amortization for the year		24,048 6,469	Eq	<b>uipment</b> 25,989 -	\$	50,037 6,469
At November 1, 2010 Amortization for the year Impact of foreign exchange	\$	24,048 6,469 16	<b>Eq</b> \$	uipment 25,989 - -		50,037 6,469 16
At November 1, 2010 Amortization for the year Impact of foreign exchange Year ended October 31, 2011 At November 1, 2011	\$	24,048 6,469 16 30,533 30,533	<b>Eq</b> \$	25,989 - - - 25,989	\$	50,037 6,469 16 56,522 56,522
At November 1, 2010 Amortization for the year Impact of foreign exchange Year ended October 31, 2011 At November 1, 2011 Amortization for the year	\$ \$ \$	24,048 6,469 16 30,533 30,533 4,414	<b>Eq</b> \$	25,989 25,989 25,989 25,989	\$	50,037 6,469 16 56,522 56,522 4,414 60,936 60,936 4,989
At November 1, 2010 Amortization for the year Impact of foreign exchange Year ended October 31, 2011  At November 1, 2011 Amortization for the year Year ended October 31, 2012  At November 1, 2012 Amortization for the year	\$ \$ \$	24,048 6,469 16 30,533 30,533 4,414 34,947 4,989	<b>Eq</b> \$	25,989 25,989 25,989 25,989 25,989 25,989	\$	50,037 6,469 16 56,522 56,522 4,414 60,936

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 10. DEFERRED DEVELOPMENT COSTS

The breakdown of development costs that have been capitalized is as follows:

#### Cost

At November 1, 2011 Additions	\$ 646,606 71,557
Year ended October 31, 2012	\$ 718,163
At November 1, 2012 Additions Recovery of deferred development costs Writedown of projects costs	\$ 718,163 677,445 (233,290) (234,241)
Year ended October 31, 2013	\$ 928,077

Additions to deferred development costs includes patent amortization of \$22,354 (2012 - \$15,204; 2011 - \$Nil).

To date, the Company has recovered from its development partners a portion of the costs it has incurred as deferred development costs coincident with meeting milestones as stipulated in development contracts.

In 2013, the Company provided a reserve against deferred development costs previously incurred with respect to three development projects, reducing the carrying value in each case to a nominal amount. In each case, the Company has decided not to pursue these development projects.

### 11. INTANGIBLE ASSETS AND PATENTS

Intangible assets comprise the costs which the Company has capitalized relating to the technical expertise and know-how that the Company has developed with respect to the commercialization efforts relating to its sensor technology. In 2011, the Company determined that it had sufficiently advanced its expertise and product knowledge relating to the general commercialization efforts for its sensor technology in multiple industry vertical applications. It anticipates that it will realize commercial economic benefits from the exploitation of these intangible assets in future.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

## 11. INTANGIBLE ASSETS AND PATENTS (Cont'd)

### **Intangible Assets**

### Cost

At November 1, 2010 Additions	\$	- 135,465
Year ended October 31, 2011	\$	135,465
At November 1, 2011 Additions	\$	135,465 -
Year ended October 31, 2012	\$	135,465
At November 1, 2012 Additions	\$	135,465
Year ended October 31, 2013	\$	135,465
Accumulated amortization		
At November 1, 2010 Amortization for the year	\$	<del>-</del>
Year ended October 31, 2011	\$	
At November 1, 2011 Amortization for the year	\$	- 19,352
Year ended October 31, 2012	\$	19,352
At November 1, 2012 Amortization for the year	\$	19,352 19,352
Year ended October 31, 2013	\$	38,704
Net book value at October 31, 2011 Net book value at October 31, 2012 Net book value at October 31, 2013	\$ \$	135,465 116,113 96,761

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 11. INTANGIBLE ASSETS AND PATENTS (cont'd)

Patents		
Cost		
At November 1, 2010	\$	230,294
Additions	•	8,017
Write-down		(175,614)
Year ended October 31, 2011	\$	62,697
At Navambar 1, 2011		62.607
At November 1, 2011 Additions	\$	62,697
		26,650
Year ended October 31, 2012	\$	89,347
At Nevember 1, 2012		00 247
At November 1, 2012 Additions	\$	89,347
		44,825
Year ended October 31, 2013	\$	134,172
A. Janes Janes		
Accumulated amortization		
At November 1, 2010	\$	28,267
Amortization for the year		43,333
Write-down		(46,581)
Year ended October 31, 2011	\$	25,019
At November 1, 2011	\$	25,019
Amortization for the year		15,204
Year ended October 31, 2012	\$	40,223
At November 1, 2012	\$	40,223
Amortization for the year		22,354
Year ended October 31, 2013	\$	62,577
Net book value at October 31, 2011	\$	37,678
Net book value at October 31, 2012	\$	49,124
Net book value at October 31, 2013	\$	71,595

In the fiscal year ended October 31, 2011, the Company wrote-down the value of its patents by \$129,033 relating to technology the Company has no immediate plans to develop.

Amortization for the years ended October 31, 2013 and 2012 was capitalized to deferred development costs. Amortization for the year ended October 31, 2011 was expensed.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 12. SHARE CAPITAL, STOCK OPTIONS AND LOSS PER SHARE

### a) Share Capital

Authorized and outstanding:

The Company has two classes of shares as follows:

- i) Special redeemable voting preference shares, 2,000,000 authorized, none are issued and outstanding.
- ii) Common shares without par value an unlimited number authorized.

	Number of Shares	Amount \$			
Balance at November 1, 2011	116,149,718	\$	51,774,555		
Private placement of units for cash (Note 13)	6,344,899		1,040,899		
Warrants exercised	12,075,858		1,499,713		
Warrants issued on private placements (Note 13)	-		(356,364)		
Fair value of warrants exercised	-		558,993		
Share issued on conversion of bridge loans (Note 14)	1,860,080	226,900			
Financing costs			(16,457)		
Balance at October 31, 2012	136,430,555	\$	54,728,239		
Private placement of units for cash (Note 13)	16,106,957		2,910,532		
Warrants exercised	5,953,913		822,391		
Warrants issued on private placements (Note 13)	<u>-</u>		(863,863)		
Fair value of warrants exercised	-		193,796		
Financing costs		_	(35,482)		
Balance at October 31, 2013	158,491,425	\$	57,755,613		

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 12. SHARE CAPITAL, STOCK OPTIONS AND LOSS PER SHARE (Cont'd)

#### b) Stock Options

Stock option plan:

The Company has a fixed stock option plan. Under the Company's stock option plan (the "Plan"), the Company may grant options for up to 15,600,000 shares of common stock to directors, officers, employees or consultants of the Company and its subsidiaries. The exercise price of each option is equal to or greater than the market price of the Company's shares on the date of grant unless otherwise permitted by applicable securities regulations. An option's maximum term under the Plan is 10 years. Stock options are fully vested upon issuance by the Company unless the Board of Directors stipulates otherwise by Directors' resolution.

A summary of the status of the Company's fixed stock option plan through October 31, 2013 and changes during the periods is as follows:

	Options (000)	Weighted average exercise price
Outstanding, November 01, 2011	11,175	0.47
Granted	2,000	0.35
Expired	(540)	(0.44)
Forfeited	(2,720)	(1.20)
Outstanding, October 31, 2012	9,915	0.24
Granted	2,170	0.30
Expired	(315)	(0.55)
Forfeited	(295)	(0.23)
Outstanding, October 31, 2013	11,475	0.24

During the year ended October 31, 2013 the Company issued a total of 2,170,000 (2012-2,000,000) stock options to officers and directors (1,120,000 (2012-1,525,000)), employees (750,000 (2012-475,000)) and consultants (300,000 (2012-Nil)). The Company has the following stock options outstanding at October 31, 2013:

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 12. SHARE CAPITAL, STOCK OPTIONS AND LOSS PER SHARE (Cont'd)

#### b) Stock Options (Cont'd)

			Weighted average remaining life	
Date of issue	# Issued	Strike Price	(in years)	Expiry Date
April 5, 2011	125,000	0.35	2.4	April 5, 2016
October 31, 2011	7,275,000	0.20	3.0	October 31, 2016
April 10, 2012	1,905,000	0.35	3.4	April 10, 2017
January 22, 2013	1,090,000	0.30 CDN	4.2	January 22, 2018
September 16, 2013	780,000	0.27 CDN	4.9	September 16, 2018
October 17, 2013	300,000	0.35	5.0	October 17, 2018
	11.475.000			

All outstanding options at October 31, 2013 are exercisable. In 2013, the Company recorded a total expense of \$368,790 (2012 - \$430,856; 2011 - \$928,497) with respect to the issuance of options issued during the year, calculated in accordance with the Black Scholes option-pricing model.

In the absence of a reliable measurement of the services received from a consultant, the services have been measured at the fair value of the options granted.

The underlying assumptions in the Black Scholes option-pricing model were as follows:

	2013	2012	2011
Share price	\$ 0.20 - 0.36 \$	0.30	\$ 0.17 - 0.20
Volatility factor (based on historical volatility)	105% - 110%	99%	90% - 95%
Risk free interest rate	1.37% - 1.84%	1.31%	1.62% - 2.55%
Expected life	5 years	5 years	2 - 5 years
Dividend yield	0%	0%	0%
Forfeiture rate	0%	0%	0%

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 12. SHARE CAPITAL, STOCK OPTIONS AND LOSS PER SHARE (Cont'd)

#### c) Loss Per Share

The calculation of basic and diluted loss per share for the year ended October 31, 2013 was based on the loss attributable to common shareholders of 5,933,928 (2012 - 1,775,065; 2011 - 3,182,387) divided by the weighted average number of common shares outstanding of 146,814,466 (2012 - 123,375,510; 2011 - 102,301,168).

Diluted loss per share did not include the effect of 11,475,000 stock options and 29,761,012 warrants outstanding (Note 13(c)) and the potential conversion of bridge loans (Note 14) as they are anti-dilutive.

## 13. PRIVATE PLACEMENTS, DERIVATIVE WARRANT LIABILITY AND COMMON SHARE PURCHASE WARRANTS

#### a) Private Placements

- i) In 2013 the Company completed a series of private placement financings with investors pursuant to prospectus and registration exemptions set forth in applicable securities law. The Company received gross proceeds \$2,910,532 and issued a total of 16,106,957 (10,200,743 CDN; 5,906,214 US) common shares. 16,106,957 common share purchase warrants with an average price of \$0.22 CDN; \$0.27 USD were attached to the private placement completed during 2013. All warrants issued in 2013 have a 12 month term from issue date.
- ii) In 2012 the Company completed a series of private placement financings with investors pursuant to prospectus and registration exemptions set forth in applicable securities law. The Company received gross proceeds \$1,040,899 and issued a total of 6,344,899 (5,397,400 CDN; 947,499 USD) common shares. 6,344,899 common share purchase warrants with an average price of \$0.19 CDN; \$0.27 USD were attached to the private placement completed during 2012. All warrants issued in 2012 had a 12 month term from issue date.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

## 13. PRIVATE PLACEMENTS, DERIVATIVE WARRANT LIABILITY AND COMMON SHARE PURCHASE WARRANTS (Cont'd)

#### a) Private Placements (Cont'd)

- iii) In 2013 the Company extended the expiry dates on a total of 11,829,029 (7,315,808 CDN; 4,513,221 US) common share purchase warrants which would have otherwise expired in 2013. These warrants were extended for a period of 12 months in each case. The Company changed the strike price of 3,673,032 CDN of these warrants from \$0.205 CDN to \$0.215 CDN and the strike price remained unchanged for the balance of these warrants. The strike price remained unchanged for all other warrants ranging from \$0.20 CDN to \$0.80 CDN, \$0.24 USD to \$0.80 USD per warrant.
- iv) In 2012 the Company extended the expiry dates on a total of 15,267,087 (9,494,167 CDN; 5,772,920 US) common share purchase warrants which would have otherwise expired in 2012. These warrants were extended for a period of 6 to 12 months in each case. The Company changed the strike price of 429,686 US of these warrants from \$1.20 USD to \$0.80 USD and the strike price of 1,666,667 CDN of these warrants from \$0.15 CDN to \$0.19 CDN. The strike price remained unchanged for all other warrants extended ranging from \$0.12 CDN to \$0.80 CDN; \$0.15 USD to \$0.80 USD per warrant.
- v) In 2011, the Company extended the expiry date of 7,928,432 (3,722,500 CDN; 4,203,932 US) common share purchase warrants which would have otherwise expired in 2011. These warrants were extended for a period of 6 to 12 months in each case. The strike price remained unchanged in each case, ranging from \$0.20 CDN to \$0.76 CDN; \$0.24 USD to \$1.20 USD.
- vi) The Company calculated the relative fair value of the share purchase warrants in accordance with the Black Scholes option-pricing model. The Company reported a total charge to share capital of \$863,863 (2012 \$356,364) and an offsetting charge to contributed surplus of \$377,234 (2012 \$66,997) for US dollar share purchase warrants issued and \$486,629 (2012 \$289,367) to derivative warrants liability for CDN share purchase warrants issued.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

## 13. PRIVATE PLACEMENTS, DERIVATIVE WARRANT LIABILITY AND COMMON SHARE PURCHASE WARRANTS (Cont'd)

#### a) Private Placements (Cont'd)

The relative fair value of these share purchase warrants was estimated using the Black Scholes option-pricing model with the following assumptions:

	2013	2012
Share price	\$0.17 - \$0.58	\$0.10 - \$0.35
Volatility factor (based on historical volatility)	75 - 136%	107 - 156%
Risk free interest rate	0.97 - 1.09%	0.91 - 1.24%
Dividend yield	0%	0%
Expected life	1 year	1 year

The Company calculated the charge associated with the extension of warrants in accordance with the Black Scholes option-pricing model. The Company reported a total charge to deficit of \$841,247 (2012 - \$1,322,879; 2011 - \$293,020) and an offsetting charge to contributed surplus of \$264,938 (2012 - \$358,983; 2011 - \$113,384) for US dollar warrants extended and \$576,309 (2012 - \$963,896; 2011 - \$179,636) to derivative warrant liability for Canadian warrants extended.

The incremental fair value of these warrants extended was estimated using the Black Scholes option-pricing model with the following assumptions:

	2013	2012	2011
Share price	\$0.19 - \$0.53	\$0.12 - \$0.30	\$0.12 - \$0.24
Volatility factor (based on historical volatility)	75 - 161%	109 - 144%	112 - 131%
Risk free interest rate	1.00 - 1.11%	0.91 - 1.14%	1.11 - 1.54%
Dividend yield	0%	0%	0%
Expected life	1 year	0.33-1.0 year	0.5-1.27 year

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

## 13. PRIVATE PLACEMENTS, DERIVATIVE WARRANT LIABILITY AND COMMON SHARE PURCHASE WARRANTS (Cont'd)

### b) Derivative Warrant Liability

The following summarizes the change in derivative warrant liability:

	 2013	 2012		2011
Balance, beginning of year	\$ 1,061,544	\$ 1,178,691	\$	68,207
Fair value assigned in warrants in units issuances	486,629	289,367		520,265
Fair value assigned in warrants extended	576,309	963,896		179,635
Fair value assigned to warrants issued on settlement of debt (Note 14)	-	306,061		-
Fair value transferred to share capital for warrants exercised	(146,121)	(348,948)		-
Warrants modified	(5,224,863)	-		-
Loss (Gain) on revaluation of warrants	3,246,502	(1,327,523)		410,584
	\$ -	\$ 1,061,544	\$ 1	1,178,691

On October 28, 2013 the exercise price of all outstanding Canadian denominated warrants was converted from CDN to USD. As a result, these warrants are no longer considered a derivative warrants liability. These warrants were revalued on October 28, 2013 in the amount of \$5,224,863 and this value was removed from derivative warrant liability and recorded to contributed surplus. Until October 28, 2013, the difference between the carrying amount of these CDN warrants and the revalued amount was recorded as loss on revaluation of derivative warrants liability in the amount of \$3,246,502.

The derivative warrant liability was revalued at October 28, 2013 (2012 – October 31; 2011 – October 31) using the Black Scholes option-pricing model with the following assumptions:

	2013	2012	2011
Share price	\$0.46	\$0.21	\$0.19
Volatility factor (based on historical volatility)	106 - 255%	81 - 153%	114 - 148%
Risk free interest rate	1.03 - 1.09%	1.01 - 1.03%	0.86 - 1.36%
Dividend yield	0%	0%	0%
Expected life	0.14 - 1.13 year	0.25 - 1 year	0.75 - 1 year

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 13. PRIVATE PLACEMENTS, DERIVATIVE WARRANT LIABILITY AND COMMON SHARE PURCHASE WARRANTS (Cont'd)

#### c) Share Purchase Warrants

	Warrants	Weighted average exercise price	Proceeds Realized
Balance outstanding at October 31,2011	26,672,637	\$0.23	-
Exercised	(12,075,858)	(\$0.12)	1,499,713
Expired	(3,108,792)	(\$0.15)	-
Granted	8,204,981	\$0.19	
Balance outstanding at October 31, 2012	19,692,968	\$0.27	-
Exercised	(5,953,913)	(\$0.14)	822,391
Expired	(85,000)	(\$0.15)	-
Granted	16,106,957	\$0.24	
Balance outstanding at October 31, 2013	29,761,012	\$0.28	

The weighted average share price on the date of exercise was \$0.22 (2012 - \$0.23).

#### 14. BRIDGE LOANS

(a) On March 4, 2011 the Company secured a 180 day convertible bridge loan ("Loan 1") from an arms' length investor in the amount of \$100,000 CDN. The interest rate on the loan was established at 2% per month (effective interest rate – 17%). The principal and interest of the loan was convertible at \$0.20 CDN per share at the holder's option. The Company provided 5,000 common share purchase warrants to acquire common shares at a strike price of \$0.20 CDN per share. No value was assigned to these warrants as their value was nominal. The loan was originally due September 4, 2011. The loan was renegotiated and extended for an additional 90 days. The conversion price was revised to \$0.15 CDN per share at the holder's option. As a result of the change in conversion, a value of \$26,997 was recorded to deficit with an offsetting charge to contributed surplus to reflect the value of the more favorable conversion feature in fiscal 2011. All other terms remained the same. This loan was repaid in the quarter ended January 31, 2012.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 14. BRIDGE LOANS (Cont'd)

- (b) On December 2, 2011, the Company secured \$285,000 CDN of bridge loans ("Loan 2") from a group of arm's length investors with maturities of six months. The loans are unsecured, bear interest at a rate of 2% per month (effective interest rate 26%) and are convertible at the holder's option at \$0.12 USD per unit. Each unit upon conversion includes one common share and one common share purchase warrant with a one year expiry and an exercise price of \$0.12 USD. The term of the loan was extended on a month to month basis in July 2012. Subsequent to October 31, 2013, these loans were converted to equity (Note 23).
- (c) On January 12, 2012, the Company secured a \$100,000 CDN bridge loan ("Loan 3") from an arm's length investor with a maturity date in six months. The loan is unsecured, bears interest at a rate of 2% per month (effective interest rate 43%) and is convertible at the holder's option at \$0.10 CDN per unit. Each unit, upon conversion includes one common share and one common share purchase warrant with a one year expiry and an exercise price of \$0.12 CDN. This loan was converted in the quarter ended July 31, 2012 by issuing 1,120,000 common shares.
- (d) On February 7, 2012, the Company secured \$204,000 CDN of bridge loans ("Loan 4") from a group of arm's length investors with maturities of six months. The loans are unsecured, bear interest at a rate of 2% per months (effective interest rate 49%) and are convertible at the holders' option at \$0.12 CDN to \$0.17 CDN per unit. Each unit upon conversion includes one common share and one common share purchase warrant with a one year expiry and an exercise price of \$0.15 CDN to \$0.20 CDN. The term of the loan was extended on a month to month basis in July 2012. \$94,805 of this loan was converted into 740,080 common shares and principal of \$100,000 CDN was not repaid but rolled by the holder into a new loan ("Loan 5").
- (e) On September 4, 2012, the Company secured \$125,000 CDN of bridge loans ("Loan 5") from a group of arm's length investors with maturities of six months. The loans are unsecured, bear interest at a rate of 2% per month (effective interest rate 32%) and are convertible at the holders' option at \$0.18 CDN per unit. Each unit, upon conversion, includes one common share and one common share purchase warrant with a one year expiry and an exercise price of \$0.22 CDN. This loan was repaid in the quarter ended April 30, 2013.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 14. BRIDGE LOANS (Cont'd)

(f) On March 31, 2010, the Company secured a 180 day convertible bridge loan ("Loan 6") from an arm's length investor in the amount of 4250,000 CDN. The interest rate on the loan was established at 4% per month (effective interest rate - 48%). The principal and interest of the loan was convertible at \$0.55 USD per share at the holder's option. The Company provided 12,500 common share purchase warrants to acquire common shares at a strike price of \$0.50 USD per share. As a result, net proceeds of \$220 were allocated to warrants. The loan was originally due in October 2010. At October 31, 2010, the note remained outstanding and interest was accrued at the stated rate of 4% per month compounded monthly. On December 17, 2010, the company renegotiated the loan, extending the terms to June 17, 2011 and bearing interest at 2% per month compounded An additional 20,000 common share purchase warrants were issued in conjunction with the renegotiation. No value was assigned to these warrants as their value was nominal. The conversion feature for this loan was reduced from \$0.55 USD to \$0.20 USD. As a result of the change in conversion, a value of \$158,567 was recorded to deficit in fiscal 2011 with an offsetting charge to contributed surplus to reflect the value of the more favourable conversion feature.

On July 17, 2011, the Company renegotiated the loan, extending the terms to October 17, 2011 and bearing interest at 2% per month compounded monthly. An additional 20,000 common share purchase warrants were issued in conjunction with the renegotiation. No value was assigned to these warrants as their value was nominal. The conversion feature of this loan remained unchanged at \$0.20 USD. The loan was repaid in October 2011.

This loan is not shown in the breakdown of bridge loans as it was repaid in fiscal 2011.

A breakdown of the outstanding bridge loans at October 31, 2012 is summarized as follows:

_	Loan 1	Loan 2	Loan 3	Loan 4	Loan 5	Total
Loan (initial value)	77,238	284,514	52,747	104,099	81,194	599,792
Embedded derivative	25,138	· -	44,776	99,828	44,850	214,592
Interest Accrued	18,495	62,403	11,767	24,606	4,816	122,087
Interest Paid	(12,318)	(56,903)	-	(12,063)	· -	(81,284)
Accretion Expense	25,702	1,557	45,313	101,962	26,161	200,695
Gain on revaluation of embedded derivative	(25,138)	-	(44,776)	(99,828)	(4,101)	(173,843)
Equity Portion of Bridge Loan - Conversion Feature	-	(1,557)	_	-	-	(1,557)
(Gain) loss on settlement	708			(233)	-	475
Repayments	(109,825)	-	-	(117,075)	-	(226,900)
Conversion		_	(109,827)	(101,296)	-	(211,123)
Carrying value at October 31, 2012		290,014			152,920	442,934

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 14. BRIDGE LOANS (Cont'd)

A breakdown of the outstanding bridge loans at October 31, 2013 is summarized as follows:

	Loan 2	Loan 5	Total
Loan (initial value)	284,514	81,194	365,708
Embedded derivative	_	44,850	44,850
Interest Accrued	130,686	15,209	145,895
Interest Paid	(125,186)	(15,209)	(140,395)
Accretion Expense	1,557	44,850	46,407
Gain on revaluation of embedded derivative	-	(44,850)	(44,850)
Equity Portion of Bridge Loan - Conversion Feature	(1,557)	-	(1,557)
Repayments		(126,044)	(126,044)
Carrying value at October 31, 2013	290,014	_	290,014

In fiscal 2013, no bridge loans were issued.

In fiscal 2012, the fair value of the embedded derivatives for which the conversion price is in CDN, was estimated on initial recognition using the Black Scholes option-pricing model with the following assumptions:

	2012
Share price	\$0.15 - \$0.27
Volatility factor (based on historical volatility)	126 - 156%
Risk free interest rate	0.93 - 0.94%
Dividend yield	0%
Expected life	6 Months

The embedded derivative at October 31, 2012 was revalued for loans outstanding in which the conversion price is in CDN using the following underlying assumptions in the Black Scholes option-pricing model:

	2012
Share price	\$0.21
Volatility factor (based on historical volatility)	79%
Risk free interest rate	1.0%
Dividend yield	0%
Expected life	0.34 Years

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 14. BRIDGE LOANS (Cont'd)

As Loan 5 was repaid during the year the embedded derivative recognized in fiscal 2012 of \$44,850 was revalued to be nil at the time of repayment and a gain on revaluation of \$40,750 (2012 - \$176,899; 2011 - loss of \$1,979) was recognized.

In the 2012 fiscal year, Loan 3 and a portion of Loan 4 were settled by the holder converting their amount outstanding with the Company issuing 1,860,080 common share with an assigned value of \$226,900. As a result of the conversion, the holder received 1,860,080 common share purchase warrants exercisable at a price of \$0.12-\$0.20 CDN for a period of 1 year. These common share purchase warrants were valued at \$306,061 using the Black Scholes option-pricing model with the following assumptions.

	2012
Share price	\$0.23 - \$0.25
Volatility factor (based on historical volatility)	154 - 156%
Risk free interest rate	1.03 - 1.24%
Dividend yield	0%
Expected life	1 year

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 15. CONTRIBUTED SURPLUS

Balance at October 31, 2013	\$ 32,822,327
Fair value of warrants exercised	(47,675)
Warrants modified (Note 13)	5,224,863
(b) Extended (Note 13)	264,938
(a) Issued (Note 13)	377,234
Common share purchase warrants	
Stock based compensation expense relating to stock options issued (Note 12)	368,790
Balance at October 31, 2012	\$ 26,634,177
Fair value of warrants exercised	(208,935)
(b) Extended (Note 13)	358,983
(a) Issued (Note 13)	66,997
Common share purchase warrants	
Stock based compensation expense relating to stock options issued (Note 12)	430,856
Balance outstanding at November 01, 2011	\$ 25,986,276

#### 16. INCOME TAXES

(a) The Company has non-capital losses of approximately \$21.6 million available to reduce future taxable income, the benefit of which has not been recognized in these consolidated financial statements. As of October 31, 2013 the tax losses expire as follows:

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 16. INCOME TAXES (Cont'd)

		Other	
<u> </u>	Canada	foreign	Total
2014	\$ 977,818	-	\$ 977,818
2015	3,079,475	-	3,079,475
2022	-	7,301	7,301
2023	-	9,667	9,667
2025	-	14,471	14,471
2026	2,303,792	5,254	2,309,046
2027	1,937,308	3,459	1,940,767
2028	10,045	55,519	65,564
2029	1,985,484	463,610	2,449,094
2030	2,678,936	1,886,778	4,565,714
2031	1,613,975	48,808	1,662,783
2032	1,788,704	333,962	2,122,666
2033	 2,197,482	235,583	 2,433,065
	\$ 18,573,019	\$ 3,064,412	\$ 21,637,431

In addition the Company has available capital loss carry forwards of approximately \$1.6 million to reduce future taxable capital gains, the benefit of which has not been recognized in these consolidated financial statements. These losses carry forward indefinitely.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 16. INCOME TAXES (Cont'd)

(b) Deferred income taxes reflect the net tax effect of temporary differences between carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are as follows.

		2013	2012	2011	
Non-capital losses and other	\$	6,334,982 \$	5,877,761	\$ 4,959,149	
Capital losses Property, equipment, intangibles, patents and deferred		212,386	221,578	210,319	
development costs and other		1,926,689	1,988,956	1,898,201	
Share issue costs		15,641	21,497	28,788	
		8,489,698	8,109,792	7,096,457	
Deferred tax assets not recognized		(8,489,698)	(8,109,792)	(7,096,457)	
	\$	- \$	-	\$ -	

(c) The reconciliation of income tax attribute to continuing operation computed at the statutory tax rates to income tax expense is as follows:

	2013	2012	2011
Loss before income taxes	\$ (5,933,928) \$	(1,775,065)	\$ (3,181,182)
Statutory rate	26.50%	26.50%	28.53%
Expected income tax recovery Effect on income taxes of unrecognized future income tax assets relating to deductible temporary defferences on:	(1,572,491)	(470,392)	(907,591)
Non-deductible expenses and other items	888,557	(148,207)	439,774
Share issue costs and other Effect of exchange rate on deferred tax assets carried	(4,361)	(4,361)	(8,062)
forward from previous years	324,880	3,071	(183,451)
Change in deferred income tax rates and other	(16,491)	(393,446)	(181,726)
Change in deferred tax assets not recognized	379,906	1,013,335	842,261
	\$ - \$	-	\$ 1,205

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 17. EXPENSES

#### Administration

The components of general and administration expenses are as follows:

	2013	2012	2011
General and administrative	\$ 53,494 \$	66,651 \$	25,988
Rent and occupancy cost	84,179	108,193	60,396
Bad debt expense	19,954	21,586	67,049
Interest income	(19,954)	(20,300)	(20,220)
Interest expense	78,677	106,442	139,732
Accretion expense	19,381	187,671	12,447
Office insurance	61,211	65,394	78,246
Telephone	17,272	17,380	18,741
Investor relations, listing and filing fees	 64,283	141,600	80,448
	\$ 378,497 \$	694,617 \$	462,827

### Professional, other fees and salaries

The components of professional, other fees and salaries expenses are as follows:

	 2013	2012	2011
Professional fees	\$ 311,330	\$ 183,021	\$ 173,217
Consulting fees	818,107	917,420	467,132
Salaries and benefits	 443,078	407,450	 424,306
	\$ 1,572,515	\$ 1,507,891	\$ 1,064,655

#### Research and development

The components of research and development expenses are as follows:

	2013	2012	 2011
Project expenses incurred (recovered)	\$ (73,321)	\$ 229,840	\$ (75,896)
Write-down of deferred development costs on specific projects	234,241	-	-
	\$ 160,920	\$ 229,840	\$ (75,896)

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 18. MANAGEMENT COMPENSATION AND RELATED PARTY TRANSACTIONS

The Company reports the following related party transactions:

(a) Chairman: The Chairman receives cash compensation on a month to month basis calculated at an annual rate of \$150,000 CDN.

In 2013 the Chairman was awarded a total of 140,000 stock options at an average price of \$0.29 CDN per share (2012 - 100,000 stock options at an average price of \$0.35 per share; 2011 - 1,000,000 stock options at an average price of \$0.20 per share).

The total compensation paid to the Chairman during the year ended October 31 was \$146,599 of cash compensation and \$21,163 of stock based compensation (2012 - \$149,565 of cash compensation and \$23,697 of stock based compensation; 2011 - \$152,326 of cash compensation and \$118,038 of stock based compensation).

In August 2011 the Chairman converted \$112,500 of compensation received to a unit private placement consisting of one common share and one common share purchase warrant. A total of 703,125 units were issued under this private placement.

#### (b) Management and consulting fees:

Included in professional fees, other fees and salaries as reported are management and consulting fees paid or payable to individuals (or companies controlled by such individuals) who served as officers and directors of the Company. The total compensation paid to such parties during the year ended October 31, 2013 was \$729,369 (of which \$202,820 was capitalized to deferred development costs) of cash compensation and \$148,141 of stock based compensation (2012 - \$625,831 of cash compensation and \$352,225 of stock based compensation; 2011 - \$494,806 (of which \$90,000 was capitalized to intangible assets) of cash compensation and \$678,721 of stock based compensation.

In 2013 these parties were awarded a total of 980,000 options at an average price of 0.29 CDN per share (2012 - 1,525,000 options at an average price of 0.35 per share; 2011 - 5,750,000 options at an average price of 0.20 per share)

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

# 18. MANAGEMENT COMPENSATION AND RELATED PARTY TRANSACTIONS (Cont'd)

### (b) Management and consulting fees (Cont'd):

In 2011 the Company assigned the promissory note receivable (Note 8) to an officer of the Company in conjunction with outstanding and unpaid fees due to that officer. During 2012, a total of \$30,000 received from the borrower was paid directly to that officer under the assignment agreement. The balance owing to the officer of the Company at October 31, 2012 was \$56,500, which was paid in fiscal 2013.

In February 2012 an officer subscribed for \$50,000 as a Unit private placement consisting of one common share (at a price of \$0.35 per share) and one common share purchase warrant (at a price of \$0.44 per share). A total of 142,858 Units were subscribed for.

#### 19. COMMITMENTS

The Company secured new leased premises in June 2012. The lease term is for 5 years and stipulates base monthly rental expenses of \$3,800 CDN. Lease commitments are as follows – commitments less than one year of \$44,000; commitment between years 2-5 of \$121,000.

#### 20. CONTINGENCIES

### (a) Legal matters:

There are currently no legal matters outstanding to which the Company is a party. 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.

#### (b) License agreement:

The Company executed a license agreement with the University of Toronto in 2005 relating to research work completed on its (MRAM) memory technology. The license agreement stipulated royalty payments capped at \$1 million in the event that the Company was successful in generating commercial revenues from the sale of the licensing of its memory technology to third parties. To date the Company has not generated any commercial revenues from the exploitation of its memory technology. It decided in 2011 to suspend any further pursuit or development of its memory technology.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 20. CONTINGENCIES (Cont'd)

#### (b) License agreement: (Cont'd)

Currently, the Company is attempting to sell off the related patent portfolio; to date the Company has been unsuccessful in doing so. If the Company does realize proceeds on the sale of these related patents it may have an obligation payable to the University of Toronto under the terms of its 2005 license agreement.

#### (c) Accounts payable:

In 2013, the Company recovered \$181,780 of accounts payable balances, recorded in previous years, relating to third party vendors whose accounts the Company has disputed. The Company has concluded that these amounts are not payable. In the event it is determined that these amounts are payable the Company would incur these costs.

#### 21. FINANCIAL RISK MANAGEMENT

#### (a) Financial Risk Management

The Company is exposed to a variety of financial risks by virtue of its activities: market risk (including foreign exchange risk and interest rate risk) and liquidity risk. The overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on financial performance. Risk management is carried out under policies approved by the Board of Directors. Management is charged with the responsibility of establishing controls and procedures to ensure that financial risks are mitigated in accordance with the approved policies.

#### (b) Market Risk:

### i. Foreign Exchange Risk:

The Company currently incurs expenses in Canadian dollars. The total monetary financial instruments are in a net positive position. Management monitors the Canadian position of these monetary financial instruments on a periodic basis throughout the course of the year.

The consolidated financial statements include balances that are denominated in Canadian dollars as follows:

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 21. FINANCIAL RISK MANAGEMENT

### (b) Market Risk: (Cont'd)

#### i. Foreign Exchange Risk: (Cont'd)

	2013	 2012
Cash	\$ 461,727	\$ 263,383
Deposits and other receivables	49,477	46,016
Accounts payable and accrued liabilities	210,827	267,098
Bridge loan	-	159,902

#### ii. Foreign Exchange Risk:

A 10% strengthening of the US dollar against the Canadian dollar would have decreased the equity by \$30,037 (2012 – increased the equity by \$10,695) due to a reduction in the value of net liability balance. A 10% weakening of the US dollar against the Canadian dollar at October 31, 2013 would have had the equal but opposite effect.

#### iii. Interest Rate Risk:

Cash flow interest rate risk is the risk that the future cash flow of a financial instrument will fluctuate because of changes in market interest rates.

Financial assets and financial liabilities with variable interest rates expose the Company to cash flow interest rate risk. The Company's cash and promissory note receivable earn interest at market rates. The Company manages its interest rate risk by maximizing the interest income earned on excess funds while maintaining the liquidity necessary to conduct operations on a day-to-day basis. Fluctuations in market rates of interest may have an impact on the Company's results of operations.

The Company is not exposed to interest price risk on its interest bearing bridge loans as the interest rate is fixed.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

### 21. FINANCIAL RISK MANAGEMENT (Cont'd)

#### (c) Liquidity Risk:

Liquidity risk is the risk that the Company will not be able to meet its obligations as they fall due.

The Company manages its liquidity risk by forecasting cash flows from operations and anticipated investing and financing activities. Senior management is actively involved in the review and approval of planned expenditures.

All financial liabilities are due within 1 year from the balance sheet at October 31, 2013.

#### (d) Credit Risk:

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's cash and deposits and other receivables. The carrying amount of financial assets represents maximum credit exposure.

As at October 31, 2013, the Company reports working capital of \$425,888 and has certain financial commitments (Note 19), the majority of which are due within one year. It must continue to raise financing in order to meet its current obligations.

#### 22. SEGMENTED INFORMATION

There is one operating segment of the business being the development and commercialization efforts with respect to the Company's proprietary memory and sensor applications. Currently, the predominant market segment that the Company is pursuing is the North American market for such technology.

Geographic information – Non-current assets

	2013	2012
Canada	\$ 415,533	665,430
United States	694,898	223,757
	\$1,110,431	889,187

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in United States dollars)

For the years ended October 31, 2013 and 2012

#### 23. SUBSEQUENT EVENTS

The Company reports the following as subsequent events:

- i) The Company realized proceeds of \$1,751,924 from the exercise of a total of 7,133,354 common share purchase warrants previously issued.
- ii) The Company extended the expiry dates of a total of 1,105,026 common share purchase warrants. These warrants were extended for a period of 6 months in each case. The strike price was changed from \$0.41 and \$0.45 to \$0.50 in each case. These warrants would have otherwise expired in November 2013.
- iii) The Company announced an initial development contract with a strategic partner in the amount of \$5.4 million, tied to development milestones.
- iv) The bridge loan that was reported at October 31, 2013, in the amount of \$290,014, has since been converted in 2,517,501 equity units. Each unit consists of one common share and one common share purchase warrant. The warrants have a strike price of \$0.12 per common share and will expire on January 27, 2015 if not exercised by that date.

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## SECTION 302 CERTIFICATION CERTIFICATION OF CHIEF EXECUTIVE OFFICER

### I, Joseph Fuda, certify that:

- 1. I have reviewed this annual report on Form 20-F of Micromem Technologies Inc. for the Fiscal Year Ended October 31, 2013;
- 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 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 period covered by the 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 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: February 19, 2014 /s/ Joseph Fuda

Joseph Fuda Chief Executive Officer (Principal executive officer)

## SECTION 302 CERTIFICATION CERTIFICATION OF CHIEF FINANCIAL OFFICER

### I, Dan Amadori, certify that:

- 1. I have reviewed this annual report on Form 20-F of Micromem Technologies Inc. for the Fiscal Year Ended October 31, 2013;
- 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 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 period covered by the 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 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: February 19, 2014 /s/ Dan Amadori

Dan Amadori
Chief Financial Officer
(Principal financial officer)

### 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 Micromem Technologies Inc. (the "Company") on Form 20-F for the Fiscal Year Ended October 31, 2013 (the "Report"), I, Dan Amadori, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, based on my knowledge, 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 result of operations of the Company.

Date: February 19, 2014 /s/ Dan Amadori

Dan Amadori
Chief Financial Officer
(Principal financial officer)

### 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 Micromem Technologies Inc. (the "Company") on Form 20-F for the Fiscal Year Ended October 31, 2013 (the "Report"), I, Joseph Fuda, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, based on my knowledge, 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 result of operations of the Company.

Date: February 19, 2014 /s/ Joseph Fuda

Joseph Fuda
Chief Executive Officer
(Principal executive officer)