

**MICROMEM TECHNOLOGIES INC.  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE QUARTER ENDED JANUARY 31, 2011  
PREPARED AS OF APRIL 1, 2011**

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## **INTRODUCTION**

The following sets out the Management's Discussion and Analysis ("MD&A") of the financial position and result of operations for the quarter ending January 31, 2011 of Micromem Technologies Inc. (the "Company", "Micromem" or "we"). The MD&A should be read in conjunction with the Company's audited consolidated financial statements and accompanying notes for the fiscal year ending October 31, 2010 and 2009 which are prepared in accordance with Canadian generally accepted accounting principles ("Canadian GAAP"). Other than financial statement data for the years ended October 31, 2010 and 2009, which are audited, all financial analysis, data and information set out in this MD&A are unaudited. Additional information regarding the Company is available on the SEDAR website at [www.sedar.com](http://www.sedar.com).

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

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

## **FORWARD LOOKING STATEMENTS**

This MD&A contains forward-looking statements and forward looking information within the meaning of applicable Canadian securities legislation ("forward looking statements"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as "believes", "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", or "intends" or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken or achieved) are not statements of historical fact, but are "forward-looking statements". Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company, or developments in the Company's business or in its industry, to differ materially from the anticipated results, performance, achievements or developments expressed or implied by such forward-looking statements. Forward-looking statements include disclosure regarding possible events, conditions or results of operations that are based on assumptions about future conditions, courses of action and consequences. Forward-looking statements may also include, without limitation, any statement relating to future events, conditions or circumstances. The Company cautions you not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. Forward-looking statements relate to, among other things, the successful commercialization of our technology, comments about potential future revenues, joint development agreements and expectations of signed contracts with customers etc. A variety of

inherent risks, uncertainties and factors, many of which are beyond the Company's control, affect the operations, performance and results of the Company and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks and uncertainties include the risk of not securing required capital in future, the risks of not successfully concluding agreements with potential partners on a timely basis, the risks associated with commercializing and bringing to market our technology. These risks are affected by numerous factors beyond the Company's control: the existence of present and possible future government regulation, the significant and increasing competition that exists in the Company's business sector, uncertainty of revenues, markets and profitability, as well as those other factors discussed in this MD&A report. This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements and reference should also be made to the Company's Annual Information Form (prepared and filed in the form of a Form 20-F Annual Report pursuant to The Securities Exchange Act of 1934) for a description of additional risk factors.

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

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**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**QUARTER ENDING JANUARY 31, 2011**  
**PREPARED AS OF APRIL 1, 2011**

*(Unless other indicated dollar amounts reported are stated in U.S. dollars)*

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**1. CORPORATE OVERVIEW**

Micromem Technologies Inc. (“Micromem” or “the Company”) is a development stage company that has developed proprietary MRAM technology for both memory and sensor applications. The Company’s shares are traded on the NASDAQ over the counter Bulletin Board (OTCBB) under the symbol MMTIF and on the CNSX under the symbol MRM. In 2007, the Company incorporated Micromem Applied Sensor Technologies Inc. (“MAST”) for the purpose of moving forward with the planned commercialization of its technology.

Over the past few years, the Company has committed significant efforts to furthering its development activities towards the commercialization of its technology. Milestones in these development efforts have included:

- (a) The consolidation of our research initiatives at the University of Toronto between 2003 – 2007, this development program was funded in part through the Ontario Government.
- (b) The hiring of a Chief Technology Officer in 2005 who assumed primary responsibility for guiding the Company’s technical developments and strategies. The CTO operated under contract to the Company until November 2007.
- (c) The incorporation of MAST and the appointment of Steven Van Fleet in 2008 to serve as President of MAST and to lead the Company’s commercialization efforts for its technology.
- (d) The contracting with two U.S. foundries between 2007 – 2009 to test and advance the Company’s sensor technology applications. Concurrently, the Company engaged Dreifus Associates Limited (“DAL”) to support the development of a series of product prototypes for different prospective commercial applications.
- (e) The Company hired Morgan Lewis as its U.S.-based counsel to build and expand its intellectual property portfolio. Morgan Lewis was initially engaged in 2005 and continued to work with the Company until October 2010 at which point they resigned and withdrew their services.
- (f) The Company developed a business dialogue with a number of potential strategic partners commencing in 2008 and executed contractual agreements with several of these parties with the objective of commercializing its sensor technology for different vertical platforms. The Company announced several executed contracts commencing in 2008.

(g) To finance its ongoing activities, the Company has secured funding through private placements, the exercise of stock options and of common share purchase warrants and through periodic bridge loans. An historical overview of the financing secured is provided as below for the period covering the fiscal years ending October 31, 2004 – 2009 (\$000):

	Private placements	Warrants	Options	Total
2004	\$73	\$265	\$530	\$868
2005	1,473	207	554	2,234
2006	75	486	1,065	1,626
2007	716	191	552	1,459
2008	2,980	1,494	1,011	5,485
2009	2,959	-	992	3,951
	\$8,276	\$2,643	\$4,704	\$15,623

## **2. HIGHLIGHTS – FISCAL YEAR ENDED OCTOBER 31, 2010 AND QUARTER ENDED JANUARY 31, 2011**

In 2010 the Company encountered delays in a number of the strategic initiatives that it was pursuing including, in several cases, significant delays on the client side and it experienced ongoing liquidity and working capital constraints which hampered its ability to sustain operations and to meet its current obligations. Notwithstanding these issues, the Company has continued to develop its projects with the expectation of realizing commercial revenues from either product sales or license agreements with potential strategic partners. The key developments and activities in 2010 with an update for the quarter ended January 31, 2011 are further discussed below:

- (a) *NanoOpto Concentrator*: As previously reported at October 31, 2010 NanoOpto was shut down in 2010 and the completion of our concentrator unit has been delayed. In total, the Company spent \$373,000 with this supplier. Currently, the Company is continuing to evaluate alternatives so as to have available the equivalent of this concentrator unit in order to pursue certain technology applications.
- (b) *LMTI*: At October 31, 2010 we reported on our negotiations with LMTI and the development of our prototypes in preparation for FDA protocol trials. We have advised LMTI that we will continue with the development of our product and, when available, will present it to LMTI under the original terms of the purchase order. The Company intends to present the product to LMTI under the terms of the original purchase order. If this does not materialize, then the Company will explore alternative market opportunities for this product.

- (c) *Unotron*: The Company announced a contractual agreement in March 2009 with Unotron to develop an application for a washable keyboard utilizing the Company's sensor technology. The manufacturing agreement was executed in May 2009. At October 31, 2010 we reported on our negotiations with Unotron and the development of our prototypes in preparation for final product certification. The Company believes that it has met all of the technical specifications associated with the prototype products. The Company remains committed to fulfilling the terms and conditions of the contractual arrangements executed with Unotron.

The secured debenture that Micromem holds with Unotron matured on September 30, 2010. The Company has been in negotiations with Unotron with respect to the repayment of the debenture. At October 31, 2010, the Company had fully reserved the outstanding principal of the debenture.

In February 2011 the Company negotiated a repayment schedule with Unotron with respect to the repayment of the outstanding principal and interest during 2011 (refer to Section 16) and has received an initial payments of \$10,000 in February and \$20,000 in March on this repayment schedule.

- (d) *BAE*: There were no new developments in the quarter beyond the report provided at October 31, 2010.
- (e) *NEMT*: We have developed a prototype unit for use by this company in its exploration activities. The technology was being developed under contract with DAL. The development of this technology has not as yet been finalized by DAL; finalization is expected pending the settlement of outstanding invoices submitted by DAL. Our dealings with NEMT continue. We anticipate that these trials will be advanced in 2011 pending the resolution of the Company's working capital constraints.
- (f) *Oil Sensor*: The Company continues to evaluate development opportunities for its oil sensor prototype.
- (g) The Company has been pursuing the development of a sensor application for a large international organization that is marketing a healthcare product and anticipates a potential development contract to emerge from these negotiations. The Company has incurred \$242,464 of development costs with respect to this initiative.
- (h) Subsequent to January 31, 2011 the Company has finalized the terms of a contract with a major international energy company to develop an application based on the initial mining sensor technology that it has developed. It reports \$221,513 as deferred development costs relating to this initiative as of January 31, 2011. In February 2011 it executed the contract and received the initial payment from this customer (refer to Section 16).

- (i) During the year ended October 31, 2010, the Company continued to secure financing through private placements and bridge loan facilities. A total of \$2,494,656 was raised through these initiatives. In the Quarter ended January 31, 2011, the Company secured a total of \$503,140 through private placements. Subsequent to January 31, 2011, the Company has secured additional financing (refer to Section 16).
- (j) The Company reports a working capital deficiency at January 31, 2011 and a going concern qualification in the footnotes to its financial statements, as further discussed in subsequent sections of this MD&A.
- (k) The Company's business plan for 2011 is based on the following components:
  - i) It will execute on the contract that it has signed with the international energy company referred to above.
  - ii) It will continue to pursue the other project opportunities that are described above.
  - iii) It will continue to respond to new project opportunities as these develop.
  - iv) It will seek a midterm solution to its current working capital constraints in order to allow it to continue its operations.

### **3. GOING CONCERN**

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

Certain principal conditions and events are prevalent which indicate that there is doubt about the Company's ability to continue as a going concern for a reasonable period of time in future. The Company has incurred substantial recurring losses to date and it reports a working capital deficiency of \$1,429,020 at January 31, 2011.

The Company continues to pursue its development initiatives in order to develop its technologies for commercial applications and continues to raise financing for operations as outlined in Notes 11 and 20 to the financial statements at January 31, 2011.

It will be necessary for the Company to raise additional funds for the continued development, testing and commercial exploitation of its technologies. To date the Company has raised financing through successive Unit private placements, through the exercise of common share stock options and through the exercise of common share purchase warrants. It has also secured periodic term loans.

In the 2011 fiscal year, the Company anticipates that (i) it will realize initial revenues from commercialization efforts with current strategic development partners, (ii) it will monitor the timing of incurring additional expenses in keeping with its ongoing working capital position, and (iii) it will continue to secure financing in the same manner in which it has raised financing to date.

The consolidated financial statements have been prepared on a going concern basis and do not include any adjustments to the amounts and classifications of the assets and liabilities that might be necessary should the Company be unable to continue in business. 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.

#### **4. SELECT FINANCIAL INFORMATION AND DISCLOSURES**

*(a) Financial Position at January 31, 2011:*

The following table sets out select financial information for the quarter ended January 31 in each of the three most recently completed financial years of the Company prepared in accordance with Canadian general accepted accounting principles:

	Quarter ended January 31, 2011 (unaudited)	Quarter ended January 31, 2010 (unaudited)	Quarter ended January 31, 2009 (unaudited)
Interest and other income	339	5,099	5,637
Total expenses	580,107	411,498	1,589,266
Net loss	(579,768)	(406,399)	(1,583,629)
Loss per share and diluted loss per share	(0.01)	-	(0.02)
Weighted average number of shares outstanding	96,493,122	88,263,889	80,392,611
Total assets	592,430	3,010,357	509,267
Cash and cash equivalents	25,255	180,081	355,608
Working capital	(1,429,020)	(341,756)	(697,379)
Shareholders' equity (deficiency)	(997,973)	2,142,888	(1,668,452)



The loss reported at January 31, 2011 was \$579,768 which included non-cash stock compensation expense of \$33,735 (2010: loss of \$406,399 and nil stock compensation expense).

To finance our operating loss in Q1 2011, we raised net proceeds of \$503,140 through the issuance of common shares through Unit private placements.

At January 31, 2011 the Company has:

- a) 10,247,199 stock options outstanding which expire, if unexercised, between 2011-2014. The average exercise price of these options is \$0.89; and,
- b) 8,723,885 common share purchase warrants which expire throughout 2011 if unexercised. The average exercise price of these warrants is \$0.41.

Refer also to **Tables 1 and 2** which are appended to this MD&A. Table 1 sets forth selected information from the consolidated statements of operations and deficit for the fiscal years ending October 31, 2009-2010 and for the related quarterly information through January 31, 2011. Table 2 sets forth selected information from the consolidated balance sheets for the fiscal years ending October 31, 2009-2010 and the related quarterly information through January 31, 2011.

***(b) Discussion of Operating Results***

The following table summarizes the Company's operating results for the quarters ended January 31, 2011, 2010, 2009:

	Quarters ended January 31,		
	2011 \$000 (unaudited)	2010 \$000 (unaudited)	2009 \$000 (unaudited)
Interest and other income	1	5	6
General and administration	100	79	280
Professional fees and salaries	396	282	366
Stock-based compensation	33	-	355
Research	15	-	564
Travel and entertainment	18	39	24
Foreign exchange (gain) loss	16	9	(1)
Amortization	12	2	2
Allowance for promissory note	(10)	-	-
Total expenses	580	411	1,590
Net loss	(579)	(406)	(1,584)
Loss per share	(0.01)	-	(0.02)

***Commentary:***

**Revenue:** The Company remains in pre-revenue mode at January 31, 2011. It reports interest income of \$339 in Q1 2011 (2010: \$5,069).

**Quarterly general and administrative related expenses compare as follows (\$000):**

	2011	2010	2009
General and administrative:			
Investor relations	-	-	104
Reserve, doubtful accounts	9	-	-
Telephone	1	3	4
Insurance	21	21	13
Rent	11	7	(8)
Interest	44	-	-
Exchange gain/loss	(4)	(5)	43
MAST	5	26	90
All other	13	27	34
	100	79	280

In 2009, the Company engaged Investor Relations Group (“IRG”) to provide investor relations services to the Company. The contract expired in September 2009.

Interest expense in Q1 2011 relates to the bridge loans secured in 2010.

**Quarterly professional, other fees and salaries related expenses compare as follows (\$000):**

	2011	2010	2009
Professional, other fees and salaries:			
Audit and related services	30	28	-
Legal - patent	-	-	50
Legal - other	16	26	16
DAL	-	-	77
President, MAST	45	-	43
Salaries and benefits	126	118	86
Management fees	114	109	94
Other	65	1	-
	396	282	366
Stock compensation expense	33	-	355
	429	282	721

In Q1 2011 and 2010 the Company capitalized costs incurred during the year with respect to its patents. Accordingly it reported no Legal – patent expenses in Q1 2011 and 2010.

The costs incurred relating to DAL and MAST were capitalized in the first quarter 2010 as Projects Under Development. In Q1 2011 no further costs were incurred with DAL.

Management fees in 2009 – 2011 relate to our Chairman, our President and our CFO.

Stock compensation expense is measured as the Black Scholes non-cash cost of options granted in respective periods.

**Quarterly research related expenses compare as follows (\$000):**

	2011	2010	2009
Research:			
Strategic Solutions	-	-	72
BAE	-	-	215
GCS	-	-	104
J.Wise	14	-	-
DAL	-	-	91
Other	1	-	82
	15	-	564

Prior to Q4 2009 all development costs were expensed as incurred after which the decision was made to capitalize development costs. All expenditures incurred in 2010 were capitalized; during Q3 and Q4 of 2010, impairment reserves were taken against specific projects.

**Quarterly travel related expenses compare as follows (\$000):**

	2011	2010	2009
Travel:			
Airfare	11	15	10
Hotel	2	6	3
Meals	1	11	5
Transportation	4	7	6
	18	39	24

Travel related costs were reduced in 2011 as business development initiatives were curtailed due to cash flow constraints.

C) Unaudited Quarterly Financial Information - Summary

Three months ended (unaudited)	Interest and other income \$	Expenses \$	Loss in period \$	Loss per share \$
January 31, 2009	5,637	1,589,266	(1,583,629)	(0.02)
April 30, 2009	536	1,273,986	(1,273,450)	(0.02)
July 31, 2009	113	1,522,071	(1,521,958)	(0.02)
October 31, 2009	81,762	13,664	68,098	-
January 31, 2010	5,099	411,498	(406,399)	-
April 30, 2010	5,009	531,769	(526,760)	(0.01)
July 31, 2010	5,000	1,942,819	(1,937,819)	(0.02)
October 31, 2010	7,778	1,811,661	(1,803,883)	(0.02)
January 31, 2011	339	580,107	(579,768)	(0.01)

Refer also to Tables 1 and 2 for summarized quarterly information.

**5. LIQUIDITY AND CAPITAL RESOURCES**

*Liquidity:*

**Table 3** provides a summary of the financing that was raised during the 2009-2010 fiscal years and the quarter ended January 31, 2011.

We currently have no cash flow from operations and will have none until we are in a position to either license or directly produce and sell products utilizing our technologies. As at January 31, 2011, our working capital deficiency was \$1,429,020 (2010: \$341,756). We currently have no lines of credit in place, we must obtain financing from new investors or from investors who currently hold outstanding options and warrants in order to meet our cash flow needs until we generate revenues.

We have granted to our directors, officers and other employees options to purchase shares at prices that are at or above market price on the date of grant. A summary of the outstanding options and warrants is provided in **Table 4**.

*Capital Resources:*

We have no commitments for capital expenditures as of January 31, 2011.

## **6. RISKS AND UNCERTAINTIES OVERVIEW**

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

### *Stage of Development of Technology:*

The Company has made significant strides in developing its prototype products over the past several years in its attempt to commercialize its products with its various strategic development partners. Nonetheless, the Company at this stage has not completed such efforts to the point that it has product available for sale and there remains uncertainties as to the Company's ultimate ability to complete the development of a product that is saleable.

### *Customers' Willingness to Purchase:*

We have entered into multiple joint development agreements whereby our prototype products are being subjected to rigorous testing by our partners. We have not as yet received unequivocal and firm purchase orders for our product. Some of the joint development partners that we are dealing with are private companies and there is a potential risk of those companies having to secure all of their requisite financing to support their orders and their working capital requirement.

### *Patent Portfolio:*

The Company has spent a considerable amount of time, effort and incurred significant costs with respect to the maintenance and development of our intellectual property portfolio. However, given the nature of IP development, the Company is subject to continuing risks that our patents could be successfully challenged, that our patent pending files may not ultimately be granted full patent status. While we continue to make specific efforts to broaden our IP claims, this is an ongoing process and requires continued effort and vigilance. The Company does not have extensive in-house resources so as to manage its IP portfolio in this environment and has traditionally relied heavily on its patent attorneys for these services. In October 2010, the Company's working relationship with its patent attorneys, Morgan Lewis, was discontinued. The Company plans to secure an alternative service provider in 2011 once its working capital position improves.

### *Financing:*

The Company has successfully raised funding over the past several years to continue to support its development initiatives and fund the Company's corporate structure and overheads. The financing environment for early stage technology companies remains challenging and there is no certainty that the Company will be able to continue to raise financing as it has in the past to continue to support its business initiatives.

*Competitors:*

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

*Management Structure:*

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

*Foreign Currency Exposure:*

The Company expects to sell its products and license technologies in the United States, in Canada and abroad. The Company has not hedged its foreign currency exposure, which has not been significant to date. In future, foreign currency fluctuations could present a risk to the business.

## **7. CRITICAL ACCOUNTING POLICIES**

Our significant accounting policies are set forth in Note 3 to our audited consolidated financial statements as of October 31, 2010 and should be read in conjunction with management's discussion of the Company's critical accounting policies and estimates as set forth below.

*Canadian GAAP:*

Our financial statements are prepared in conformity with Canadian GAAP which requires our management 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.

The Company's consolidated financial statements have been prepared in accordance with Canadian GAAP which, in the case of the Company, conform in all material with respect to U.S. GAAP except for the accounting for development expenditures reported in the fiscal year ended October 31, 2010.

Under U.S. GAAP, development expenditures are expensed as incurred. In 2009, the Company capitalized \$2,000,611 of development costs in accordance with Canadian GAAP. In 2010, the Company capitalized an additional \$932,302 of development costs; it recorded an impairment reserve of \$2,711,392 due to the uncertain timing relating to

project completion. At January 31, 2011 the Company continues to report \$221,521 of development costs on the balance sheet.

A reconciliation of the financial statements between US and Canadian GAAP is presented in Note 18 to the financial statements.

*Foreign Currency Translation:*

Accounts recorded in foreign currency have been converted to United States dollars as follows: Monetary current assets and current liabilities, at the prevailing exchange rates at the end of the year; non-monetary assets at historical rates; revenues and expenses are translated at the 3 month average exchange rate 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.

*Research and Development Expenses:*

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

*Patents:*

Patents are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When circumstances dictate, an impairment loss is calculated as equal to the excess of the carrying value of the assets over their undiscounted estimated future net cash flow. Until October 31, 2008, the Company expensed all current expenditures for patent-related activities. In the fiscal year ended October 31, 2009, Company determined that it met the criteria for capitalizing patent-related costs incurred during the current fiscal year. Amortization expenses recorded on a straight line basis over the estimated useful life of 10 years. In the quarter ended October 31, 2010, the Company changed its estimated useful life for patents prospectively to 5 years.

*Stock-Based Compensation:*

Stock-based compensation is recognized using the fair value method. Under this method, the Black Scholes option-pricing model is used to determine periodic stock option expense. Any compensatory benefit recorded is recognized initially as deferred share compensation in the consolidated statements of shareholders' equity and then charged against income over the contractual or vesting period.

As stock options are exercised, the Company records a charge to contributed surplus and a credit to share capital. The amount reported in each case is based on the original expense recorded when the related options were granted.



### *Unit Private Placements:*

Until October 31, 2008, the Company had applied the residual value approach in accounting for the value assigned to the common shares and the warrants which it made available in the number of Unit private placement financings. Under this residual value approach, the Company assigned 100% of the proceeds from the Unit private placement to the common shares and a nil value to the attached warrants. In the year ended October 31, 2009, the Company started to estimate the value of the common shares and the warrants included in the Unit private placement financings which it completed in the fiscal year using the relative fair value approach. It assigned a value to the warrants which formed part of these Unit Private placements, calculated in accordance with the Black Scholes option-pricing model.

### *Income Taxes:*

The Company accounts for income taxes by the asset and liability method. Under the asset and liability method, future tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Future tax assets and liabilities are measured using substantively enacted tax rates and laws that are expected to apply when the asset is realized or the liability settled. To the extent that it is estimated that a future income tax asset will not be realized, a valuation allowance is provided.

## **8. RECENT CANADIAN ACCOUNTING POLICIES NOT YET ADOPTED**

### *International Financial Reporting Standards (IFRS):*

In February 2008, the Accounting Standards Board ("AcSB") confirmed that the use of IFRS will be required in 2011 for publicly accountable enterprises in Canada. The adoption date of November 1, 2011 will require the restatement, for comparative purposes, of amounts reported by the Company for its year ended October 31, 2011, and of the opening balance sheet as at November 1, 2010. The Company is continuing to assess the financial reporting impacts of the adoption of IFRS and, at this time, the impact on future financial position and results of operations is not reasonably determinable or estimable. The Company does anticipate a significant increase in disclosure resulting from the adoption of IFRS and is continuing to assess the level of disclosure required, as well as system changes that may be necessary to gather and process the required information.

## **9. FINANCIAL INSTRUMENTS**

It is management's opinion that the Company is not exposed to significant interest rate and credit risks arising from financial instruments and that the fair value of financial instruments approximates the carrying value.

*Fair values:* The Company's financial instruments include: cash and cash equivalents, other receivable and accounts payable and accrued liabilities, the fair values of which approximate their carrying values due to their short-term maturity.

*Credit risk:* Financial instruments, which subject the Company to potential credit risk, consist of other receivable. The Company does not require collateral or other security for accounts receivable. The Company estimates its provision for uncollectible amounts based on an analysis of the specific amount and the debtor's payment history and prospects.

*Foreign exchange:* The Company completes transactions denominated in Canadian and in United States dollars and, as such, is exposed to fluctuations in foreign exchange rates. The Company does not use derivative instruments to reduce its exposure to foreign currency risk.

## **10. COMMITMENTS AND CONTINGENCIES**

*Technology Development Agreement with Estancia:*

To the extent that the Company generates revenue in future relating directly and specifically to the Vemram patents, we are obligated to pay Estancia 32% of the gross profit realized less expenses agreed to by the parties and 32% of any unit royalties realized less direct expenses. To date no revenues have been generated. We have discontinued the development of this technology after 2002.

*Operating Leases:*

The Company has month to month operating lease commitments in respect of its head office.

*Legal Matters:*

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

*Royalties:*

The Company has obligations under the terms of the License Agreement signed with University of Toronto in June 2005. The total obligation could be \$1 million tied to future product revenues.

*Senior Management:*

In 2005, we entered into an employment agreement with the Chairman of the Board of Directors, Salvatore Fuda, for a period from January 1, 2005 through December 31, 2009, which contract was then extended to December 31, 2010. Under the terms of the agreement, the Chairman was retained to provide certain management services to the Company. The Q1 2011 compensation expense as reported was \$37,218 as compared to \$35,423 in Q1 2010. In January, 2011, the Board of Directors extended the Chairman's contract on a month-month-basis at an annual rate of \$150,000 Canadian funds.

In May 2008, the Company entered into employment agreements with the President, the Chief Financial Officer and the President of the Company's subsidiary, MAST Inc. In May 2010 the agreements with the President and the Chief Financial Officer were continued on a month to month basis on the same terms. These agreements stipulate remaining obligations as below:

President	\$13,333	Canadian funds per month
Chief Financial Officer	\$12,500	Canadian funds per month
President – MAST	\$15,000	Per month through May 2011

In July 2009, the Company executed a purchase order for approximately \$1 million of services to be provided by a supplier between July 2009 – April 2010. During 2010, the purchase order was cancelled. Over the course of the 2009 - 2010, the Company paid approximately \$373,000 in respect of these working arrangements.

## **11. DISCLOSURE CONTROLS / INTERNAL CONTROLS**

In 2008 the Company was classified as an accelerated filer and accordingly was required to complete its initial audit on its internal controls under the requirements of the Sarbanes Oxley legislation.

In 2010 we took a top-down approach as defined by the Committee of Sponsoring Organizations of the Treadway Commission's framework ("COSO"), to our evaluation and testing of internal controls over financial reporting. Using this approach, we evaluated on a company wide basis, all controls and focusing on the high risk areas. We report no material weaknesses in 2010 as a result of a number of internal controls initiatives undertaken over the course of the fiscal year.

Management and the Board of Directors, primarily through the Audit Committee, have instituted review procedures on all of our periodic filings. We have established a disclosure committee consisting of independent directors and our Chief Information Officer. A charter for the disclosure committee and a policy has been developed and has been ratified by our Board of Directors. We engage legal counsel and our external investor relations consultants, to provide guidance, commentary on all of our press releases.

Management has concluded that our disclosure controls and procedures meet required standards. These disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in its various reports are recorded, processed, summarized and reported accurately. In spite of its evaluation, management does recognize that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance and not absolute assurance of achieving the desired control objectives.

## **12. OFF-BALANCE SHEET ARRANGEMENTS**

The Company has no off-balance sheet financial commitments and does not anticipate entering into any contracts of such nature other than the addition of new operating leases for equipment and premises as may be required in the normal course of business.

## **13. TRANSACTIONS WITH RELATED PARTIES**

The Company reports the following related party transactions:

(a) *Compensation:*

Included in professional fees 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 fiscal years ending October 31, 2009-2011 is as follows:

	Cash Compensation	Stock Option Expense
2011 (3 mos)	\$ 159,136	-
2010 (12 mos)	\$ 621,223	\$ 64,653
2009 (12 mos)	\$ 625,576	\$ 407,040

(b) *Cost sharing agreements:*

In the normal course of business, the Company has entered into cost sharing arrangements with companies with respect to which certain senior officers and directors of the Company exercise significant influence. These entities share space with the Company and these cost sharing agreements are with respect to office overhead expenses. These transactions, which were measured at the exchange amount on the date of the transaction, relate to salaries, rent and other expenses.

The net expense reported by the Company in these expense categories is summarized as follows:

	Rent	Salaries	Other	Total
2011 (3 mos)	\$ 11,192	\$ 125,665	\$ 3,254	\$ 140,111
2010 (12 mos)	27,610	499,886	13,112	540,608
2009 (12 mos)	17,177	289,897	11,541	318,615

In Q1 2011 the gross amount of these expenses was \$159,968, and the Company re-billed \$19,856 of these costs to these related companies. At January 31, 2011 the Company reports \$97,559 of balances due from such parties for these expenses and has reserved \$94,818 due to uncertainty of collection.

(c) *Accounts receivable, payable and accruals:*

At January 31, 2011 the Company reports the following accounts receivable and payable balances with related parties:

• Net receivable from related companies re cost sharing of overhead expenses:	\$ 2,741
• Advances to an officer of the Company	\$ 22,803
• Payable to Company's Chairman under terms of employment contract:	\$ 37,218
• Payable to Management (CFO and US President) under the terms of employment contracts:	\$ 78,526

## **14. SHARE CAPITAL**

At January 31, 2011 the Company reports 97,849,511 common shares outstanding (2010: 91,587,279). Additionally, the Company has 10,247,199 stock options outstanding with a weighted average exercise price of \$.89 per share (2010: 10,022,199 options outstanding with a weighted average exercise price of \$.89 per share) and a total of 8,723,885 outstanding warrants to acquire common shares with a weighted average exercise price of \$.41 per share (2010: 5,621,141 outstanding warrants with a weighted average exercise price of \$.76 per share).

## **15. MANAGEMENT AND BOARD OF DIRECTORS**

Our management team and directors, along with their Q1 2011 remuneration, is presented as below:

Individual	Position	Q1 2011 remuneration		
		Cash	Options	Total
Salvatore Fuda (1)	Chairman, Director	37,218	-	37,218
Joseph Fuda (2)	President, Director	39,700	-	39,700
Steven Van Fleet (3)	President, MAST Inc., Director	45,000	-	45,000
David Sharpless	Director	-	-	-
Andrew Brandt	Director	-	-	-
Oliver Nepomuceno	Director	-	-	-
Larry Blue	Director	-	-	-
Alex Dey	Director	-	-	-
Dan Amadori (2)	CFO	37,218	-	37,218

- (1) contract was extended after December, 2010 on a month to month basis.  
(2) contract was extended on a month to month basis in May 2010.  
(3) contract extends to May 2011.

## **16. SUBSEQUENT EVENTS**

The following subsequent events are noted as of April 1, 2011:

- a) The convertible loan described in Note 11 (e)(ii) to the financial statements was repaid in February 2011.
- b) The Company secured a six month, \$250,000 convertible bridge loan from an arm's length investor in February 2011 which is unsecured and bears interest at a rate of 2% per month. The principal and interest is convertible at a rate of \$0.20 per share. 5,000 warrants with an exercise price of \$0.20 per share were issued in relation to this loan.

- c) The Company negotiated a repayment schedule with respect to the promissory note described in Note 7 in February 2011. The Company has received initial payments of \$10,000 in February and \$20,000 in March against this note; the remaining principal and interest is scheduled for repayment between April – August 2011.
- d) In February 2011, the outstanding advance of \$22,803 to an officer of the Company was repaid in full.
- e) In February 2011, the Company executed a contract with an international energy company and received an initial payment of \$75,000 under the terms of the contract.
- f) The Company secured a six month, \$100,000 convertible bridge loan from an arm's length investor in March 2011 which is unsecured and bears interest at a rate of 2% per month. The principal and interest is convertible at a rate of \$0.20 per share. 5,000 warrants with an exercise price of \$0.20 per share were issued in relation to this loan.

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**Table 1**

Micromem Technologies Inc Management Discussion and Analysis January 31, 2011
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<u>Fiscal year ending October 31</u>	<u>Interest and other income</u>	<u>Net Loss</u>	<u>Loss per share (basic and fully diluted)</u>
2010	22,886	(4,674,861)	(0.05)
2009	88,047	(4,310,939)	(0.05)
Quarter ending			
January 31, 2011	339	(579,768)	(0.01)
October 31, 2010	7,778	(1,803,883)	(0.02)
July 31, 2010	5,000	(1,937,819)	(0.02)
April 30, 2010	5,009	(526,760)	(0.01)
January 31, 2010	5,099	(406,399)	-
October 31, 2009	81,762	52,936	-
July 31, 2009	113	(1,521,958)	(0.02)
April 30, 2009	536	(1,273,450)	(0.02)
January 31, 2009	5,637	(1,583,629)	(0.02)



**Table 2**

<p>Micromem Technologies Inc  Management Discussion and Analysis January 31, 2011  Selected Balance Sheet Information (all amounts in United States dollars)</p>
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Fiscal year ending October 31	Working capital (deficiency)	Capital assets at NBV	Other Assets	Total Assets	Shareholders equity (deficit)
2010	(1,459,460)	16,686	423,548	568,336	(1,019,226)
2009	(650,044)	24,422	2,148,461	2,562,479	1,522,839
Quarter ending					
January 31, 2011	(1,429,020)	15,102	415,945	592,430	(997,973)
October 31, 2010	(1,459,460)	16,686	423,548	568,336	(1,019,226)
July 31, 2010	(1,131,126)	18,808	1,596,876	1,984,874	484,558
April 30, 2010	(918,937)	20,981	2,699,602	3,060,200	1,801,646
January 31, 2010	(341,756)	23,156	2,461,488	3,010,357	2,142,888
October 31, 2009	(650,044)	24,422	2,148,461	2,562,479	1,522,839
July 31, 2009	228,263	26,943	-	988,360	255,206
April 30, 2009	(138,550)	29,359	-	491,051	(109,191)
January 31, 2009	(697,379)	28,927	-	509,567	(668,452)

Table 3

Micromem Technologies Inc  
Management Discussion and Analysis  
January 31, 2011

## Summary of financing raised by Company

Date of financing	2009			2010		
	Shares	Price / share	\$	Shares	Price / share	\$
<b>Exercise of options</b>						
January 2009	32,801	0.74	24,417			
April 2009	631,000	0.64	403,500			
July 2009	889,000	0.57	504,500			
August 2009	100,000	0.60	60,000			
<b>Exercise of warrants</b>						
July 2009	200,000	1.17	234,000			
<b>Private placements</b>						
January 2009	336,053	0.58	194,465			
April 2009	2,777,878	0.58	1,620,397			
July 2009	779,604	0.98	763,980			
October 2009	500,000	0.76	380,000			
January 2010				2,204,276	0.476	1,049,062
April 2010				289,899	0.448	130,000
July 2010				1,730,026	0.321	556,078
October 2010				1,717,307	0.196	335,910
	<u>6,246,336</u>		<u>4,185,259</u>	<u>5,941,508</u>		<u>2,071,050</u>
<b>2011</b>						
	<u>Shares</u>	<u>Price / share</u>	<u>\$</u>			
<b>Private placements</b>						
January 31, 2011	2,525,000	0.199	503,140			
	<u>2,525,000</u>		<u>503,140</u>			

Table 4

Micromem Technologies Inc Management Discussion and Analysis January 31, 2011
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Outstanding options	Strike price	Expiry date
1,927,199	0.72	05/27/11
4,290,000	0.80	07/06/11
350,000	0.36	04/17/12
215,000	0.60	10/25/12
375,000	0.55	12/20/12
325,000	1.01	03/03/13
20,000	1.12	03/10/13
1,400,000	1.50	08/28/13
1,345,000	1.00	08/25/14
<b>10,247,199</b>	<b>0.89</b>	

Total proceeds if all options exercised: **\$ 9,076,483**

Outstanding Warrants

123,274	0.75	11/11/11
600,000	0.76	12/14/11
815,000	0.56	12/16/11
366,000	0.55	01/15/12
300,000	0.55	01/26/12
111,111	0.56	02/01/12
133,333	0.56	02/12/12
10,000	0.50	03/30/11
45,455	0.54	04/05/11
2,500	0.50	04/13/11
429,686	1.20	05/14/11
765,188	0.41	05/25/11
339,838	0.45	06/15/11
312,500	0.39	07/12/11
312,500	0.40	07/23/11
7,500	0.40	02/24/11
200,000	0.28	08/26/11
1,325,000	0.24	10/15/11
500,000	0.20	11/04/11
400,000	0.19	11/30/11
300,000	0.20	12/30/11
250,000	0.20	01/04/12
750,000	0.20	01/11/12
325,000	0.20	01/31/12
<b>8,723,885</b>	<b>0.42</b>	

Total proceeds if all warrants exercised: **\$ 3,643,663**