#### MICROMEM TECHNOLOGIES INC. MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE QUARTER ENDED APRIL 30, 2011 PREPARED AS OF JUNE 28, 2011

#### **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 April 30, 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 <a href="https://www.sedar.com">www.sedar.com</a>.

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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# MICROMEM TECHNOLOGIES INC. MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE QUARTER ENDED APRIL 30, 2011 PREPARED AS OF JUNE 28, 2011

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

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# MICROMEM TECHNOLOGIES INC. MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE QUARTER ENDED APRIL 30, 2011 PREPARED AS OF JUNE 28, 2011

## 1. CORPORATE OVERVEW

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)
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 6 MONTH PERIOD TO APRIL 30, 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 have been reported in previous MD&A filings. An update through the quarter ended April 30, 2011 are further discussed below:

- (a) LifeMed: On June 29, 2011 the Company served notice to LifeMed Technologies Inc. that the working arrangements as contemplated in the manufacturing agreement which was executed in August 2009 and as amended in September 2009 and the purchase order which was executed in September 2009 have been terminated. The Company has not derived any orders nor any revenues from these agreements. Micromem intends to pursue other potential customers for the technology that it has developed to date.
- (b) *Unotron*: The Company continues its business discussion with Unotron Inc. Since February 2011, it has recovered \$75,000 of the \$200,000 promissory note receivable from Unotron. Pending collection of the balance outstanding plus

accrued interest, it plans to re-engage Unotron with respect to the Manufacturing Agreement and purchase order which was executed in 2009.

(c) NEMT: Micromem's second round of field testing is scheduled to begin shortly using its magnetic surveying platform which measures the earth's magnetic signature. If these tests are successfully completed, it is expected that the product will be commercialized and scheduled for deployment to oil and gas and mineral exploration clients.

The Company has submitted a proposal to another mineral exploration company that has shown strong interest in proceeding to pursue a development proposal with the Company for specific applications related to gulf exploration.

- (d) *Oil Sensor*: The Company is in discussion under a non-disclosure agreement with a large automotive company for a development and licensing contract for an enhanced oil condition sensor that includes the use of nano particles imbedded in the oil filter. The Company is now pursuing a provisional patent filing relating to this work.
- (e) International Energy Company: The Company executed a development contract with a major international energy company for an application based on the initial mining sensor technology that it developed. It reports \$243,188 as deferred development costs relating to this initiative at April 30, 2011. It executed the contract in February and received at that time an initial payment of \$75,000 from the customer.

The initial design work relating to this project has been complete and a proof of concept is now under construction. The Company has been successful in meeting the development milestones established to date.

- (f) GSI Westwind: The Company has submitted for approval mechanical and electrical design drawings for a specific product. Manufacturing of the product for initial testing is underway. The Company has received an initial payment of \$27,000 against these development expenditures.
- (g) *Medical Device*: As previously reported, the Company was pursuing a potential customer in the medical products sector and began development work towards this end in 2010. The Company has decided to postpone further work on this application pending that customer's decision to provide funding for the development by the Company of a manufacturing prototype.
- (h) Intellectual Property: Micromem has commenced the process of preparing provisional patents for several of the applications that it has under development including an integrated sensor platform for oil monitoring in vehicles and an array of high resolution sensors and a data processing algorithm for use in conjunction with medical devices.

- (i) The Company continues to develop its sales pipeline in discussion with other potential customers.
- (j)
  The Company's go forward business plan 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 \$1,986,534 at April 30, 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 April 30, 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 April 30, 2011:

The following table sets out select financial information for the quarter ended April 30 in each of the three most recently completed financial years of the Company prepared in accordance with Canadian general accepted accounting principles:

	Quarter ended April 30, 2011 (unaudited)	Quarter ended April 30, 2010 (unaudited)	Quarter ended April 30, 2009 (unaudited)
Interest and other income	39	5,009	536
Total expenses	507,264	531,769	1,273,986
Net loss	(507,225)	(526,760)	(1,273,450)
Loss per share and diluted loss per share	(0.01)	(0.01)	(0.02)
Weighted average number of shares outstanding	97,860,622	91,846,431	82,506,004
Total assets	723,762	3,060,200	491,051
Cash and cash equivalents	34,909	37,260	91,813
Working capital	(1,986,534)	(918,937)	135,550
Shareholders' equity (deficiency)	(1,388,613)	1,801,646	(109,191)

The loss reported at April 30, 2011 was \$507,225 which included non-cash stock compensation expense of \$12,425 (2010: loss of \$526,760 and \$30,385 stock compensation expense).

To finance our operating loss in Q2 2011, we raised net proceeds of \$103,363 through the issuance of common shares through Unit private placements, of this amount, \$73,363 is reported as subscriptions received.

#### At April 30, 2011 the Company has:

- a) 10,372,199 stock options outstanding which expire, if unexercised, between 2011-2016. The average exercise price of these options is \$0.89; and,
- b) 8,943,430 common share purchase warrants which expire throughout 2011 and 2012 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 April 30, 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 April 30, 2011.

# (b) Discussion of Operating Results

The following table summarizes the Company's operating results for the quarters ended April 30, 2011, 2010, 2009:

	Quarters ended April 30,				
	2011	2010	2009		
	\$000	\$000	\$000		
	(unaudited)	(unaudited)	(unaudited)		
Interest and other income	-	5	1		
General and administration	129	41	306		
Professional fees and salaries	321	394	320		
Stock-based compensation	12	30	342		
Research	(7)	-	265		
Travel and entertainment	21	51	54		
Foreign exchange (gain) loss	49	14	(15)		
Amortization	2	2	2		
Allowance for promissory note	(20)	-	•		
Total expenses	507	532	1,274		
Net loss	(507)	(527)	(1,273)		
Loss per share	(0.01)	(0.01)	(0.02)		

# Commentary:

**Revenue**: The Company remains in pre-revenue mode at April 30, 2011. In Q2 2011 it reports interest income of \$39 (2010: interest income - \$5,069).

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

	2011	2010	2009
General and administrative:			
Investor relations	5	-	111
Reserve, doubtful accounts	(16)	(45)	-
Telephone	4	6	6
Insurance	20	22	16
Rent	14	7	8
Interest	43	11	-
Exchange gain/loss	8	(5)	11
MAST	10	26	85
All other	41	19	69
	129	41	306

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 Q2 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	47	53	-
Legal - patent	-	-	35
Legal - other	48	80	52
DAL	-	-	-
President, MAST	_	-	42
Salaries and benefits	104	132	87
Management fees	119	112	95
Other	3	17	8
	321	394	319
Stock compensation expense	12	30	342
	333	424	661

In Q2 2011 and 2010 the Company capitalized costs incurred during the year with respect to its patents. Accordingly it reported no Legal – patent expenses in Q2 2011 and 2010.

The costs incurred relating to DAL and MAST were capitalized in the second quarter 2011 and 2010 as Projects Under Development. In Q2 2011 \$141,000 of DAL costs were capitalized.

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):

	201	2010	2009
Research:			
Strategic Solutions	-	-	112
BAE	-	-	108
GCS	-	-	142
J.Wise	-	-	-
DAL	-	_	-
Other	(7)	-	(97)
	(7)	-	265

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. In Q2, 2011 \$254,770 of research and development costs were capitalized as below:

Projects	 1/31/2011		Additions		4/30/2011
Project A	\$ 1	\$	-	\$	1
Project B	1		-		1
Project C	1		16,360		16,361
Project D	1		-		1
Project E	221,513		21,675		243,188
Project F	1		-		1
Project G	1		141,200		141,201
Project H	1		-		1
Project I	1		<u>-</u>		1
			·		
	\$ 221,521	\$	179,235	\$	400,756

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

	2011	2010	2009
Travel:			
Airfare	12	23	15
Hotel	4	7	12
Meals	2	14	18
Transportation	3	7	9
	21	51	54

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

# C) <u>Unaudited Quarterly Financial Information - Summary</u>

Three months ended (unaudited)	Interest and other income \$	Expenses \$	Loss in period	Loss per share
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)
April 30, 2011	39	507,264	(507,225)	(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 on a quarterly year to date basis at April 30, 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 April 30, 2011, our working capital deficiency was \$1,986,534 (2010: \$918,937). 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 April 30, 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 their 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 April 30, 2011 the Company capitalized \$179,235 and reports \$400,756 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 ACCOUTING 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 parities 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 Q2 2011 compensation expense as reported was \$38,962 as compared to \$36,477 in Q2 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. In May 2011 the agreement with the President – MAST was 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	US funds per month

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.

As of April 30, 2011 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 (6 mos)	\$ 323,621	\$ 12,425
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 (6 mos)	\$ 25,602	\$ 229,320	\$ 5,879	\$ 260,801
2010 (12 mos)	27,610	499,886	13,112	540,608
2009 (12 mos)	17,177	289,897	11,541	318,615

For the 6 months ended April 30, 2011, the gross amount of these expenses was \$302,156 and the Company re-billed \$41,355 of these costs to these related companies. At April 30, 2011 the Company reports \$110,926 of balances due from such parties for these expenses and has reserved \$110,926 due to uncertainty of collection.

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

At April 30, 2011 the Company reports the following accounts receivable and payable balances with related parties:

•	Payable to Company's Chairman under terms of employment contract:	\$ 79,248
•	Payable to Management (CFO and US President) under the terms of employment contracts:	\$ 135,391

#### **14. SHARE CAPITAL**

At April 30, 2011 the Company reports 98,099,511 common shares outstanding (2010: 91,877,178). Additionally, the Company has 10,372,199 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 8,943,430 outstanding warrants to acquire common shares with a weighted average exercise price of \$.41 per share (2010: 3,436,361outstanding warrants with a weighted average exercise price of \$.73 per share).

### 15. MANAGEMENT AND BOARD OF DIRECTORS

Our management team and directors, along with their Q2 2011 remuneration, is presented as below:

		Q2 2011 remuneration		
Individual	Position	Cash	Options	Total
Salvatore Fuda (1)	Chairman, Director	38,962	-	38,962
Joseph Fuda (2)	President, Director	41,560	-	41,560
Steven Van Fleet (3)	President, MAST Inc., Director	45,000	-	45,000
David Sharpless	Director	- 1	-	-
Andrew Brandt	Director	- 1	-	_
Oliver Nepomuceno	Director	- 1	-	-
Larry Blue	Director	<u> </u>	-	-
Alex Dey	Director	-	12,425	12,425
Dan Amadori (2)	CFO	38,962	-	38,962

- (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 expired in May 2011, now extended on a month to month basis

#### 16. SUBSEQUENT EVENTS

The following subsequent events are noted as of June 28, 2011:

- a) The convertible loan described in Note 11 (e)(iv) and 11(e)(v) of the notes to the Financial Statements were repaid in May 2011.
- b) The convertible loan described in Note 11 (e)(i) of the notes to the Financial Statements has been extended with the lender on a month to month basis.
- c) The Company received payments of \$35,000 against the promissory note described in Note 7; the remaining outstanding balance is scheduled for repayment through August 2011.
- d) The Company has extended, on a month to month basis, the contract with the President of MAST. The terms of the contract remain the same.
- e) The Company raised an additional \$754,565 through Unit private placements and issued 7,050,242 Units. Each Unit consists of one common share and one share purchase warrant.
- f) The Company extended the maturity date of 3,072,988 outstanding warrants which would have otherwise expired by June 30, 2011.
- g) 1,927,199 options issued to officers of the Company expired on May 27, 2011.
- h) The Company has extended the term of a total of 1,394,444 common share purchase warrants for a period of 12 months, the exercise price remains unchanged. The warrants were scheduled to expire in July August 2011.

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Micromem Technologies Inc Management Discussion and Analysis April 30, 2011

Fiscal year ending October 31	Interest and other income	Net Loss	Loss per share (basic and fully diluted)	
2010	22,886	(4,674,861)	(0.05)	
2009	88,047	(4,310,939)	(0.05)	
Quarter ending				
April 30, 2011	39	(507,225)	(0.01)	
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	87,399	(1,530,693)	- (	
July 31, 2009	113	(1,521,958)	(0.02)	
April 30, 2009	536	(1,273,450)	(0.02)	

Table 1

Micromem Technologies Inc Management Discussion and Analysis April 30, 2011 Selected Balance Sheet Information (all amounts in United States dollars)

Fiscal year ending October 31	Working capitai (deficiency)	Capitai asssets 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					
April 30, 2011	(1,986,534)	13,451	584,470	732,762	(1,388,613)
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)

Table 2

#### Micromem Technologies Inc Management Discussion and Analysis April 30, 2011

#### Summary of financing raised by Company

Date of financing		2009			2010	
	Shares	Price / share	\$	Shares	Price / share	\$
Exercise of options						
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			
Exercise of warrants						
July 2009	200,000	1.17	234,000			
Private piacements						
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
	6,246,336		4,185,259	5,941,508		2,071,050
		2011				
	Shares	Price / share	\$			
Private placements						
January 31, 2011	2,525,000	0.199	503,140			
April 30, 2011	250,000	0.120	30,000			
	2,775,000		533,140			

Table 4

# Micromem Technologies Inc Management Discussion and Analysis April 30, 2011

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
125,000	0.35	04/05/16
10,372,199	0.88	
Total proceeds if all options exercised:		\$ 9,120,233
Outstanding Warrants		
102 076	0.75	44/44/44
123,276	0.76	11/11/11 12/14/11
600,000 815,000		
366,000	0.56 0.55	12/16/11
300,000	0.55	01/15/12
111,111	0.56	01/26/12 02/01/12
133,333	0.56	02/12/12
429,686	1.20	05/14/11
765,188	0.41	05/25/11
339,838	0.45	06/15/11
312,500	0.43	07/12/11
312,500	0.40	07/12/11
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
20,000	0.20	12/17/11
10,000	0.20	02/25/12
5,000	0.21	03/04/12
250,000	0.21	
8,943,432	0.15	04/27/12
Total proceeds if all warrants exercised:		\$ 3,654,386