

**MICROMEM TECHNOLOGIES INC.  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED OCTOBER 31, 2010  
PREPARED AS OF FEBRUARY 28, 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 fiscal year ending October 31, 2010 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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**MICROMEM TECHNOLOGIES INC.**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FISCAL YEAR ENDING OCTOBER 31, 2010**  
**PREPARED AS OF FEBRUARY 28, 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**

### Review of 2010 fiscal year developments:

2010 was a difficult year for the Company. It 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 are further discussed below:

(a) *NanoOpto Concentrator:* In 2009 the Company contracted with NanoOpto, a New Jersey-based research facility, to build a concentrator unit which would serve to enhance and increase the sensitivity of our existing sensor technology for certain applications where the performance standards and criteria were extremely high. The Company originally anticipated that the concentrator would be available in 2010. The parent company of NanoOpto decided to shutdown the operations of NanoOpto during 2010 while our concentrator project was still in process. In October 2010, we settled with the parent company of NanoOpto with respect to our outstanding purchase order and the work that NanoOpto had completed on the Company's behalf. 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*: We announced the execution of a Manufacturing Agreement and related purchase order with Life Med Technologies Inc. (“LMTI”) in August – September 2009.

By December 2009, we had engaged King & Spalding as our attorneys to assist in the filing of our planned FDA submission for the device that we were planning to deliver to LMTI under the terms of these contractual arrangements.

In calendar 2010 we met on numerous occasions with the principals of LMTI. LMTI communicated an interpretation of the original contractual agreements with which the Company disagreed. Under the terms of the executed contractual agreements, Micromem has agreed to incur the development costs with respect to the product prototype, to file the FDA submission in its name and, in this process, will retain all of the rights to the intellectual property that is developed. Micromem has agreed that upon LMTI’s fulfillment and payment under the terms of the purchase order, Micromem will transfer the related intellectual property to LMTI.

Our prototype has been developed and tested and is ready for FDA protocol trials. In addition, all sections of the FDA documentation that can be completed have been submitted to our FDA attorney. The sections of the FDA application requiring LMTI’s input have not yet been received nor completed.

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. To date, Micromem has incurred a total of approximately \$115,000 of direct costs associated with this initiative in addition to legal costs relating to our FDA process. Given the developments as described above, Micromem has recorded a reserve of the costs incurred coincident with the filing of its third quarter financial statements released on September 29, 2010.

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. At October 31, 2010 it reports its investment in these development costs at nominal value of \$1.

(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.

Micromem advanced \$200,000 to Unotron at the beginning of this relationship as its initial investment in the project. This investment was structured as a secured debenture with a first charge on the assets of Unotron. The debenture stipulated quarterly interest at a rate of 10% with a maturity date of September 2010.

From a development standpoint, the Company has incurred \$529,455 of costs associated with the development of prototype products and has delivered these prototypes to Unotron. The Company engaged engineers to assist in this effort and incurred the cost associated with several trips to the Unotron manufacturing facilities in China, during 2010. The product has been developed and accepted by our client during two visits to Hong Kong by engineers whom Micromem engaged. A short list of integration issues with the client's keyboard controller remain outstanding and will be completed when we are in receipt of an order forecast in accordance with the manufacturing agreement.

Under the terms of the manufacturing agreement, Unotron is required to provide an estimated unit and order schedule for delivery of product by Micromem, once the prototypes are delivered. Unotron has not yet provided those estimated orders to Micromem. Unotron has issued a second product request to Micromem. We will consider this new request when Unotron delivers the order forecasts in accordance with the manufacturing agreement.

In order to obtain final product certification, Micromem is required to produce additional units for delivery to Unotron for such certification testing. It has communicated to Unotron that it is prepared to incur these costs and deliver these final units to Unotron for certification once it receives estimated order quantities and delivery times that Unotron will require for the sale of these products to its customers.

The Company believes that it has met all of the technical specifications associated with the prototype products. Given the delays that the Company has encountered in finalizing these commercial terms with Unotron, it has recorded an impairment reserve of \$529,494 representing the direct costs incurred associated with this project as of its third quarter, as reported on September 29, 2010.

The Company remains committed to fulfilling the terms and conditions of the contractual arrangements executed with Unotron. At October 31, 2010 it reports its investment in development costs at nominal value of \$1.

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. To date, Unotron has made interest payments through September 30, 2010 but has not finalized a repayment schedule. Accordingly, at October 31, 2010, the Company has fully reserved the outstanding principal of the debenture.

Subsequent to October 31, 2010 the Company has negotiated a repayment schedule with Unotron with respect to the repayment of the outstanding principal and interest in 2011 (refer to Section 16) and has received an initial payment of \$10,000 on this repayment schedule.

- (d) *BAE*: We previously advised that Micromem had engaged BAE to test our MRAM sensor technologies in their foundries in Nassau, New Hampshire. In 2008 – 2010, Micromem spent a total of \$797,186 with respect to these foundry services provided by BAE.

As discussed above the Company initially anticipated having a concentrator unit available from a supplier, NanoOpto, in 2010 which would have allowed the Company to build sensor applications with the required tolerance and performance levels required by BAE and the Department of Defence in general. NanoOpto discontinued operation during 2010. The Company anticipates that it will develop an alternative solution for the concentrator during 2011, pending the resolution of its working capital constraints. At that time, it plans to re-approach BAE with the expectation of pursuing current commercial discussions with them.

Given these developments, at October 31, 2010 the Company has recorded an impairment reserve of \$797,185 against these costs which were previously capitalized and reports its investment in development costs at nominal value of \$1.

- (e) *NEMT*: We have developed a prototype unit for use by this company in its exploration activities in the North Sea and other areas. 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. We have incurred a total of \$797,794 of development costs with respect to this project.

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.

The Company booked an impairment reserve of \$797,793 with respect to the direct costs associated with the NEMT project as of the end of its third quarter as reported on September 29, 2010. At October 31, 2010 it reports its investment in development cost at nominal value of \$1.

- (f) *DAL*: In September 2010 the Company negotiated repayment terms with DAL as it related to DAL's outstanding invoices. A portion of the balance owing by Micromem was settled through the issuance of 50,000 common shares to DAL. The Company has acknowledged its outstanding obligation of \$141,000 to DAL which remains outstanding.
- (g) *Morgan Lewis*: The Company has engaged Morgan Lewis as its patent attorneys since 2005. It has paid Morgan Lewis approximately \$1 million in legal fees since 2005. During 2010, the Company was unable to remain current on the Morgan Lewis invoices as submitted. At October 31, 2010, the balance owing on services provided by Morgan Lewis is approximately \$115,000. Morgan Lewis



has resigned as a service provider to the Company in October 2010. The Company continues to negotiate with Morgan Lewis with respect to the proposed payment terms.

- (h) *Oil Sensor*: The Company continues to evaluate development opportunities for its oil sensor prototype.
- (i) *Mining Sensor*: The mining sensor that the Company has been developing has served as a precursor to the design of a product that the Company has contracted to develop with an international partner as discussed further below.
- (j) *Other initiatives*: There are several additional initiatives that the Company is currently pursuing with the expectation of commercial revenue opportunities in 2011. These include:

The development of a sensor application for a large international organization that is marketing a healthcare product. The Company anticipates a development contract from these negotiations. The Company has incurred \$242,464 of development costs with respect to this initiative and has reflected a current impairment reserve of \$242,463 of these costs pending finalization of a contract with this customer.

Subsequent to October 31, 2010 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 October 31, 2010. In February 2011 it executed the contract and received the initial payment from this customer (refer to subsequent events, Section 16).

- (k) The Company continued to secure financing through private placements and bridge loan facilities in 2010. A total of \$2,494,656 was raised through these initiatives. Subsequent to October 31, 2010, the Company has secured additional financing (refer to Section 16).
- (l) The Company reports a significant working capital deficiency at October 31, 2010 and a going concern qualification in the footnotes to its financial statements, as further discussed in subsequent sections of this MD&A.
- (m) 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 is committed to working towards positive resolution of the LMTI, project as discussed above.

- iii) It will continue to pursue the other project opportunities that are described above.
- iv) It will continue to respond to new project opportunities as these develop.
- v) 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 \$1,459,460 at October 31, 2010.

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 October 31, 2010.

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 October 31, 2010:*

The following table sets out select financial information for the three most recently completed financial year-ends prepared in accordance with Canadian general accepted accounting principles:

	Year ended October 31, 2010	Year ended October 31, 2009	Year ended October 31, 2008
Interest and other income	22,886	88,047	11,762
Total expenses	4,688,239	4,398,986	5,428,487
Income taxes	9,508	-	-
Net loss	(4,674,861)	(4,310,939)	(5,416,725)
Loss per share and diluted loss per share	(0.05)	(0.05)	(0.07)
Weighted average number of shares outstanding	92,225,645	86,400,439	78,012,115
Total assets	568,336	2,562,479	630,467
Cash and cash equivalents	26,039	106,110	475,235
Working capital	(1,459,460)	(650,044)	(338,079)
Shareholders' equity (deficiency)	(1,019,226)	1,522,839	(331,758)

The loss reported at October 31, 2010 was \$ 4.675 million (2009 loss of \$4.311 million which included non-cash stock options cost of \$1.952 million) which included impairment reserves of \$201,333 on our promissory note receivable (2009: nil) and of \$2,711,392 on our development costs (2009: nil).

To finance our operating loss in 2010, we raised net proceeds of \$2,494,656 through the issuance of common shares through Unit private placements and through bridge loan facilities.

At October 31, 2010 the Company has:

- a) 10,022,199 stock options outstanding which expire, if unexercised, between 2010-2014. The average exercise price of these options is \$0.89; and,
- b) 6,198,885 common share purchase warrants which expire throughout 2011 if unexercised. The average exercise price of these warrants is \$0.51.

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, 2007-2010 and for the related quarterly information through October 31, 2010. Table 2 sets forth selected information from the consolidated balance sheets for the fiscal years ending October 31, 2007-2010 and the related quarterly information through October 31, 2010.

(b) **Discussion of Operating Results**

The following table summarizes the Company's operating results for the years ended October 31, 2010, 2009, 2008.

	Years ended October 31,		
	2010 \$000	2009 \$000	2008 \$000
Interest and other income	23	88	12
General and administration	551	937	604
Professional fees and salaries	1,250	1,289	2,264
Stock-based compensation	95	1,952	1,041
Research	(106)	13	1,064
Travel and entertainment	146	224	399
Foreign exchange (gain) loss	32	(28)	52
Amortization	9	11	5
Write down of deferred development costs	2,711	-	-
Total expenses	4,688	4,399	5,429
Income taxes	10	-	-
Net loss	(4,675)	(4,311)	(5,417)
Loss per share	(0.05)	(0.05)	(0.07)

*Revenue:* The Company remains in pre-revenue mode at October 31, 2010. It reports interest income of \$22,886 in 2010 which primarily relates to interest earned on the secured promissory note outstanding (2009: \$88,047 comprised of \$11,382 of interest income and \$76,665 of recoveries of tax credits).

*Income taxes:* The Company brought its income tax filings for all of its subsidiaries up to date in 2010. It reports a small income tax expense relating to a subsidiary from prior years, that subsidiary is now inactive.

*Write down of development costs:* In the third and fourth quarters of the 2010 fiscal year, the Company booked impairment reserves against the project development costs it had capitalized commencing in 2009 and continuing in the first and second quarters of 2010. A continuity schedule with respect to development costs incurred, capitalized and reserved is presented as below:

Projects	10/31/09	Additions	Impairment reserve	10/31/10
Project A	\$ 337,237	\$ 192,258	\$ (529,494)	\$ 1
Project B	38,683	75,960	(114,642)	1
Project C	587,349	210,445	(797,793)	1
Project D	750,367	46,819	(797,185)	1
Project E	131,033	90,480		221,513
Project F	155,942	23,452	(179,393)	1
Project G	-	19,035	(19,034)	1
Project H	-	242,464	(242,463)	1
Project I	-	31,389	(31,388)	1
	\$ 2,000,611	\$ 932,302	\$ (2,711,392)	\$ 221,521

The impairment reserve of \$2,711,392 includes amounts relating to costs previously capitalized pertaining to LMTI, Unotron, BAE, NEMT and several other development projects. While the Company carries these projects at nominal value at October 31, 2010 it remains committed to realizing commercial opportunities on these projects in future.

**General and administrative expenses compare as follows (\$000):**

	2010	2009	2008
1) Investor relations	14	279	78
2) AGM Expense	46	58	76
3) Reserve, doubtful accounts	134	49	88
4) Shareholder information	20	24	55
5) Telephone	18	21	45
6) Insurance	87	53	48
7) Rent	28	17	32
8) Exchange loss	(10)	34	33
9) MAST	68	323	31
10) Interest expense	77	-	-
11) All other	69	79	118
	551	937	604

*Investor relations:* The Company engaged Investor Relations Group (“IRG”) of New York in September 2008 to provide investor relations services to the Company. We were committed to monthly payments of \$13,500 plus 25,000 common shares per month. In May 2009 the contract was renegotiated to payments of \$7,500 and 12,500 common shares per month under this one year contract. The Contract expired in September 2009 and was not renewed thereafter.

*MAST:* In 2009 the activity in MAST increased significantly. The major components of the MAST G&A expenses as reported include market research (\$140,000) investor relations (\$112,000) and travel expenses (\$66,000). Activity in 2010 was significantly

curtailed and minimal new business development was undertaken as a result of cash flow constraints encountered in 2010.

*Reserves:* In 2010 the reserve for doubtful accounts includes the impairment reserve on the Unotron debenture of \$200,000 offset by the recovery of approximately \$66,000 of amounts billed to related parties and collected in 2010 after these amounts were originally reserved.

The Company rebills certain related companies for a portion of its overhead expenses. Given uncertainty of collection the Company will reserve the amounts that are rebilled as these charges are recorded. The reserves reflected in 2009 and 2008 represent such amounts.

*Insurance:* Insurance related expense increased in 2010 as the Company increased the extent of its basic coverage.

*Interest expense:* Interest expense in 2010 relates to the interest which incurred with respect to the bridge loans it secured in 2010.

**Professional, Other Fees and Salaries compare as follows (\$000):**

	2010	2009	2008
1) Audit and related services	135	139	199
2) Legal - patents	-	-	253
3) Legal - other	101	126	287
4) Salaries and benefits	500	444	242
5) Management fees	441	444	794
6) DAL	-	77	300
7) President, MAST	-	58	138
8) Other	73	2	50
	1,250	1,290	2,263
9) Stock compensation expense	95	1,951	1,041
	1,345	3,241	3,304

*Audit:* We have successfully reduced our audit related expenses since 2008 as we have developed more in-house proficiency in our reporting and control procedures. In 2010, we incurred approximately \$25,000 of related expense pertaining to the completion of our tax return filings for our subsidiaries which had been in arrears until 2010.

*Legal – patents:* Commencing in 2009, the Company began to capitalize legal costs associated with its patent related filings, accordingly no expense is reported in this category in 2009 or 2010.

*Legal – other:* Other legal expenses relate to ongoing compliance related costs. In 2010, the Company incurred legal expenses related to the preparation of its FDA filing material for the LMTI project. In 2009, it incurred additional legal expense relating to the CNSX

listing that it secured that year. In 2008 it incurred legal costs associated with its defense against claims by the Company ex-CTO for wrongful dismissal which claims were later retracted by the CTO.

*Salaries:* We have added one employee since 2008. In 2008, we rebilled a larger portion of total salaries to other parties. In 2010 we adjusted the salary rates of several individuals on payroll.

*Management fees:* Management fees include payments to the Chairman, the President and the CFO. In 2008 our Chairman received \$291,000 of incentive-based compensation under the terms of his contract – no such amounts were payable in 2009 or 2010.

Commencing in 2008, the Company entered into a 3 year contract through 2011 with the President of MAST at a base annual remuneration of \$180,000. The bulk of these expenses in 2009 and all of these costs incurred in 2010 have been allocated to Projects under Development and were capitalized.

*DAL:* Virtually all payments to DAL in 2009 and 2010 have been capitalized as Projects under Development.

*Stock compensation:* The stock compensation expense in 2010 relates to the extension of certain options previously granted for an additional year. In 2008 and 2009 the Company awarded stock options to officers, directors and employees and reported the expense calculated in accordance with the Black Scholes option-pricing model.

**Research expenses compare as follows (\$000):**

	2010	2009	2008
1) Strategic Solutions	-	-	729
2) BAE	-	13	370
3) GCS	-	-	192
4) President, MAST	-	-	30
5) Other	(106)	-	(258)
	(106)	13	1,063

Commencing in 2009, the Company began to capitalize its development costs which were previously reported as research expenses and until that time were expensed as incurred.

The development contract with Strategic Solutions ended in 2008. The BAE-related costs continued in 2009 and, ultimately, the Company incurred approximately \$797,000 of costs pertaining to BAE.

In 2010, the Company incurred \$45,000 with the GCS foundry and a total of \$482,000 of costs for outsourced engineering services which costs were capitalized.



*Other:* In 2009 – 2010, the Company incurred \$479,000 of costs associated with the concentrator being developed by NanoOpto as outlined in Section 2(a) above. These costs were capitalized and, when the Company settled with NanoOpto, it recovered \$106,000 of these costs and reports this recovery as other credits in 2010.

The other recovery credit balance of \$258,000 reported in 2008 relates to costs recovered from an insurance claim filed on a shipment of prototype sensors that was damaged in transit and the settlement of balances owing to the University of Toronto at a discount to the original invoiced amounts.

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

	2010	2009	2008
1) Airfare	58	84	170
2) Hotel	23	54	94
3) Meals	31	51	95
4) Transportation	34	35	39
	146	224	398

As business development activity was curtailed in 2010, travel-related costs decreased from the expenses reported in 2009. In 2008, the Company also reported travel-related costs associated with our ex-CTO.

**C) Unaudited Quarterly Financial Information - Summary**

Three months ended (unaudited)	Interest and other income \$	Expenses \$	Loss in period \$	Loss per share \$
January 31, 2008	1,493	721,548	(720,055)	(0.01)
April 30, 2008	2,988	1,183,096	(1,180,108)	(0.02)
July 31, 2008	3,258	1,283,401	(1,280,143)	(0.02)
October 31, 2008	4,023	2,240,442	(2,236,419)	(0.03)
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)

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

*Unaudited Quarterly Information – 3 Months Ended October 31, 2010*

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

	2010	2009	2008
General and administrative:			
Investor relations	14	20	78
AGM Expense	46	-	-
Reserve, doubtful accounts	196	49	88
Telephone	4	11	20
Insurance	22	17	12
Rent	7	13	13
Interest	37	-	-
All other	11	(24)	17
	337	86	228

The costs associated with the Annual General Meeting were incurred in Q4 in 2010 versus in Q3 in each of 2009 and 2008. Annual costs associated with the AGM were comparable in each of the three years.

The Company reserved the Unotron debenture amount of \$200,000 in Q4 2010. The reserves reported in 2009 and 2008 relate to intercompany charges.

Interest expense in Q4 2010 relates to the bridge loans secured in 2010.

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

	2010	2009	2008
Professional, other fees and salaries:			
Audit and related services	22	106	119
Legal - patent	-	(121)	67
Legal - other	(7)	27	121
DAL	-	-	107
President, MAST	-	14	40
Salaries and benefits	118	118	98
Management fees	111	106	421
Other	24	(97)	54
	268	153	1,027
Stock compensation expense	-	912	891
	268	1,065	1,918

In Q4 2008 and Q4 2009 the Company adjusted its audit related accruals for additional work performed at year-end by the external auditors in completing their certification work, in particular with respect to the SOX 404 audit. In 2010, the Company has incurred less audit-related expenses and has accrued more of these costs in each quarter.

In Q4 2009 the Company capitalized costs incurred during the year with respect to its patents. Accordingly it reported a net credit in Q4 2009 in this expense category. Patent costs were capitalized throughout 2010.

The costs incurred relating to DAL and MAST were virtually all capitalized in 2009 and 2010 as Projects Under Development. DAL expenditures in 2010 were \$190,000 (2009: \$250,000), MAST-related costs in 2010 and 2009 were \$204,000.

Management fees in 2008 included a year-end payment of approximately \$291,000 to the Chairman under the terms of his contract; no such expense was incurred in 2009 or 2010.

The other recovery of \$97,000 in 2009 relates to the capitalization of costs in Q4.

Stock compensation expense in 2009 and 2008 relates to stock options declared in Q4 of each of those years. No options were granted in 2010.

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

	2010	2009	2008
Research:			
Strategic Solutions	-	(194)	218
BAE	-	(400)	255
GCS	-	(204)	24
Nano Opto	-	(405)	-
J.Wise	-	(87)	-
DAL	-	82	-
Other	(106)	(6)	4
	(106)	(1,214)	501

Prior to Q4 2009 all development costs were expensed as incurred. The decision in Q4 2009 to capitalize development costs resulted in the recovery of significant costs which had been expensed previously during 2009. All expenditures incurred in 2010 were capitalized; the credit recovery reported in Q4 relates to the settlement reached with NanoOpto in Q4.

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

	2010	2009	2008
Travel:			
Airfare	7	20	48
Hotel	5	16	28
Meals	2	22	19
Transportation	6	10	10
	20	68	105

Relative to the travel costs reported in Q4 2009 and 2008, travel related costs were reduced in 2010 as business development initiatives were curtailed due to cash flow constraints.

**5. LIQUIDITY AND CAPITAL RESOURCES**

*Liquidity:*

**Table 3** provides a summary of the financing that was raised during the 2008-2010 fiscal years.

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 October 31, 2010, our working capital deficiency was \$1,459,460 (2009: \$650,044).

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 October 31, 2010.

**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 consolidated financial statements 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 and for the allocation of proceeds received using the relative fair value method of accounting for Unit private placement for the fiscal years through October 31, 2008.

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 October 31, 2010 the Company continues to report \$221,521 of development costs on the balance sheet.

In the year ended October 31, 2009, the Company changed the estimates that it used to value the common shares and the warrants included in the Unit private placement financings which it completed in the fiscal year then ended. It assigned value to the warrants which formed part of these Unit private placements calculated in accordance with the Black Scholes option-pricing model. Under U.S. GAAP, using standards which are analogous, the valuation of the shares and warrants are determined using this relative fair value approach. There is no change in aggregate shareholders equity reported.

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**

### a. *Business Combinations:*

In January 2009, the CICA issued Section 1582, Business Combinations, which replaces former guidance on business combinations. Section 1582 establishes principles and requirements of the acquisition method for business combinations and related disclosures. In addition, the CICA issued Sections 1601, Consolidated Financial Statements, and 1602, Non-Controlling Interests, which replaces the existing guidance. Section 1601 establishes standards for the preparation of consolidated financial statements, while section 1602 provides guidance on accounting for a non-controlling interest in a subsidiary in consolidated financial statements subsequent to business combination.

These standards apply prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2011 with earlier application permitted. The Company is currently evaluating the new section to determine the potential impact on its consolidated financial statements in future.

### b. *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 had operating lease commitments which expired in 2010 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 has been extended to December 31, 2010. Under the terms of the agreement, the Chairman was retained to provide certain management services to the

Company. The contract stipulated compensation based on a percentage of the increase of the market capitalization on a year-over-year basis commencing as at December 31, 2005 and subject to a minimum annual compensation amount of \$150,000 Canadian funds (\$143,877 U.S. funds at average exchange rates). Under this contract, the 2010 expense as reported was \$143,877 as compared to \$129,149 in 2009. In January of 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:

	Term	Remaining Obligation
President	Month-to-Month	\$13,333 Canadian Funds
Chief Financial Officer	Month-to-Month	\$12,500 Canadian Funds
President – MAST	7 months	\$105,000

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.

The Company cancelled remaining open purchase orders in mid-2010 given working capital constraints.

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

In the fiscal year ending October 31, 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. The report that was completed at that time cited three material weaknesses in the Company’s system of internal controls and reporting systems. These have been previously reported. In each case, we reviewed the recommendations made to remedy the material weaknesses and provided our response as to the compensating controls that existed as well as management’s plan to remedy these material weaknesses in 2009.

In 2009, we devoted internal resources to the documentation and testing of the Company’s internal controls. This process was completed over a six month period through October 2009. We have achieved improvements in our internal control procedures during the 2009 fiscal year. The Company identified a material weakness in certain of its procedures to effect the timely and complete close of its year-end financial statements. A series of journal entries over the course of the audit were posted to finalize

the financial statements. We have adapted procedures to remedy this material weakness in 2010.

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 paid:*

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, 2008-2010 is as follows:

	Cash Compensation	Stock Option Expense
2010	\$ 621,223	\$ 64,653
2009	\$ 625,576	\$ 407,040
2008	\$ 825,748	\$ 637,835

(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
2010	\$27,610	\$499,886	\$13,112	\$540,608
2009	17,177	289,897	11,541	318,615
2008	30,000	242,000	1,000	273,000

In 2010 the gross amount of these expenses was \$627,567, and the Company re-billed \$86,959 of these costs to these related companies. At October 31, 2010 the Company reports \$91,493 of balances due from such parties for these expenses and has reserved \$80,700 due to uncertainty of collection.

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

At October 31, 2010 the Company reports the following accounts receivable and payable balances with related parties:

• Net receivable from related companies re cost sharing of overhead expenses:	\$ 10,793
• Advances to an officer of the Company	\$ 32,187
• Payable to Company's Chairman under terms of employment contract:	\$ 147,030
• Payable to Management (CFO and US President) under the terms of employment contracts:	\$ 45,973

## **14. SHARE CAPITAL**

At October 31, 2010 the Company reports 95,324,511 common shares outstanding (2009: 89,383,003). Additionally, the Company has 10,022,199 stock options outstanding with a weighted average exercise price of \$.89 per share (2009: 10,022,199 options outstanding with a weighted average exercise price of \$.89 per share) and a total of 6,198,887 outstanding warrants to acquire common shares with a weighted average

exercise price of \$.51 per share (2009: 3,416,865 outstanding warrants with a weighted average exercise price of \$.82 per share).

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

Our management team and directors, along with their 2010 remuneration, is presented as below:

<b>Individual</b>	<b>Position</b>	<b>2010 remuneration</b>		
		<b>Cash</b>	<b>Options</b>	<b>Total</b>
Salvatore Fuda (1)	Chairman, Director	143,877	-	143,877
Joseph Fuda (2)	President, Director	153,469	48,644	202,113
Steven Van Fleet (3)	President, MAST Inc., Director	180,000	10,064	190,064
David Sharpless	Director	-	-	-
Andrew Brandt	Director	-	-	-
Oliver Nepomuceno	Director	-	-	-
Larry Blue	Director	-	30,385	30,385
Alex Dey	Director	-	-	-
Dan Amadori (2)	CFO	143,877	5,945	149,822

- (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 February 14, 2010:

- a) The Company raised an additional \$503,140 through Unit private placements and issued 2,525,000 Units. Each Unit consists of one common share and one share purchase warrant. Of this total, the Chairman of the Company subscribed for 750,000 Units at a Unit price of \$0.20 per Unit and the Company realized proceeds of \$151,469.
- b) The convertible loan described in Note 11(e)(ii) to the financial statements was renegotiated subsequent to year end. A portion of this loan was originally due on September 24<sup>th</sup> and the remaining balance on October 19<sup>th</sup>. Until year end, this note remained overdue and interest was accrued at the stated rate of 4% per month. On December 17<sup>th</sup>, the Company renegotiated the loan, now due on June 17<sup>th</sup>, 2011 and bearing interest at 2% per month. An additional 20,000 warrants which expire on June 17<sup>th</sup> 2011, were issued in conjunction with the renegotiation.
- c) The convertible loan described in Note 11(e)(iii) to the financial statements at October 31, 2010 was repaid in February 2011.

- d) The Company secured a \$250,000 bridge loan from an arms length investor in February 2011 at an interest rate of 2% per month.
- e) Subsequent to year end, the Company extended the Chairman's contract on a month to month basis as outlined in Note 14 to the financial statements at an annual rate of \$150,000 Canadian funds as compensation.
- f) The Company has extended the term of 2,448,720 warrants for a period of one year which would have otherwise expired between November 2010 and February 2011(refer to Table 4 as attached).
- g) The Company has granted 375,000 employee stock options with a strike price of CDN \$0.55 for a period of two years. These were issued in accordance with the Company's Stock Option Plan.
- h) The Company negotiated a repayment schedule with respect to the promissory note described in Note 7 to the financial statements at October 31, 2010. The Company has received an initial payment of \$10,000; the remaining principal and interest is scheduled for repayment between March – August 2011.
- i) 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.

\*\*\*\*\*

**Table 1**

Micromem Technologies Inc Management Discussion and Analysis October 31, 2010
---

<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)
2008	11,762	(5,416,725)	(0.07)
 Quarter ending			
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)
October 31, 2008	4,023	(2,236,419)	(0.03)
July 31, 2008	3,258	(1,280,143)	(0.02)
April 30, 2008	2,988	(1,180,108)	(0.02)
January 31, 2008	1,493	(720,055)	(0.01)



Table 2

<p>Micromem Technologies Inc  Management Discussion and Analysis  October 31, 2010  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 (deficiency)
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
2008	(338,079)	26,321	-	630,467	(311,759)
Quarter ending					
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)
October 31, 2008	(338,079)	26,321	-	630,467	(311,758)
July 31, 2008	726,529	27,868	-	1,569,288	754,397
April 30, 3008	209,329	8,857	-	1,066,373	218,186
January 31, 2008	(1,728,948)	-	-	214,854	(1,728,948)

Table 3

Micromem Technologies Inc  
Management Discussion and Analysis  
October 31, 2010

Summary of financing raised by Company

Date of financing	2007			2008		
	Shares	Price / share	\$	Shares	Price / share	\$
January 2007	1,000,000	0.30	300,000			
March 2007	600,000	0.30	180,000			
September 2007	100,000	0.72	72,000			
April 2008				1,370,000	0.70	964,500
July 2008				45,000	0.62	28,000
October 2008				25,000	0.72	18,000
<b>Exercise of warrants</b>						
April 2007	417,500	0.40	167,000			
July 2007	60,000	0.40	24,000			
April 2008				83,500	0.40	33,400
July 2008				1,667,818	0.40	667,127
October 2008				1,920,000	0.41	793,000
<b>Private placements</b>						
May 2006						
October 2007	1,577,368	0.45	716,230			
January 2008				1,003,900	0.49	493,685
April 2008				2,450,508	0.68	1,673,752
July 2008				285,000	1.29	368,750
October 2008				412,888	1.07	443,844
	3,754,868		1,459,230	9,263,614		5,484,058
	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
	6,246,336		4,185,259	5,941,508		2,071,050

Table 4

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Outstanding options	Strike price	Expiry date
100,000	0.60	11/03/10
50,000	0.63	12/02/10
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
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>10,022,199</b>	<b>0.89</b>	

Total proceeds if all options exercised: **\$ 8,961,733**

Outstanding Warrants

123,276	0.75	11/11/10 <sup>(1)</sup>
600,000	0.76	12/14/10 <sup>(1)</sup>
815,000	0.56	12/16/10 <sup>(1)</sup>
366,000	0.55	01/15/11 <sup>(1)</sup>
300,000	0.55	01/26/11 <sup>(1)</sup>
111,111	0.56	02/01/11 <sup>(1)</sup>
133,333	0.56	02/12/11 <sup>(1)</sup>
10,000	0.50	03/30/11 <sup>(1)</sup>
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
<b>6,198,887</b>	<b>0.51</b>	

Total proceeds if all warrants exercised: **\$ 3,140,576**

<sup>(1)</sup> Maturity date extended by one year in November 2010